



# Documentazione di Astra Control Automation 22.11

Astra Automation

NetApp  
December 01, 2023

# Sommario

Documentazione di Astra Control Automation 22.11	1
Note di rilascio	2
A proposito di questa release	2
Novità dell'API REST di Astra Control	2
Problemi noti	6
Panoramica delle caratteristiche e dei vantaggi	8
Inizia subito	9
Prima di iniziare	9
Ottieni un token API	9
La prima chiamata API	10
Preparati a utilizzare i flussi di lavoro	11
Concetti di base di Kubernetes	13
Riferimento API online	13
Implementazione core REST	15
Servizi web REST	15
Risorse e raccolte	16
Dettagli HTTP	17
Formato URL	20
Risorse ed endpoint	22
Riepilogo delle risorse REST di Astra Control	22
Risorse ed endpoint aggiuntivi	25
Ulteriori considerazioni sull'utilizzo	26
Sicurezza RBAC	26
Lavorare con le raccolte	26
Diagnostica e supporto	27
Revocare un token API	27
Flussi di lavoro dell'infrastruttura	29
Prima di iniziare	29
Identità e accesso	29
Configurazione LDAP	34
Cluster	53
Cloud	59
Bucket	60
Storage	60
Workflow di gestione	64
Prima di iniziare	64
Controllo dell'app	65
Protezione delle applicazioni	69
Clonare e ripristinare un'applicazione	77
Spazi dei nomi	82
Supporto	84
Utilizzo di Python	87
SDK NetApp Astra Control Python	87

Python nativo	88
Riferimento API	94
Overview	94
ASUP	94
Account	128
App	180
AppMirror	378
Application Asset	548
Application Backup	587
Application Snapshot	652
Bucket	685
Certificate	732
Cloud	778
Cluster	821
Cluster node	951
Credential	1017
Entitlement	1062
Event	1080
Execution Hook	1114
Execution Hook Override	1225
Feature	1261
Group	1275
Hook source	1309
Kubernetes API Resource	1349
LDAP Group	1363
LDAP User	1377
License	1391
Managed cluster	1443
Metrics	1522
Namespace	1524
Notification	1608
Package	1641
Role binding	1702
Schedule	1836
Setting	1886
Storage backend	1918
Storage class	1975
Subscription	2032
Task	2084
Token	2111
Unread Notification	2145
Upgrade	2166
User	2198
Volume	2262
Risorse aggiuntive	2351

Astra .....	2351
Risorse cloud di NetApp .....	2351
Concetti DI REST e cloud .....	2351
Versioni precedenti della documentazione di Astra Control Automation .....	2353
Note legali .....	2354
Copyright .....	2354
Marchi .....	2354
Brevetti .....	2354
Direttiva sulla privacy .....	2354
Licenza API Astra Control .....	2354

# Documentazione di Astra Control Automation 22.11

# Note di rilascio

## A proposito di questa release

La documentazione di questo sito descrive l'API DI Astra Control REST e le relative tecnologie di automazione incluse nelle release dei due modelli di implementazione di Astra Control, come descritto di seguito.



Ad ogni release di Astra Control viene assegnato un numero di versione del modulo **YY.MM**. Questo valore indica la versione in base all'anno (YY) e al mese (MM) in cui è diventata disponibile. Ad esempio, Astra Control Service 23.01 è stato rilasciato nel gennaio 2023.

### Cadenza di rilascio

In generale, gli aggiornamenti di Astra Control Service e Astra Control Center avvengono contemporaneamente. Tuttavia, Astra Control Service ha una cadenza di rilascio accelerata che può portare a uno o più aggiornamenti incrementali oltre la versione più recente di Astra Control Center.

Poiché questo sito documenta l'API REST per entrambi i modelli di implementazione, alcune funzionalità potrebbero essere disponibili solo con la versione più recente di Astra Control Service. Le eventuali differenze tra i due modelli di implementazione vengono notate in base alle necessità.

### Implementazioni di Astra Control

La documentazione di questo sito si applica alle seguenti release di Astra Control:

- Servizio di controllo Astra 23.01
- Centro di controllo Astra 22.11

### Ulteriori informazioni

Per ulteriori informazioni sulle versioni attuali e precedenti di Astra Control, consultare le pagine e i siti seguenti.

- ["Novità dell'API REST di Astra Control"](#)
- ["Risorse REST ed endpoint"](#)
- ["Documentazione di Astra Control Center 22.11"](#)
- ["Documentazione del servizio Astra Control"](#)
- ["Versioni precedenti della documentazione di Astra Automation"](#)

### Aiutaci a migliorare la documentazione

Seguici su Twitter [@NetAppDoc](#) per ricevere notifiche sulla documentazione NetApp. Puoi anche fornire un feedback diventando un ["Collaboratore di GitHub"](#) oppure inviare un'e-mail all'indirizzo [doccomments@netapp.com](mailto:doccomments@netapp.com).

## Novità dell'API REST di Astra Control

NetApp aggiorna regolarmente l'API REST di Astra Control per offrire nuove funzionalità, miglioramenti e correzioni di bug.

## 17 gennaio 2023 (23.01)

Questa versione include un aggiornamento minore dell'API REST.

### Funzionalità di esecuzione migliorata con i filtri

Quando si utilizzano gli hook di esecuzione, è ora possibile aggiungere filtri per controllare a quali container corrisponde un hook. Se si creano più filtri per un singolo gancio di esecuzione, questi vengono combinati con un operatore AND logico. È possibile definire fino a 10 filtri attivi per gancio di esecuzione.

## 22 novembre 2022 (22.11)

Questa release include un'espansione e un aggiornamento dell'API REST, nonché un namespace migliorato e il supporto LDAP.

### Risorse Astra nuove e migliorate

Sono stati aggiunti quattro nuovi tipi di risorse: **ApiResource**, **IdapGroup**, **LDAPUser** e **task**. Inoltre, sono state migliorate diverse risorse ed endpoint esistenti.

### Monitoraggio del supporto per attività a esecuzione prolungata

I nuovi endpoint delle attività forniscono l'accesso alle risorse delle attività gestite e possono essere utilizzati per visualizzare lo stato delle attività interne a esecuzione prolungata.

### Scenari di utilizzo dello spazio dei nomi migliorati

È stato aggiunto il supporto per le applicazioni che includono più spazi dei nomi e le risorse cluster associate a risorse qualificate per lo spazio dei nomi.

### Abbonamenti cloud estesi

È ora possibile aggiungere più sottoscrizioni di account per ciascuno dei provider cloud.

### Flussi di lavoro aggiuntivi

Sono stati aggiunti ulteriori flussi di lavoro che illustrano l'API REST di Astra Control. Vedere "[Flussi di lavoro dell'infrastruttura](#)" e "[Workflow di gestione](#)" per ulteriori informazioni.

### Informazioni correlate

- "[Astra Control Center: Novità](#)"

## 10 agosto 2022 (22.08)

Questa release include un'espansione e un aggiornamento dell'API REST, oltre a funzionalità di sicurezza e amministrazione avanzate.

### Risorse Astra nuove e migliorate

Sono stati aggiunti tre nuovi tipi di risorse: **Certificato**, **Gruppo** e **AppMirror**. Inoltre, sono state aggiornate le versioni di diverse risorse esistenti.

## Autenticazione LDAP

È possibile configurare Astra Control Center in modo che si integri con un server LDAP per autenticare gli utenti Astra selezionati. Vedere ["Configurazione LDAP"](#) per ulteriori informazioni.

## Gancio di esecuzione migliorato

Il supporto per gli hook di esecuzione è stato aggiunto alla release Astra Control 21.12. Oltre agli hook di esecuzione pre-snapshot e post-snapshot esistenti, è ora possibile configurare i seguenti tipi di hook di esecuzione con la versione 22.08:

- Pre-backup
- Post-backup
- Post-ripristino

Astra Control ora consente anche di utilizzare lo stesso script per più hook di esecuzione.

## Replica dell'applicazione con SnapMirror

È ora possibile replicare le modifiche di dati e applicazioni tra cluster utilizzando la tecnologia NetApp SnapMirror. Questo miglioramento può essere utilizzato per migliorare la business continuity e le funzionalità di recovery.

### Informazioni correlate

- ["Astra Control Center 22.08: Novità"](#)

## 26 aprile 2022 (22.04)

Questa release include un'espansione e un aggiornamento dell'API REST, oltre a funzionalità di sicurezza e amministrazione avanzate.

## Risorse Astra nuove e migliorate

Sono stati aggiunti due nuovi tipi di risorse: **Pacchetto** e **aggiornamento**. Inoltre, le versioni di diverse risorse esistenti sono state aggiornate.

## RBAC migliorato con granularità dello spazio dei nomi

Quando si associa un ruolo a un utente associato, è possibile limitare gli spazi dei nomi a cui l'utente ha accesso. Vedere il riferimento **role binding API** e ["Sicurezza RBAC"](#) per ulteriori informazioni.

## Rimozione della benna

È possibile rimuovere un bucket quando non è più necessario o non funziona correttamente.

## Supporto per Cloud Volumes ONTAP

Cloud Volumes ONTAP è ora supportato come back-end di storage.

## Ulteriori miglioramenti del prodotto

Sono disponibili diversi miglioramenti aggiuntivi alle due implementazioni dei prodotti Astra Control, tra cui:



- Ingresso generico per Astra Control Center
- Cluster privato in AKS
- Supporto per Kubernetes 1.22
- Supporto per il portfolio VMware Tanzu

Consulta la pagina **Novità** nei siti di documentazione di Astra Control Center e Astra Control Service.

#### Informazioni correlate

- ["Astra Control Center 22.04: Novità"](#)

## 14 dicembre 2021 (21.12)

Questa release include un'espansione dell'API REST insieme a una modifica alla struttura della documentazione per supportare meglio l'evoluzione di Astra Control attraverso i futuri aggiornamenti delle release.

### Documentazione di Astra Automation separata per ogni release di Astra Control

Ogni release di Astra Control include un'API REST distinta che è stata migliorata e adattata alle funzionalità della release specifica. La documentazione per ciascuna release dell'API REST di Astra Control è ora disponibile sul proprio sito Web dedicato insieme al repository di contenuti GitHub associato. Il principale sito di documentazione "[Automazione del controllo Astra](#)" contiene sempre la documentazione relativa alla versione più recente. Vedere "[Versioni precedenti della documentazione di Astra Control Automation](#)" per informazioni sulle release precedenti.

### Espansione dei tipi DI risorse RIMANENTI

Il numero di tipi di risorse REST ha continuato a espandersi con l'enfasi sugli hook di esecuzione e sui backend dello storage. Le nuove risorse includono: Account, gancio di esecuzione, origine hook, override hook di esecuzione, nodo cluster, backend di storage gestito, namespace, dispositivo di storage e nodo di storage. Vedere "[Risorse](#)" per ulteriori informazioni.

### SDK NetApp Astra Control Python

NetApp Astra Control Python SDK è un pacchetto open source che semplifica lo sviluppo di codice di automazione per il tuo ambiente Astra Control. Il fulcro è l'SDK Astra, che include un insieme di classi per astrarre la complessità delle chiamate API REST. È inoltre disponibile uno script toolkit per eseguire task amministrativi specifici eseguendo il wrapping e l'astrazione delle classi Python. Vedere "[SDK NetApp Astra Control Python](#)" per ulteriori informazioni.

#### Informazioni correlate

- ["Astra Control Center 21.12: Novità"](#)

## 5 agosto 2021 (21.08)

Questa release include l'introduzione di un nuovo modello di implementazione Astra e un'importante espansione dell'API REST.

### Modello di implementazione di Astra Control Center

Oltre all'offerta di Astra Control Service esistente come servizio di cloud pubblico, questa release include anche il modello di implementazione on-premise di Astra Control Center. Puoi installare Astra Control Center

presso la tua sede per gestire il tuo ambiente Kubernetes locale. I due modelli di implementazione di Astra Control condividono la stessa API REST, con piccole differenze indicate nella documentazione.

## **Espansione dei tipi DI risorse RIMANENTI**

Il numero di risorse accessibili tramite l'API REST di Astra Control si è notevolmente ampliato, con molte delle nuove risorse che forniscono una base per l'offerta on-premise di Astra Control Center. Le nuove risorse includono: ASUP, diritto, funzionalità, licenza, impostazione, sottoscrizione, bucket, cloud, cluster, cluster gestito, back-end dello storage e classe di storage. Vedere "[Risorse](#)" per ulteriori informazioni.

## **Endpoint aggiuntivi che supportano un'implementazione Astra**

Oltre alle risorse REST estese, sono disponibili diversi altri nuovi endpoint API per supportare un'implementazione di Astra Control.

### **Supporto di OpenAPI**

Gli endpoint OpenAPI forniscono l'accesso al documento JSON OpenAPI corrente e ad altre risorse correlate.

### **Supporto di OpenMetrics**

Gli endpoint OpenMetrics forniscono l'accesso alle metriche degli account attraverso la risorsa OpenMetrics.

### **Informazioni correlate**

- "[Astra Control Center 21.08: Novità](#)"

## **15 aprile 2021 (21.04)**

Questa versione include le seguenti nuove funzioni e miglioramenti.

### **Introduzione dell'API REST**

L'API REST di Astra Control è disponibile per l'utilizzo con l'offerta di Astra Control Service. È stato creato in base alle tecnologie REST e alle Best practice attuali. L'API fornisce le basi per l'automazione delle implementazioni Astra e include le seguenti funzionalità e vantaggi.

### **Risorse**

Sono disponibili quattordici tipi di risorse REST.

### **Accesso al token API**

L'accesso all'API REST viene fornito tramite un token di accesso API che è possibile generare nell'interfaccia utente web Astra. Il token API fornisce un accesso sicuro all'API.

### **Supporto per le raccolte**

Esiste un insieme completo di parametri di query che possono essere utilizzati per accedere alle raccolte di risorse. Alcune delle operazioni supportate includono il filtraggio, l'ordinamento e l'impaginazione.

## **Problemi noti**

Si consiglia di esaminare tutti i problemi noti relativi alla release corrente relativi all'API REST di Astra Control. I problemi noti identificano i problemi che potrebbero impedire il corretto utilizzo del prodotto.



Non ci sono nuovi problemi noti con la release 23.01 dell'API REST di Astra Control. Tutti i problemi descritti di seguito sono stati rilevati nelle release precedenti e sono ancora applicabili alla release corrente.

Consulta una delle seguenti pagine in base al modello di implementazione.

- ["Problemi noti per Astra Control Service"](#)
- ["Problemi noti per Astra Control Center 22.11"](#)

# Panoramica delle caratteristiche e dei vantaggi

Astra Control Center e Astra Control Service forniscono un'API REST comune a cui è possibile accedere direttamente attraverso un linguaggio di programmazione o un'utility come Curl. Di seguito vengono presentati i principali punti di forza e i vantaggi dell'API.



Per accedere all'API REST, devi prima accedere all'interfaccia utente web Astra e generare un token API. È necessario includere il token in ogni richiesta API.

## Basato sulla tecnologia REST

L'API Astra Control è stata creata utilizzando la tecnologia REST e le Best practice attuali. La tecnologia di base include HTTP, JSON e RBAC.

## Supporto per i due modelli di implementazione di Astra Control

Astra Control Service viene utilizzato nell'ambiente di cloud pubblico, mentre Astra Control Center è per le implementazioni on-premise. Esiste un'API REST che supporta entrambi questi modelli di implementazione.

## Mappatura chiara tra le risorse degli endpoint REST e il modello a oggetti

Gli endpoint REST esterni utilizzati per accedere alle risorse vengono mappati su un modello a oggetti coerente gestito internamente dal servizio Astra. Il modello a oggetti è progettato utilizzando la modellazione delle relazioni con le entità (ER) che aiuta a definire chiaramente le azioni e le risposte API.

## Set completo di parametri di query

L'API REST fornisce un insieme completo di parametri di query che è possibile utilizzare per accedere alle raccolte di risorse. Alcune delle operazioni supportate includono il filtraggio, l'ordinamento e l'impaginazione.

## Allineamento con l'interfaccia utente Web di Astra Control

Il design dell'interfaccia utente web Astra è allineato con L'API REST e quindi c'è coerenza tra i due percorsi di accesso e l'esperienza dell'utente.

## Solidi dati di debug e determinazione dei problemi

L'API REST di Astra Control offre un'efficace funzionalità di debug e determinazione dei problemi, inclusi eventi di sistema e notifiche degli utenti.

## Processi di workflow

Viene fornita una serie di flussi di lavoro per agevolare lo sviluppo del codice di automazione. I flussi di lavoro sono organizzati in due categorie principali: Infrastruttura e gestione.

## Base per tecnologie di automazione avanzate

Oltre ad accedere direttamente all'API REST, è possibile utilizzare altre tecnologie di automazione basate sull'API REST.

## Parte della documentazione della famiglia Astra

La documentazione di Astra Control Automation fa parte della più ampia documentazione della famiglia Astra. Vedere "[Documentazione Astra](#)" per ulteriori informazioni.

# Inizia subito

## Prima di iniziare

Puoi prepararti rapidamente a iniziare a utilizzare l'API REST di Astra Control seguendo i passaggi riportati di seguito.

### Disporre delle credenziali dell'account Astra

Per accedere all'interfaccia utente web Astra e generare un token API, sono necessarie le credenziali Astra. Con Astra Control Center, queste credenziali vengono gestite in locale. Con Astra Control Service è possibile accedere alle credenziali dell'account tramite il servizio **Auth0**.

### Acquisire familiarità con i concetti di base di Kubernetes

Dovresti avere familiarità con diversi concetti di base di Kubernetes. Vedere "[Concetti di base di Kubernetes](#)" per ulteriori informazioni.

### Esaminare i concetti DI REST e l'implementazione

Assicurarsi di rivedere "[Implementazione core REST](#)" Per informazioni sui concetti REST e sui dettagli relativi alla progettazione dell'API REST di Astra Control.

### Ulteriori informazioni

È necessario conoscere le risorse informative aggiuntive come suggerito in "[Risorse aggiuntive](#)".

## Ottieni un token API

Per utilizzare l'API REST di Astra Control è necessario ottenere un token API Astra.

### Introduzione

Un token API identifica il chiamante di Astra e deve essere incluso in ogni chiamata API REST.

- È possibile generare un token API utilizzando l'interfaccia utente web Astra.
- L'identità dell'utente trasportata con il token è determinata dall'utente che lo crea.
- Il token deve essere incluso in `Authorization` intestazione della richiesta HTTP.
- Un token non scade mai dopo la sua creazione.
- È possibile revocare un token nell'interfaccia utente web Astra.

### Informazioni correlate

- "[Revocare un token API](#)"

## Creare un token API Astra

La seguente procedura descrive come creare un token API Astra.

### Prima di iniziare

Hai bisogno di credenziali per un account Astra.

### A proposito di questa attività

Questa attività genera un token API nell'interfaccia web Astra. È inoltre necessario recuperare l'ID dell'account necessario anche per effettuare chiamate API.

### Fasi

1. Accedi ad Astra utilizzando le credenziali del tuo account.

Accedere al seguente sito per Astra Control Service: "<https://astra.netapp.io>"

2. Fare clic sull'icona a forma di figura nella parte superiore destra della pagina e selezionare **API access**.
3. Fare clic su **generate API token** nella pagina e nella finestra popup fare clic su **generate API token**.
4. Fare clic sull'icona per copiare la stringa del token negli Appunti e salvarla nell'editor.
5. Copiare e salvare l'id account disponibile nella stessa pagina.

### Al termine

Quando si accede all'API REST di Astra Control tramite Curl o un linguaggio di programmazione, è necessario includere il token del bearer API nell'`HTTP Authorization` intestazione della richiesta.

## La prima chiamata API

È possibile eseguire un semplice comando curl sulla CLI della workstation per iniziare a utilizzare l'API REST di Astra Control e verificarne la disponibilità.

### Prima di iniziare

L'utility Curl deve essere disponibile sulla workstation locale. È inoltre necessario disporre di un token API e dell'identificativo account associato. Vedere "[Ottieni un token API](#)" per ulteriori informazioni.

### Esempio di arricciamento

Il seguente comando Curl recupera un elenco di utenti Astra. Fornire il `<ACCOUNT_ID>` e il `<API_TOKEN>` appropriati, come indicato.

```
curl --location --request GET
'https://astra.netapp.io/accounts/<ACCOUNT_ID>/core/v1/users' --header
'Content-Type: application/json' --header 'Authorization: Bearer
<API_TOKEN>'
```

## Esempio di output JSON

```
{
  "items": [
    [
      "David",
      "Anderson",
      "844ec6234-11e0-49ea-8434-a992a6270ec1"
    ],
    [
      "Jane",
      "Cohen",
      "2a3e227c-fda7-4145-a86c-ed9aa0183a6c"
    ]
  ],
  "metadata": {}
}
```

## Preparati a utilizzare i flussi di lavoro

Prima di utilizzarli con un'implementazione live, è necessario conoscere l'organizzazione e il formato dei flussi di lavoro Astra.

### Introduzione

Un *workflow* è una sequenza di uno o più passaggi necessari per eseguire un'attività o un obiettivo amministrativo specifico. Ogni fase del flusso di lavoro di Astra Control è una delle seguenti:

- REST API Call (con dettagli come ad esempio CURL e JSON)
- Invocazione di un altro workflow Astra
- Attività correlate a varie attività (come prendere una decisione di progettazione richiesta)

I flussi di lavoro includono i passaggi principali e i parametri necessari per eseguire ogni attività. Forniscono un punto di partenza per personalizzare il tuo ambiente di automazione.

### Parametri di input comuni

I parametri di input descritti di seguito sono comuni a tutti gli esempi di curl utilizzati per illustrare una chiamata API REST.



Poiché questi parametri di input sono universalmente richiesti, non vengono descritti ulteriormente nei singoli flussi di lavoro. Se si utilizzano parametri di input aggiuntivi per un esempio specifico di curl, questi sono descritti nella sezione **parametri di input aggiuntivi**.

### Parametri del percorso

Il percorso dell'endpoint utilizzato con ogni chiamata API REST include i seguenti parametri. Vedere anche ["Formato URL"](#) per ulteriori informazioni.

## ID account

Questo è il valore UUIDv4 che identifica l'account Astra in cui viene eseguita l'operazione API. Vedere ["Ottieni un token API"](#) Per ulteriori informazioni su come individuare l'ID account.

## Intestazioni delle richieste

A seconda della chiamata API REST, potrebbe essere necessario includere diverse intestazioni di richiesta.

### Autorizzazione

Tutte le chiamate API nei flussi di lavoro richiedono un token API per identificare l'utente. È necessario includere il token in `Authorization` intestazione della richiesta. Vedere ["Ottieni un token API"](#) Per ulteriori informazioni sulla generazione di un token API.

### Tipo di contenuto

Con le richieste HTTP POST e PUT in cui JSON è incluso nel corpo della richiesta, è necessario dichiarare il tipo di supporto in base alla risorsa Astra. Ad esempio, è possibile includere l'intestazione `Content-Type: application/astra-appSnap+json` quando si crea uno snapshot per un'applicazione gestita.

### Accettare

È possibile dichiarare il tipo di supporto specifico del contenuto previsto nella risposta in base alla risorsa Astra. Ad esempio, è possibile includere l'intestazione `Accept: application/astra-appBackup+json` quando si elencano i backup per un'applicazione gestita. Tuttavia, per semplicità, i campioni di arriccatura nei flussi di lavoro accettano tutti i tipi di supporto.

## Presentazione di token e identificatori

Il token API e gli altri valori ID utilizzati con gli esempi di curl sono opachi e non sono comprensibili. Per migliorare la leggibilità dei campioni, non vengono utilizzati i valori token e ID effettivi. Piuttosto, vengono utilizzate parole chiave riservate più piccole che hanno diversi benefici:

- I campioni Curl e JSON sono più chiari e comprensibili.
- Poiché tutte le parole chiave utilizzano lo stesso formato con parentesi quadre e lettere maiuscole, è possibile identificare rapidamente la posizione e il contenuto da inserire o estrarre.
- Nessun valore viene perso perché i parametri originali non possono essere copiati e utilizzati con un'implementazione effettiva.

Ecco alcune delle parole chiave riservate più comuni utilizzate negli esempi di curl. Questo elenco non è esaustivo e vengono utilizzate parole chiave aggiuntive in base alle necessità. Il loro significato dovrebbe essere ovvio in base al contesto.

Parola chiave	Tipo	Descrizione
<ACCOUNT_ID>	Percorso	Il valore UUIDv4 che identifica l'account in cui viene eseguita l'operazione API.
<API_TOKEN>	Intestazione	Il token del bearer che identifica e autorizza il chiamante.
<APP_ID>	Percorso	Il valore UUIDv4 che identifica l'applicazione per la chiamata API.

## Categorie di workflow

Sono disponibili due ampie categorie di flussi di lavoro Astra in base al modello di implementazione. Se si utilizza Astra Control Center, è necessario iniziare con i flussi di lavoro dell'infrastruttura e passare ai flussi di



lavoro di gestione. Quando si utilizza Astra Control Service, in genere è possibile accedere direttamente ai flussi di lavoro di gestione.



Gli esempi di arriccatura nei flussi di lavoro utilizzano l'URL per Astra Control Service. È necessario modificare l'URL quando si utilizza l'Astra Control Center on-premise in base all'ambiente in uso.

## Flussi di lavoro dell'infrastruttura

Questi flussi di lavoro si occupano dell'infrastruttura Astra, inclusi credenziali, bucket e backend dello storage. Sono necessari con Astra Control Center, ma nella maggior parte dei casi possono essere utilizzati anche con Astra Control Service. I flussi di lavoro si concentrano sulle attività necessarie per stabilire e gestire un cluster gestito da Astra.

## Workflow di gestione

È possibile utilizzare questi flussi di lavoro dopo aver gestito un cluster. I flussi di lavoro si concentrano sulla protezione delle applicazioni e supportano operazioni come il backup, il ripristino e la clonazione di un'applicazione.

# Concetti di base di Kubernetes

Esistono diversi concetti di Kubernetes rilevanti quando si utilizza l'API ASTRA REST.

## Oggetti

Gli oggetti mantenuti in un ambiente Kubernetes sono entità persistenti che rappresentano la configurazione del cluster. Questi oggetti descrivono collettivamente lo stato del sistema, incluso il carico di lavoro del cluster.

## Spazi dei nomi

Gli spazi dei nomi forniscono una tecnica per isolare le risorse all'interno di un singolo cluster. Questa struttura organizzativa è utile quando si dividono i tipi di lavoro, gli utenti e le risorse. Gli oggetti con un *ambito dello spazio dei nomi* devono essere univoci all'interno dello spazio dei nomi, mentre quelli con un *ambito del cluster* devono essere univoci nell'intero cluster.

## Etichette

Le etichette possono essere associate agli oggetti Kubernetes. Descrivono gli attributi che utilizzano coppie chiave-valore e possono imporre un'organizzazione arbitraria sul cluster, che può essere utile a un'organizzazione ma non è al di fuori dell'operazione Kubernetes principale.

# Riferimento API online

È possibile accedere ai dettagli delle chiamate REST API di Astra Control, inclusi i metodi HTTP, i parametri di input e le risposte. Questo riferimento completo è utile quando si sviluppano applicazioni di automazione utilizzando l'API REST.



La documentazione di riferimento API REST è attualmente fornita con Astra Control ed è disponibile online.

## Prima di iniziare

Hai bisogno di un account per Astra Control Center o Astra Control Service.

## Fasi

1. Accedi ad Astra utilizzando le credenziali del tuo account.

Accedere al seguente sito per Astra Control Service: "<https://astra.netapp.io>"

2. Fare clic sull'icona a forma di figura nella parte superiore destra della pagina e selezionare **API access**.
3. Nella parte superiore della pagina, fare clic sull'URL visualizzato sotto **API Documentation** (documentazione API).
4. Se richiesto, fornire nuovamente le credenziali dell'account.

# Implementazione core REST

## Servizi web REST

Representational state Transfer (REST) è uno stile per la creazione di applicazioni web distribuite. Quando viene applicato alla progettazione di un'API di servizi Web, stabilisce un insieme di tecnologie mainstream e Best practice per esporre le risorse basate su server e gestire i loro stati. Mentre REST fornisce una base coerente per lo sviluppo delle applicazioni, i dettagli di ciascuna API possono variare in base alle scelte di progettazione specifiche. Prima di utilizzarla con una distribuzione live, è necessario conoscere le caratteristiche dell'API REST di Astra Control.

### Risorse e rappresentazione dello stato

Le risorse sono i componenti di base di un sistema basato su web. Quando si crea un'applicazione di servizi Web REST, le attività di progettazione iniziali includono:

- Identificazione delle risorse di sistema o basate su server

Ogni sistema utilizza e gestisce le risorse. Una risorsa può essere un file, una transazione di business, un processo o un'entità amministrativa. Una delle prime attività nella progettazione di un'applicazione basata sui servizi web REST è quella di identificare le risorse.

- Definizione degli stati delle risorse e delle operazioni di stato associate

Le risorse si trovano sempre in un numero limitato di stati. Gli stati, così come le operazioni associate utilizzate per influenzare i cambiamenti di stato, devono essere chiaramente definiti.

### Endpoint URI

Ogni risorsa REST deve essere definita e resa disponibile utilizzando uno schema di indirizzamento ben definito. Gli endpoint in cui sono situate e identificate le risorse utilizzano un URI (Uniform Resource Identifier). L'URI fornisce un framework generale per la creazione di un nome univoco per ogni risorsa nella rete. L'URL (Uniform Resource Locator) è un tipo di URI utilizzato con i servizi Web per identificare e accedere alle risorse. Le risorse sono in genere esposte in una struttura gerarchica simile a una directory di file.

### Messaggi HTTP

HTTP (Hypertext Transfer Protocol) è il protocollo utilizzato dal client e dal server dei servizi Web per scambiare messaggi di richiesta e risposta relativi alle risorse. Durante la progettazione di un'applicazione di servizi Web, i metodi HTTP vengono mappati alle risorse e alle azioni di gestione dello stato corrispondenti. HTTP è stateless. Pertanto, per associare un insieme di richieste e risposte correlate come parte di una transazione, è necessario includere informazioni aggiuntive nelle intestazioni HTTP portate con i flussi di dati di richiesta e risposta.

### Formattazione JSON

Sebbene le informazioni possano essere strutturate e trasferite tra un client e un server di servizi Web in diversi modi, l'opzione più diffusa è JavaScript Object Notation (JSON). JSON è uno standard di settore per la rappresentazione di semplici strutture di dati in testo normale e viene utilizzato per trasferire informazioni di

stato che descrivono le risorse. L'API REST di Astra Control utilizza JSON per formattare i dati trasportati nel corpo di ogni richiesta e risposta HTTP.

## Risorse e raccolte

L'API REST di Astra Control fornisce l'accesso alle istanze di risorse e alle raccolte di istanze di risorse.



Concettualmente, una RISORSA REST\* è simile a un **oggetto** come definito con i linguaggi e i sistemi di programmazione orientata agli oggetti (OOP). A volte questi termini vengono utilizzati in modo intercambiabile. In generale, la "risorsa" è preferibile quando viene utilizzata nel contesto dell'API REST esterna, mentre l'oggetto viene utilizzato per i corrispondenti dati dell'istanza stateful memorizzati nel server.

### Attributi delle risorse Astra

L'API REST di Astra Control è conforme ai principi di progettazione RESTful. Ogni istanza di risorsa Astra viene creata in base a un tipo di risorsa ben definito. Un insieme di istanze di risorse dello stesso tipo viene definito **insieme**. Le chiamate API agiscono su singole risorse o raccolte di risorse.

#### Tipi di risorse

I tipi di risorse inclusi nell'API REST di Astra Control hanno le seguenti caratteristiche:

- Ogni tipo di risorsa viene definito utilizzando uno schema (in genere in JSON)
- Ogni schema delle risorse include il tipo e la versione delle risorse
- I tipi di risorse sono univoci a livello globale

#### Istanze di risorse

Le istanze di risorse disponibili tramite l'API REST di Astra Control hanno le seguenti caratteristiche:

- Le istanze di risorse vengono create in base a un singolo tipo di risorsa
- Il tipo di risorsa viene indicato utilizzando il valore del tipo di supporto
- Le istanze sono composte da dati stateful gestiti dal servizio Astra
- Ogni istanza è accessibile attraverso un URL univoco e di lunga durata
- Nei casi in cui un'istanza di risorsa può avere più di una rappresentazione, è possibile utilizzare diversi tipi di supporto per richiedere la rappresentazione desiderata

#### Raccolte di risorse

Le raccolte di risorse disponibili tramite l'API REST di Astra Control hanno le seguenti caratteristiche:

- L'insieme di istanze di risorse di un singolo tipo di risorsa è noto come insieme
- Le raccolte di risorse hanno un URL unico e di lunga durata

#### Identificatori delle istanze

A ogni istanza di risorsa viene assegnato un identificatore al momento della creazione. Questo identificatore è un valore UUIDv4 a 128 bit. I valori UUIDv4 assegnati sono globalmente univoci e immutabili. Dopo aver eseguito una chiamata API che crea una nuova istanza, viene restituito al chiamante un URL con l'id associato in `a.location` intestazione della risposta HTTP. È possibile estrarre l'identificatore e utilizzarlo nelle chiamate successive quando si fa riferimento all'istanza della risorsa.



L'identificatore di risorsa è la chiave principale utilizzata per le raccolte.

## Struttura comune per le risorse Astra

Ogni risorsa Astra Control viene definita utilizzando una struttura comune.

### Dati comuni

Ogni risorsa Astra contiene i valori chiave mostrati nella tabella seguente.

Chiave	Descrizione
tipo	Un tipo di risorsa globalmente univoco, noto come <b>tipo di risorsa</b> .
versione	Identificatore di versione noto come <b>versione della risorsa</b> .
id	Identificatore univoco globale noto come <b>resource identifier</b> .
metadati	Oggetto JSON contenente varie informazioni, incluse le etichette utente e di sistema.

### Oggetto metadata

L'oggetto JSON di metadati incluso in ogni risorsa Astra contiene i valori chiave mostrati nella tabella seguente.

Chiave	Descrizione
etichette	Array JSON di etichette specificate dal client associate alla risorsa.
CreationTimestamp	Stringa JSON contenente un indicatore data e ora che indica quando è stata creata la risorsa.
ModificationTimestamp	Stringa JSON contenente un timestamp formattato ISO-8601 che indica l'ultima modifica della risorsa.
CreatedBy	Stringa JSON contenente l'identificatore UUIDv4 dell'id utente che ha creato la risorsa. Se la risorsa è stata creata da un componente di sistema interno e non esiste un UUID associato all'entità di creazione, viene utilizzato l'UID <b>null</b> .

### Stato della risorsa

Risorse selezionate a `state` valore utilizzato per orchestrare le transizioni del ciclo di vita e controllare l'accesso.

## Dettagli HTTP

L'API REST di Astra Control utilizza HTTP e i relativi parametri per agire sulle istanze e sugli insiemi di risorse. Di seguito sono presentati i dettagli dell'implementazione HTTP.

### Le transazioni API e il modello CRUD

L'API REST di Astra Control implementa un modello transazionale con operazioni ben definite e transizioni di stato.

#### Transazione API di richiesta e risposta

Ogni chiamata API REST viene eseguita come richiesta HTTP al servizio Astra. Ogni richiesta genera una risposta associata al client. Questa coppia richiesta-risposta può essere considerata una transazione API.

## Supporto del modello operativo CRUD

Si accede a ciascuna delle istanze e raccolte di risorse disponibili tramite l'API REST di Astra Control in base al modello **CRUD**. Sono disponibili quattro operazioni, ciascuna delle quali viene mappata a un singolo metodo HTTP. Le operazioni includono:

- Creare
- Leggi
- Aggiornare
- Eliminare

Per alcune risorse Astra, è supportato solo un sottoinsieme di queste operazioni. Esaminare ["Riferimento API online"](#) Per ulteriori informazioni su una chiamata API specifica.

## Metodi HTTP

I metodi HTTP o i verbi supportati dall'API sono presentati nella tabella seguente.

Metodo	CRUD	Descrizione
OTTIENI	Leggi	Recupera le proprietà degli oggetti per un'istanza o una raccolta di risorse. Questa operazione viene considerata un'operazione <b>list</b> quando utilizzata con una raccolta.
POST	Creare	Crea una nuova istanza di risorsa in base ai parametri di input. L'URL a lungo termine viene restituito in un <code>Location</code> intestazione della risposta.
IN PRIMO PIANO	Aggiornare	Aggiorna un'intera istanza di risorsa con il corpo di richiesta JSON fornito. I valori chiave non modificabili dall'utente vengono conservati.
ELIMINARE	Eliminare	Elimina un'istanza di risorsa esistente.

## Intestazioni di richiesta e risposta

La seguente tabella riassume le intestazioni HTTP utilizzate con l'API REST di Astra Control.



Vedere ["RFC 7232"](#) e ["RFC 7233"](#) per ulteriori informazioni.

Intestazione	Tipo	Note sull'utilizzo
Accettare	Richiesta	Se il valore è "/" o non viene fornito, <code>application/json</code> Viene restituito nell'intestazione di risposta <code>Content-Type</code> . Se il valore è impostato su <code>Astra Resource Media Type</code> , lo stesso tipo di supporto viene restituito nell'intestazione <code>Content-Type</code> .
Autorizzazione	Richiesta	Token bearer con la chiave API per l'utente.
Tipo di contenuto	Risposta	Restituito in base a. <code>Accept</code> intestazione della richiesta.
ETAG	Risposta	Incluso con un successo come definito con RFC 7232. Il valore è una rappresentazione esadecimale del valore MD5 per l'intera risorsa JSON.

Intestazione	Tipo	Note sull'utilizzo
IF-Match	Richiesta	Intestazione di richiesta di precondizione implementata come descritto nella sezione 3.1 RFC 7232 e supporto per richieste <b>PUT</b> .
IF-modified-since	Richiesta	Intestazione di richiesta di precondizione implementata come descritto nella sezione 3.4 RFC 7232 e supporto per richieste <b>PUT</b> .
IF-unmodified-since	Richiesta	Intestazione di richiesta di precondizione implementata come descritto nella sezione 3.4 RFC 7232 e supporto per richieste <b>PUT</b> .
Posizione	Risposta	Contiene l'URL completo della risorsa appena creata.

## Parametri di query

I seguenti parametri di query sono disponibili per l'utilizzo con le raccolte di risorse. Vedere ["Lavorare con le raccolte"](#) per ulteriori informazioni.

Parametro di query	Descrizione
includi	Contiene i campi che devono essere restituiti durante la lettura di una raccolta.
filtro	Indica i campi che devono corrispondere per la restituzione di una risorsa durante la lettura di una raccolta.
OrderBy	Determina l'ordinamento delle risorse restituite durante la lettura di una raccolta.
limite	Limita il numero massimo di risorse restituite durante la lettura di una raccolta.
saltare	Imposta il numero di risorse da passare e saltare durante la lettura di una raccolta.
conta	Indica se il numero totale di risorse deve essere restituito nell'oggetto metadata.

## Codici di stato HTTP

I codici di stato HTTP utilizzati dall'API REST di Astra Control sono descritti di seguito.



L'API REST di Astra Control utilizza anche lo standard **Problem Details for HTTP API**. Vedere ["Diagnostica e supporto"](#) per ulteriori informazioni.

Codice	Significato	Descrizione
200	OK	Indica il successo delle chiamate che non creano una nuova istanza di risorsa.
201	Creato	Un oggetto viene creato correttamente e l'intestazione della risposta di posizione include l'identificatore univoco dell'oggetto.
204	Nessun contenuto	La richiesta è stata completata, anche se non è stato restituito alcun contenuto.
400	Richiesta errata	L'input della richiesta non viene riconosciuto o non è appropriato.
401	Non autorizzato	L'utente non è autorizzato e deve autenticarsi.

Codice	Significato	Descrizione
403	Vietato	Accesso negato a causa di un errore di autorizzazione.
404	Non trovato	La risorsa a cui si fa riferimento nella richiesta non esiste.
409	Conflitto	Tentativo di creazione di un oggetto non riuscito perché l'oggetto esiste già.
500	Errore interno	Si è verificato un errore interno generale nel server.
503	Servizio non disponibile	Il servizio non è pronto a gestire la richiesta per qualche motivo.

## Formato URL

La struttura generale dell'URL utilizzato per accedere a un'istanza o a una raccolta di risorse attraverso l'API REST è composta da diversi valori. Questa struttura riflette il modello a oggetti sottostante e la progettazione del sistema.

### Account come root

La radice del percorso delle risorse per ogni endpoint REST è l'account Astra. Quindi, tutti i percorsi nell'URL iniziano con `/account/{account_id}` dove `account_id` È il valore UUIDv4 univoco per l'account. Struttura interna questa riflette una progettazione in cui l'accesso a tutte le risorse si basa su un account specifico.

### Categoria di risorse degli endpoint

Gli endpoint delle risorse Astra sono suddivisi in tre categorie:

- Core (`/core`)
- Applicazione gestita (`/k8s`)
- Topologia (`/topology`)

Vedere "[Risorse](#)" per ulteriori informazioni.

### Versione categoria

Ciascuna delle tre categorie di risorse dispone di una versione globale che controlla la versione delle risorse a cui si accede. Per convenzione e definizione, passaggio a una nuova versione principale di una categoria di risorse (ad esempio, da `/v1` a `/v2`) Introdurrà le ultime modifiche nell'API.

### Istanza o raccolta di risorse

È possibile utilizzare una combinazione di tipi di risorse e identificatori nel percorso, in base all'accesso a un'istanza o a una raccolta di risorse.

### Esempio

- Percorso delle risorse

In base alla struttura presentata in precedenza, un percorso tipico verso un endpoint è:  
`/accounts/{account_id}/core/v1/users.`

- URL completo



L'URL completo per l'endpoint corrispondente è:

`https://astra.netapp.io/accounts/{account_id}/core/v1/users.`

# Risorse ed endpoint

È possibile accedere alle risorse fornite tramite l'API REST di Astra Control per automatizzare un'implementazione Astra. Ogni risorsa è disponibile attraverso uno o più endpoint. Di seguito viene fornita un'introduzione alle risorse REST che è possibile utilizzare come parte di un'implementazione dell'automazione.



Il formato del percorso e dell'URL completo utilizzati per accedere alle risorse di Astra Control si basa su diversi valori. Vedere ["Formato URL"](#) per ulteriori informazioni. Vedere anche ["Riferimento API online"](#) Per ulteriori informazioni sull'utilizzo delle risorse e degli endpoint Astra.

## Riepilogo delle risorse REST di Astra Control

Gli endpoint delle risorse principali forniti nell'API REST di Astra Control sono organizzati in tre categorie. È possibile accedere a ciascuna risorsa con il set completo di operazioni CRUD (creazione, lettura, aggiornamento, eliminazione), salvo dove indicato.

La colonna **Release** indica la release Astra quando la risorsa è stata introdotta per la prima volta. Questo campo è in grassetto per le risorse aggiunte di recente all'API REST.

### Risorse di base

Gli endpoint principali delle risorse forniscono i servizi di base necessari per stabilire e mantenere l'ambiente di runtime Astra.

Risorsa	Rilasciar e	Descrizione
Account	21.12	Le risorse dell'account consentono di gestire i tenant isolati all'interno dell'ambiente di implementazione di Astra Control multi-tenant.
ASUP	21.08	Le risorse ASUP rappresentano i bundle AutoSupport inoltrati al supporto NetApp.
Certificato	22.08	Le risorse dei certificati rappresentano i certificati installati utilizzati per l'autenticazione avanzata delle connessioni in uscita.
Credenziale	21.04	Le risorse delle credenziali contengono informazioni relative alla sicurezza che possono essere utilizzate con utenti Astra, cluster, bucket e backend di storage.
Diritto	21.08	Le risorse relative ai diritti rappresentano le funzionalità e le capacità disponibili per un account in base alle licenze e alle sottoscrizioni attive.
Evento	21.04	Le risorse degli eventi rappresentano tutti gli eventi che si verificano nel sistema, incluso il sottoinsieme classificato come notifiche.
Gancio di esecuzione	21.12	Le risorse di esecuzione hook rappresentano script personalizzati che è possibile eseguire prima o dopo l'esecuzione di uno snapshot di un'applicazione gestita.

Risorsa	Rilasciare	Descrizione
Funzione	21.08	Le risorse delle funzioni rappresentano le funzioni Astra selezionate che è possibile interrogare per determinare se sono attivate o disattivate nel sistema. L'accesso è limitato alla sola lettura.
Gruppo	22.08	Le risorse del gruppo rappresentano i gruppi Astra e le risorse associate. Nella release corrente sono supportati solo i gruppi LDAP.
Origine gancio	21.12	Le risorse di origine hook rappresentano il codice di origine effettivo utilizzato con un gancio di esecuzione. La separazione del codice sorgente dal controllo di esecuzione offre diversi vantaggi, ad esempio la possibilità di condividere gli script.
Gruppo LDAP	<b>22.11</b>	È possibile elencare i gruppi all'interno del server LDAP configurato. L'accesso ai gruppi LDAP è di sola lettura.
Utente LDAP	<b>22.11</b>	È possibile elencare gli utenti all'interno del server LDAP configurato. L'accesso agli utenti LDAP è di sola lettura.
Licenza	21.08	Le risorse di licenza rappresentano le licenze disponibili per un account Astra.
Notifica	21.04	Le risorse di notifica rappresentano gli eventi Astra che hanno una destinazione di notifica. L'accesso viene fornito in base all'utente.
Pacchetto	22.04	Le risorse del pacchetto forniscono la registrazione e l'accesso alle definizioni dei pacchetti. I pacchetti software sono composti da vari componenti, tra cui file, immagini e altri elementi.
Binding dei ruoli	21.04	Le risorse di associazione dei ruoli rappresentano le relazioni tra coppie specifiche di utenti e account. Oltre al collegamento tra i due, viene specificato un set di autorizzazioni per ciascuno attraverso un ruolo specifico.
Impostazione	21.08	Le risorse di impostazione rappresentano un insieme di coppie chiave-valore che descrivono una funzionalità per un account Astra specifico.
Iscrizione	21.08	Le risorse di abbonamento rappresentano gli abbonamenti attivi per un account Astra.
Attività	<b>22.11</b>	Le risorse delle attività forniscono l'accesso in sola lettura alle attività gestite e possono essere utilizzate per visualizzare lo stato delle attività interne a esecuzione prolungata.
Token	21.04	Le risorse token rappresentano i token disponibili per accedere a livello di programmazione all'API REST di Astra Control.
Notifica non letta	21.04	Le risorse di notifica non lette rappresentano le notifiche assegnate a un utente specifico ma non ancora lette.
Eseguire l'upgrade	22.04	Le risorse di aggiornamento forniscono l'accesso ai componenti software e la possibilità di avviare gli aggiornamenti.
Utente	21.04	Le risorse utente rappresentano gli utenti Astra in grado di accedere al sistema in base al proprio ruolo definito.

## Risorse applicative gestite

Gli endpoint delle risorse applicative gestite forniscono l'accesso alle applicazioni Kubernetes gestite.

Risorsa	Rilasciare	Descrizione
Risorsa applicativa	21.04	Le risorse applicative rappresentano raccolte interne di informazioni di stato necessarie per gestire le applicazioni Astra.
Backup dell'applicazione	21.04	Le risorse di backup delle applicazioni rappresentano i backup delle applicazioni gestite.
Snapshot dell'applicazione	21.04	Le risorse di snapshot delle applicazioni rappresentano snapshot delle applicazioni gestite.
Override del gancio di esecuzione	21.12	Le risorse di override degli uncini di esecuzione consentono di disattivare gli uncini di esecuzione predefiniti NetApp precaricati per applicazioni specifiche in base alle necessità.
Pianificazione	21.04	Le risorse di pianificazione rappresentano le operazioni di protezione dei dati pianificate per le applicazioni gestite come parte di una policy di protezione dei dati.

## Risorse per la topologia

Gli endpoint delle risorse di topologia forniscono l'accesso alle applicazioni non gestite e alle risorse di storage.

Risorsa	Rilasciare	Descrizione
Risorsa API	22.11	Gli endpoint delle risorse API forniscono accesso in sola lettura alle risorse Kubernetes in uno specifico cluster gestito.
App	21.04	Le risorse applicative rappresentano tutte le applicazioni Kubernetes, incluse quelle non gestite da Astra.
AppMirror	22.08	Le risorse di AppMirror rappresentano le risorse di AppMirror da fornire per la gestione delle relazioni di mirroring delle applicazioni.
Bucket	21.08	Le risorse del bucket rappresentano i bucket cloud S3 utilizzati per memorizzare i backup delle applicazioni gestite da Astra.
Cloud	21.08	Le risorse cloud rappresentano i cloud a cui i client Astra possono connettersi per gestire cluster e applicazioni.
Cluster	21.08	Le risorse del cluster rappresentano i cluster Kubernetes non gestiti da Kubernetes.
Nodo del cluster	21.12	Le risorse dei nodi del cluster forniscono una risoluzione aggiuntiva consentendo di accedere ai singoli nodi all'interno di un cluster Kubernetes.
Cluster gestito	21.08	Le risorse del cluster gestito rappresentano i cluster Kubernetes attualmente gestiti da Kubernetes.
Namespace	21.12	Le risorse dello spazio dei nomi forniscono l'accesso agli spazi dei nomi utilizzati all'interno di un cluster Kubernetes.

Risorsa	Rilasciare	Descrizione
Back-end dello storage	21.08	Le risorse di back-end dello storage rappresentano i provider di servizi di storage che possono essere utilizzati dai cluster e dalle applicazioni gestiti da Astra.
Classe di storage	21.08	Le risorse della classe di storage rappresentano classi o tipi diversi di storage rilevati e disponibili per uno specifico cluster gestito.
Volume	21.04	Le risorse dei volumi rappresentano i volumi di storage Kubernetes associati alle applicazioni gestite.

## Risorse ed endpoint aggiuntivi

Esistono diverse risorse aggiuntive e endpoint che è possibile utilizzare per supportare un'implementazione Astra.



Queste risorse e questi endpoint non sono attualmente inclusi nella documentazione di riferimento dell'API REST di Astra Control.

### OpenAPI

Gli endpoint OpenAPI forniscono l'accesso al documento JSON OpenAPI corrente e ad altre risorse correlate.

### OpenMetrics

Gli endpoint OpenMetrics forniscono l'accesso alle metriche dell'account attraverso la risorsa OpenMetrics. Il supporto è disponibile con il modello di implementazione di Astra Control Center.

# Ulteriori considerazioni sull'utilizzo

## Sicurezza RBAC

L'API ASTRA REST supporta il RBAC (role-based access control) per concedere e limitare l'accesso alle funzioni del sistema.

### Ruoli Astra

Ogni utente Astra viene assegnato a un singolo ruolo che determina le azioni che possono essere eseguite. I ruoli sono organizzati in una gerarchia come descritto nella tabella seguente.

Ruolo	Descrizione
Proprietario	Dispone di tutte le autorizzazioni del ruolo Admin e può anche eliminare gli account Astra.
Amministratore	Dispone di tutte le autorizzazioni del ruolo membro e può anche invitare gli utenti a unirsi a un account.
Membro	È in grado di gestire completamente l'applicazione Astra e le risorse di calcolo.
Visualizzatore	Limitato solo alla visualizzazione delle risorse.

### RBAC migliorato con granularità dello spazio dei nomi



Questa funzionalità è stata introdotta con la versione 22.04 dell'API ASTRA REST.

Quando viene stabilita un'associazione di ruolo per un utente specifico, è possibile applicare un vincolo per limitare gli spazi dei nomi a cui l'utente ha accesso. Questo vincolo può essere definito in diversi modi, come descritto nella tabella seguente. Vedere il parametro `roleConstraints` Nell'API di associazione dei ruoli per ulteriori informazioni.

Spazi dei nomi	Descrizione
Tutto	L'utente può accedere a tutti gli spazi dei nomi attraverso il parametro jolly <code>*****</code> . Questo è il valore predefinito per mantenere la compatibilità con le versioni precedenti.
Nessuno	L'elenco dei vincoli viene specificato anche se è vuoto. Ciò indica che l'utente non può accedere a nessuno spazio dei nomi.
Elenco dei namespace	Viene incluso l'UUID di uno spazio dei nomi che limita l'utente al singolo spazio dei nomi. Per consentire l'accesso a più spazi dei nomi, è possibile utilizzare anche un elenco separato da virgole.
Etichetta	Viene specificata un'etichetta e viene consentito l'accesso a tutti gli spazi dei nomi corrispondenti.

## Lavorare con le raccolte

L'API REST di Astra Control offre diversi modi per accedere alle raccolte di risorse attraverso i parametri di query definiti.

### Selezione dei valori

È possibile specificare quali coppie chiave-valore devono essere restituite per ogni istanza di risorsa utilizzando `include` parametro. Tutte le istanze vengono restituite nel corpo della risposta.

### Filtraggio

Il filtraggio delle risorse di raccolta consente a un utente API di specificare le condizioni che determinano se una risorsa viene restituita nel corpo della risposta. Il `filter` il parametro viene utilizzato per indicare la condizione di filtraggio.

### Ordinamento

L'ordinamento delle risorse di raccolta consente a un utente API di specificare l'ordine in cui le risorse vengono restituite nel corpo della risposta. Il `orderBy` il parametro viene utilizzato per indicare la condizione di filtraggio.

### Impaginazione

È possibile applicare l'impaginazione limitando il numero di istanze di risorse restituite su una richiesta utilizzando `limit` parametro.

### Conta

Se si include il parametro booleano `count` impostare su `true`, il numero di risorse nella matrice restituita per una data risposta è fornito nella sezione dei metadati.

## Diagnostica e supporto

Con l'API REST di Astra Control sono disponibili diverse funzionalità di supporto che possono essere utilizzate per la diagnostica e il debug.

### Risorse API

Ci sono diverse funzionalità di Astra esposte attraverso le risorse API che forniscono informazioni diagnostiche e supporto.

Tipo	Descrizione
Evento	Attività di sistema registrate come parte dell'elaborazione Astra.
Notifica	Un sottoinsieme di eventi considerati abbastanza importanti da essere presentati all'utente.
Notifica non letta	Le notifiche che devono ancora essere lette o recuperate dall'utente.

## Revocare un token API

È possibile revocare un token API all'interfaccia web Astra quando non è più necessario.

### Prima di iniziare

Hai bisogno di un account Astra. È inoltre necessario identificare i token che si desidera revocare.

### A proposito di questa attività

Una volta revocato, il token risulta immediatamente e permanentemente inutilizzabile.

### Fasi

1. Accedi ad Astra utilizzando le credenziali del tuo account.

Accedere al seguente sito per Astra Control Service: "<https://astra.netapp.io>"

2. Fare clic sull'icona a forma di figura nella parte superiore destra della pagina e selezionare **API access**.

3. Selezionare il token o i token che si desidera revocare.

4. Nella casella di riepilogo **azioni**, fare clic su **revoqa token**.



# Flussi di lavoro dell'infrastruttura

## Prima di iniziare

È possibile utilizzare questi flussi di lavoro per creare e gestire l'infrastruttura utilizzata con un'implementazione di Astra Control Center. In molti casi, i flussi di lavoro possono essere utilizzati anche con Astra Control Service.



Questi flussi di lavoro possono essere ampliati e migliorati da NetApp in qualsiasi momento, pertanto è necessario esaminarli periodicamente.

## Preparazione generale

Prima di utilizzare uno qualsiasi dei flussi di lavoro Astra, assicurarsi di rivedere ["Preparati a utilizzare i flussi di lavoro"](#).

## Categorie di workflow

I flussi di lavoro dell'infrastruttura sono organizzati in diverse categorie per facilitare l'individuazione di quello desiderato.

Categoria	Descrizione
Identità e accesso	Questi flussi di lavoro consentono di gestire l'identità e l'accesso ad Astra. Le risorse includono utenti, credenziali e token.
Configurazione LDAP	È possibile configurare Astra Control Center in modo che utilizzi LDAP per autenticare gli utenti selezionati.
Cluster	È possibile aggiungere cluster Kubernetes gestiti che consentono di proteggere e supportare le applicazioni in essi contenute.
Cloud	Questi flussi di lavoro forniscono l'accesso ai cloud disponibili attraverso l'API REST di Astra Control.
Bucket	È possibile utilizzare questi flussi di lavoro per creare e gestire i bucket S3 utilizzati per memorizzare i backup.
Storage	Questi flussi di lavoro consentono di aggiungere e gestire volumi e backend di storage.

## Identità e accesso

### Elencare gli utenti

È possibile elencare gli utenti definiti per un account Astra specifico.

#### 1. Elencare gli utenti

Eseguire la seguente chiamata API REST.

Metodo HTTP	Percorso
OTTIENI	/accounts/{account_id}/core/v1/users

### Parametri di input aggiuntivi

Oltre ai parametri comuni a tutte le chiamate API REST, negli esempi di curl vengono utilizzati anche i seguenti parametri.

Parametro	Tipo	Obbligatorio	Descrizione
includi	Query	No	Se si desidera, selezionare i valori che si desidera restituire nella risposta.

### Esempio di curl: Restituisce tutti i dati per tutti gli utenti

```
curl --location -i --request GET
'https://astra.netapp.io/accounts/<ACCOUNT_ID>/core/v1/users' --header
'Accept: */*' --header 'Authorization: Bearer <API_TOKEN>'
```

### Esempio di curl: Restituisce il nome, il cognome e l'id per tutti gli utenti

```
curl --location -i --request GET
'https://astra.netapp.io/accounts/<ACCOUNT_ID>/core/v1/users?include=first
Name,lastName,id' --header 'Accept: */*' --header 'Authorization: Bearer
<API_TOKEN>'
```

### Esempio di output JSON

```
{
  "items": [
    [
      "David",
      "Anderson",
      "844ec6234-11e0-49ea-8434-a992a6270ec1"
    ],
    [
      "Jane",
      "Cohen",
      "2a3e227c-fda7-4145-a86c-ed9aa0183a6c"
    ]
  ],
  "metadata": {}
}
```

## Creare un utente

È possibile creare un utente con credenziali specifiche e un ruolo predefinito. È anche possibile limitare l'accesso dell'utente a spazi dei nomi specifici.

### 1. Selezionare un nome utente

Eseguire il flusso di lavoro ["Elencare gli utenti"](#) e selezionare un nome disponibile non attualmente in uso.

### 2. Creare l'utente

Eseguire la seguente chiamata API REST per creare un utente. Una volta completata la chiamata, il nuovo utente non sarà ancora utilizzabile.

Metodo HTTP	Percorso
POST	/accounts/{account_id}/core/v1/users

### Esempio di input JSON

```
{
  "type" : "application/astra-user",
  "version" : "1.1",
  "firstName" : "John",
  "lastName" : "West",
  "email" : "jwest@example.com"
}
```

### Esempio di arricciamento

```
curl --location -i --request POST
'https://astra.netapp.io/accounts/<ACCOUNT_ID>/core/v1/users' --header
'Accept: */*' --header 'Authorization: Bearer <API_TOKEN>' --data
@JSONinput
```

### Esempio di output JSON

```

{
  "metadata": {
    "creationTimestamp": "2022-11-20T17:23:15Z",
    "modificationTimestamp": "2022-11-20T17:23:15Z",
    "createdBy": "a20e91f3-2c49-443b-b240-615d940ec5f3",
    "labels": []
  },
  "type": "application/astra-user",
  "version": "1.2",
  "id": "d07dac0a-a328-4840-a216-12de16bbd484",
  "authProvider": "local",
  "authID": "jwest@example.com",
  "firstName": "John",
  "lastName": "West",
  "companyName": "",
  "email": "jwest@example.com",
  "postalAddress": {
    "addressCountry": "",
    "addressLocality": "",
    "addressRegion": "",
    "streetAddress1": "",
    "streetAddress2": "",
    "postalCode": ""
  },
  "state": "active",
  "sendWelcomeEmail": "false",
  "isEnabled": "true",
  "isInviteAccepted": "true",
  "enableTimestamp": "2022-11-20T17:23:15Z",
  "lastActTimestamp": ""
}

```

### 3. Se si desidera, selezionare gli spazi dei nomi consentiti

Eseguire il flusso di lavoro ["Elencare gli spazi dei nomi"](#) e selezionare gli spazi dei nomi a cui si desidera limitare l'accesso.

### 4. Associare l'utente a un ruolo

Eseguire la seguente chiamata API REST per associare l'utente a un ruolo. Nell'esempio riportato di seguito non sono previste restrizioni per l'accesso allo spazio dei nomi. Vedere ["RBAC migliorato con granularità dello spazio dei nomi"](#) per ulteriori informazioni.

Metodo HTTP	Percorso
POST	/Accounts/{account_id}/core/v1/roleBindings

## Esempio di input JSON

```
{
  "type" : "application/astra-roleBinding",
  "version" : "1.1",
  "userID" : "d07dac0a-a328-4840-a216-12de16bbd484",
  "accountID" : "29e1f39f-2bf4-44ba-a191-5b84ef414c95",
  "role" : "viewer",
  "roleConstraints": [ "*" ]
}
```

## Esempio di arricciamento

```
curl --location -i --request POST
'https://astra.netapp.io/accounts/<ACCOUNT_ID>/core/v1/roleBindings'
--header 'Accept: */*' --header 'Authorization: Bearer <API_TOKEN>' --data
@JSONinput
```

### 5. Creare una credenziale

Eseguire la seguente chiamata API REST per creare una credenziale e associarla all'utente. In questo esempio viene utilizzata una password fornita come valore base64. Il nome La proprietà deve contenere l'ID dell'utente restituito al passaggio precedente. La proprietà di input `change` deve anche essere codificato in base64 e determina se l'utente deve modificare la propria password al primo accesso (`true` oppure `false`).



Questo passaggio è necessario solo con le implementazioni di Astra Control Center che utilizzano l'autenticazione locale. Non è necessario con le implementazioni di Astra Control Center utilizzando LDAP o con le implementazioni di Astra Control Service.

Metodo HTTP	Percorso
POST	/accounts/{account_id}/core/v1/credentials

## Esempio di input JSON

```
{
  "type" : "application/astra-credential",
  "version" : "1.1",
  "name" : "d07dac0a-a328-4840-a216-12de16bbd484",
  "keyType" : "passwordHash",
  "keyStore" : {
    "cleartext" : "TmV0QXBwMTIz",
    "change" : "ZmFsc2U="
  },
  "valid" : "true"
}
```

### Esempio di arricciamento

```
curl --location -i --request POST
'https://astra.netapp.io/accounts/<ACCOUNT_ID>/core/v1/credentials'
--header 'Accept: */*' --header 'Authorization: Bearer <API_TOKEN>' --data
@JSONinput
```

## Configurazione LDAP

### Preparazione per la configurazione LDAP

È possibile integrare Astra Control Center con un server LDAP (Lightweight Directory Access Protocol) per eseguire l'autenticazione per gli utenti Astra selezionati. LDAP è un protocollo standard di settore per l'accesso alle informazioni di directory distribuite e una scelta popolare per l'autenticazione aziendale.

#### Informazioni correlate

- ["Roadmap delle specifiche tecniche LDAP"](#)
- ["LDAP versione 3"](#)

### Panoramica del processo di implementazione

Ad alto livello, è necessario eseguire diversi passaggi per configurare un server LDAP in modo da fornire l'autenticazione agli utenti Astra.



Sebbene i passaggi presentati di seguito siano in sequenza, in alcuni casi è possibile eseguirli in un ordine diverso. Ad esempio, è possibile definire gli utenti e i gruppi Astra prima di configurare il server LDAP.

1. Revisione ["Requisiti e limitazioni"](#) per comprendere le opzioni, i requisiti e le limitazioni.
2. Selezionare un server LDAP e le opzioni di configurazione desiderate (inclusa la protezione).
3. Eseguire il flusso di lavoro ["Configurare Astra per l'utilizzo di un server LDAP"](#) Per integrare Astra con il

server LDAP.

4. Esaminare gli utenti e i gruppi sul server LDAP per assicurarsi che siano definiti correttamente.
5. Eseguire il flusso di lavoro appropriato in ["Aggiungere voci LDAP ad Astra"](#) Identificare gli utenti da autenticare utilizzando LDAP.

## Requisiti e limitazioni

Prima di configurare Astra per l'utilizzo di LDAP per l'autenticazione, è necessario esaminare gli elementi essenziali della configurazione di Astra presentati di seguito, incluse le limitazioni e le opzioni di configurazione.

### Supportato solo con Astra Control Center

La piattaforma Astra Control offre due modelli di implementazione. L'autenticazione LDAP è supportata solo con le implementazioni di Astra Control Center.

### Configurazione mediante API REST o interfaccia utente Web

L'attuale release di Astra Control Center supporta la configurazione dell'autenticazione LDAP utilizzando sia l'API REST di Astra Control che l'interfaccia utente web Astra.

### Server LDAP richiesto

Per accettare ed elaborare le richieste di autenticazione Astra, è necessario disporre di un server LDAP. Active Directory di Microsoft è supportata con la release corrente di Astra Control Center.

### Connessione sicura al server LDAP

Quando si configura il server LDAP in Astra, è possibile definire una connessione sicura. In questo caso è necessario un certificato per il protocollo LDAPS.

### Configurare utenti o gruppi

Selezionare gli utenti da autenticare utilizzando LDAP. È possibile eseguire questa operazione identificando i singoli utenti o un gruppo di utenti. Gli account devono essere definiti sul server LDAP. Inoltre, devono essere identificati in Astra (tipo LDAP), che consente di inoltrare le richieste di autenticazione a LDAP.

### Vincolo di ruolo quando si lega un utente o un gruppo

Con l'attuale release di Astra Control Center, l'unico valore supportato per `roleConstraint` è `""`. Questo indica che l'utente non è limitato a un set limitato di spazi dei nomi e può accedervi tutti. Vedere ["Aggiungere voci LDAP ad Astra"](#) per ulteriori informazioni.

### Credenziali LDAP

Le credenziali utilizzate da LDAP includono il nome utente (indirizzo e-mail) e la password associata.

### Indirizzi e-mail univoci

Tutti gli indirizzi e-mail che fungono da nomi utente in un'implementazione di Astra Control Center devono essere univoci. Non è possibile aggiungere un utente LDAP con un indirizzo e-mail già definito in Astra. Se esiste un'email duplicata, devi prima eliminarla da Astra. Vedere ["Rimuovere gli utenti"](#) Per ulteriori informazioni, visitare il sito di documentazione di Astra Control Center.

### È possibile definire prima utenti e gruppi LDAP

È possibile aggiungere utenti e gruppi LDAP a Astra Control Center anche se non esistono ancora in LDAP o se il server LDAP non è configurato. Ciò consente di preconfigurare gli utenti e i gruppi prima di configurare il server LDAP.

### Un utente definito in più gruppi LDAP

Se un utente LDAP appartiene a più gruppi LDAP e ai gruppi sono stati assegnati ruoli diversi in Astra, il ruolo effettivo dell'utente al momento dell'autenticazione sarà il più privilegiato. Ad esempio, se a un utente è assegnato il `viewer` con il `group1`, ma ha il `member` ruolo nel `group2`, il ruolo dell'utente sarebbe `member`. Si basa sulla gerarchia utilizzata da Astra (dal più alto al più basso):

- Proprietario
- Amministratore
- Membro
- Visualizzatore

### Sincronizzazione periodica dell'account

Astra sincronizza gli utenti e i gruppi IT con il server LDAP circa ogni 60 secondi. Quindi, se un utente o un gruppo viene aggiunto o rimosso da LDAP, può essere necessario fino a un minuto prima che sia disponibile in Astra.

### Disattivazione e ripristino della configurazione LDAP

Prima di tentare di ripristinare la configurazione LDAP, è necessario disattivare l'autenticazione LDAP. Inoltre, per modificare il server LDAP (`connectionHost`), è necessario eseguire entrambe le operazioni. Vedere ["Disattivare e ripristinare LDAP"](#) per ulteriori informazioni.

### Parametri API REST

I flussi di lavoro di configurazione LDAP effettuano chiamate API REST per eseguire le attività specifiche. Ogni chiamata API può includere parametri di input come mostrato negli esempi forniti. Vedere ["Riferimento API online"](#) per informazioni su come individuare la documentazione di riferimento.

## Configurare Astra per l'utilizzo di un server LDAP

Selezionare un server LDAP e configurare Astra per utilizzare il server come provider di autenticazione. L'attività di configurazione consiste nei passaggi descritti di seguito. Ogni passaggio include una singola chiamata API REST.

### 1. Aggiungere un certificato CA

Eeguire la seguente chiamata API REST per aggiungere un certificato CA ad Astra.



Questo passaggio è facoltativo e necessario solo se si desidera che Astra e LDAP comunichino su un canale sicuro utilizzando LDAPS.

Metodo HTTP	Percorso
POST	/accounts/{account_id}/core/v1/certificates

### Esempio di input JSON



```
{
  "type": "application/astra-certificate",
  "version": "1.0",
  "certUse": "rootCA",
  "cert": "LS0tLS1CRUdJTiBDRVJUSUZJQ0FURS0tLS0tCk1JSUMyVEN",
  "isSelfSigned": "true"
}
```

Tenere presente quanto segue sui parametri di input:

- `cert` È una stringa JSON contenente un certificato con codifica base64 e formato PKCS-11 (con codifica PEM).
- `isSelfSigned` deve essere impostato su `true` se il certificato è autofirmato. L'impostazione predefinita è `false`.

### Esempio di arricchimento

```
curl --location -i --request POST --data @JSONinput
'https://astra.example.com/accounts/<ACCOUNT_ID>/core/v1/certificates'
--header 'Content-Type: application/astra-certificate+json' --header
'Accept: */*' --header 'Authorization: Bearer <API_TOKEN>'
```

### Esempio di risposta JSON

```

{
  "type": "application/astra-certificate",
  "version": "1.0",
  "id": "a5212e7e-402b-4cff-bba0-63f3c6505199",
  "certUse": "rootCA",
  "cert": "LS0tLS1CRUdJTlBDRVJUSUZJQ0FURSB0tLS0tCk1JSUMyVEN",
  "cn": "adldap.example.com",
  "expiryTimestamp": "2023-07-08T20:22:07Z",
  "isSelfSigned": "true",
  "trustState": "trusted",
  "trustStateTransitions": [
    {
      "from": "untrusted",
      "to": [
        "trusted",
        "expired"
      ]
    },
    {
      "from": "trusted",
      "to": [
        "untrusted",
        "expired"
      ]
    },
    {
      "from": "expired",
      "to": [
        "untrusted",
        "trusted"
      ]
    }
  ],
  "trustStateDesired": "trusted",
  "trustStateDetails": [],
  "metadata": {
    "creationTimestamp": "2022-07-21T04:16:06Z",
    "modificationTimestamp": "2022-07-21T04:16:06Z",
    "createdBy": "8a02d2b8-a69d-4064-827f-36851b3e1e6e",
    "modifiedBy": "8a02d2b8-a69d-4064-827f-36851b3e1e6e",
    "labels": []
  }
}

```

## 2. Aggiungere le credenziali di binding

Eseguire la seguente chiamata API REST per aggiungere le credenziali BIND.

Metodo HTTP	Percorso
POST	/accounts/{account_id}/core/v1/credentials

### Esempio di input JSON

```
{
  "name": "ldapBindCredential",
  "type": "application/astra-credential",
  "version": "1.1",
  "keyStore": {
    "bindDn": "dWlkPWFkbWluLG91PXM5c3RlbQ==",
    "password": "cGFzc3dvcmQ="
  }
}
```

Tenere presente quanto segue sui parametri di input:

- bindDn e password Sono le credenziali bind codificate base64 dell'utente amministratore LDAP in grado di connettersi e cercare nella directory LDAP. bindDn È l'indirizzo e-mail dell'utente LDAP.

### Esempio di arricciamento

```
curl --location -i --request POST --data @JSONinput
'https://astra.example.com/accounts/<ACCOUNT_ID>/core/v1/credentials'
--header 'Content-Type: application/astra-credential+json' --header
'Accept: */*' --header 'Authorization: Bearer <API_TOKEN>'
```

### Esempio di risposta JSON

```
{
  "type": "application/astra-credential",
  "version": "1.1",
  "id": "3bd9c8a7-f5a4-4c44-b778-90a85fc7d154",
  "name": "ldapBindCredential",
  "metadata": {
    "creationTimestamp": "2022-07-21T06:53:11Z",
    "modificationTimestamp": "2022-07-21T06:53:11Z",
    "createdBy": "527329f2-662c-41c0-ada9-2f428f14c137"
  }
}
```

Osservare i seguenti parametri di risposta:

- Il `id` della credenziale viene utilizzata nelle fasi successive del flusso di lavoro.

### 3. Recuperare l'UUID dell'impostazione LDAP

Eseguire la seguente chiamata API REST per recuperare l'UUID di `astra.account.ldap` Impostazione inclusa in Astra Control Center.



Nell'esempio riportato di seguito viene utilizzato un parametro di query per filtrare la raccolta delle impostazioni. È invece possibile rimuovere il filtro per ottenere tutte le impostazioni e quindi cercare `astra.account.ldap`.

Metodo HTTP	Percorso
OTTIENI	<code>/accounts/{account_id}/core/v1/settings</code>

### Esempio di arricciamento

```
curl --location -i --request GET
'https://astra.example.com/accounts/<ACCOUNT_ID>/core/v1/settings?filter=name%20eq%20'astra.account.ldap'&include=name,id' --header 'Accept: */*'
--header 'Authorization: Bearer <API_TOKEN>'
```

### Esempio di risposta JSON

```
{
  "items": [
    ["astra.account.ldap",
     "12072b56-e939-45ec-974d-2dd83b7815df"]
  ],
  "metadata": {}
}
```

### 4. Aggiornare l'impostazione LDAP

Eseguire la seguente chiamata API REST per aggiornare l'impostazione LDAP e completare la configurazione. Utilizzare `id` Valore della chiamata API precedente per `<SETTING_ID>` Valore nel percorso URL riportato di seguito.



È possibile inviare una richiesta GET per l'impostazione specifica prima di visualizzare `configSchema`. In questo modo verranno fornite ulteriori informazioni sui campi obbligatori della configurazione.

Metodo HTTP	Percorso
IN PRIMO PIANO	/accounts/{account_id}/core/v1/settings/{setting_id}

### Esempio di input JSON

```
{
  "type": "application/astra-setting",
  "version": "1.0",
  "desiredConfig": {
    "connectionHost": "myldap.example.com",
    "credentialId": "3bd9c8a7-f5a4-4c44-b778-90a85fc7d154",
    "groupBaseDN": "OU=groups,OU=astra,DC=example,DC=com",
    "isEnabled": "true",
    "port": 686,
    "secureMode": "LDAPS",
    "userBaseDN": "OU=users,OU=astra,DC=example,dc=com",
    "userSearchFilter": "((objectClass=User))",
    "vendor": "Active Directory"
  }
}
```

Tenere presente quanto segue sui parametri di input:

- `isEnabled` deve essere impostato su `true` oppure si potrebbe verificare un errore.
- `credentialId` è l'id della credenziale bind creata in precedenza.
- `secureMode` deve essere impostato su `LDAP` oppure `LDAPS` in base alla configurazione del passaggio precedente.
- Solo "Active Directory" è supportato come vendor.

### Esempio di arricciamento

```
curl --location -i --request PUT --data @JSONinput
'https://astra.example.com/accounts/<ACCOUNT_ID>/core/v1/settings/<SETTING_ID>' --header 'Content-Type: application/astra-setting+json' --header
'Accept: */*' --header 'Authorization: Bearer <API_TOKEN>'
```

Se la chiamata ha esito positivo, viene restituita la risposta HTTP 204.

### 5. Recuperare l'impostazione LDAP

È possibile eseguire la seguente chiamata API REST per recuperare le impostazioni LDAP e confermare l'aggiornamento.

Metodo HTTP	Percorso
OTTIENI	/accounts/{account_id}/core/v1/settings/{setting_id}

### Esempio di arricciamento

```
curl --location -i --request GET
'https://astra.example.com/accounts/<ACCOUNT_ID>/core/v1/settings/<SETTING_ID>' --header 'Accept: */*' --header 'Authorization: Bearer <API_TOKEN>'
```

### Esempio di risposta JSON

```
{
  "items": [
    {
      "type": "application/astra-setting",
      "version": "1.0",
      "metadata": {
        "creationTimestamp": "2022-06-17T21:16:31Z",
        "modificationTimestamp": "2022-07-21T07:12:20Z",
        "labels": [],
        "createdBy": "system",
        "modifiedBy": "00000000-0000-0000-0000-000000000000"
      },
      "id": "12072b56-e939-45ec-974d-2dd83b7815df",
      "name": "astra.account.ldap",
      "desiredConfig": {
        "connectionHost": "10.193.61.88",
        "credentialId": "3bd9c8a7-f5a4-4c44-b778-90a85fc7d154",
        "groupBaseDN": "ou=groups,ou=astra,dc=example,dc=com",
        "isEnabled": "true",
        "port": 686,
        "secureMode": "LDAPS",
        "userBaseDN": "ou=users,ou=astra,dc=example,dc=com",
        "userSearchFilter": "(objectClass=User)",
        "vendor": "Active Directory"
      },
      "currentConfig": {
        "connectionHost": "10.193.160.209",
        "credentialId": "3bd9c8a7-f5a4-4c44-b778-90a85fc7d154",
        "groupBaseDN": "ou=groups,ou=astra,dc=example,dc=com",
        "isEnabled": "true",
        "port": 686,
        "secureMode": "LDAPS",
        "userBaseDN": "ou=users,ou=astra,dc=example,dc=com",

```

```

    "userSearchFilter": "((objectClass=User))",
    "vendor": "Active Directory"
  },
  "configSchema": {
    "$schema": "http://json-schema.org/draft-07/schema#",
    "title": "astra.account.ldap",
    "type": "object",
    "properties": {
      "connectionHost": {
        "type": "string",
        "description": "The hostname or IP address of your LDAP server."
      },
      "credentialId": {
        "type": "string",
        "description": "The credential ID for LDAP account."
      },
      "groupBaseDN": {
        "type": "string",
        "description": "The base DN of the tree used to start the group
search. The system searches the subtree from the specified location."
      },
      "groupSearchCustomFilter": {
        "type": "string",
        "description": "Type of search that controls the default group
search filter used."
      },
      "isEnabled": {
        "type": "string",
        "description": "This property determines if this setting is
enabled or not."
      },
      "port": {
        "type": "integer",
        "description": "The port on which the LDAP server is running."
      },
      "secureMode": {
        "type": "string",
        "description": "The secure mode LDAPS or LDAP."
      },
      "userBaseDN": {
        "type": "string",
        "description": "The base DN of the tree used to start the user
search. The system searches the subtree from the specified location."
      },
      "userSearchFilter": {
        "type": "string",

```

```

    "description": "The filter used to search for users according a
search criteria."
  },
  "vendor": {
    "type": "string",
    "description": "The LDAP provider you are using.",
    "enum": ["Active Directory"]
  }
},
"additionalProperties": false,
"required": [
  "connectionHost",
  "secureMode",
  "credentialId",
  "userBaseDN",
  "userSearchFilter",
  "groupBaseDN",
  "vendor",
  "isEnabled"
]
},
"state": "valid",
}
],
"metadata": {}
}

```

Individuare il `state` nella risposta che avrà uno dei valori nella tabella seguente.

Stato	Descrizione
in sospeso	Il processo di configurazione è ancora attivo e non ancora completato.
valido	La configurazione è stata completata correttamente e <code>currentConfig</code> nella risposta corrisponde <code>desiredConfig</code> .
errore	Il processo di configurazione LDAP non è riuscito.

## Aggiungere voci LDAP ad Astra

Una volta configurato LDAP come provider di autenticazione per Astra Control Center, è possibile selezionare gli utenti LDAP che Astra eseguirà l'autenticazione utilizzando le credenziali LDAP. Ogni utente deve avere un ruolo in Astra prima di poter accedere ad Astra attraverso l'API REST di Astra Control.

Esistono due modi per configurare Astra per assegnare i ruoli. Scegliere quello più adatto al proprio ambiente.

- ["Aggiungere e associare un singolo utente"](#)



- "Aggiungere e associare un gruppo"



Le credenziali LDAP sono sotto forma di nome utente come indirizzo e-mail e password LDAP associata.

## Aggiungere e associare un singolo utente

È possibile assegnare un ruolo a ciascun utente Astra utilizzato dopo l'autenticazione LDAP. Ciò è appropriato quando vi è un numero limitato di utenti e ciascuno potrebbe avere caratteristiche amministrative diverse.

### 1. Aggiungere un utente

Eseguire la seguente chiamata API REST per aggiungere un utente ad Astra e indicare che LDAP è il provider di autenticazione.

Metodo HTTP	Percorso
POST	/accounts/{account_id}/core/v1/users

### Esempio di input JSON

```
{
  "type" : "application/astra-user",
  "version" : "1.1",
  "authID" : "cn=JohnDoe,ou=users,ou=astra,dc=example,dc=com",
  "authProvider" : "ldap",
  "firstName" : "John",
  "lastName" : "Doe",
  "email" : "john.doe@example.com"
}
```

Tenere presente quanto segue sui parametri di input:

- Sono necessari i seguenti parametri:
  - authProvider
  - authID
  - email
- authID È il nome distinto (DN) dell'utente in LDAP
- email Deve essere univoco per tutti gli utenti definiti in Astra

Se il email Il valore non è univoco, si verifica un errore e nella risposta viene restituito un codice di stato 409 HTTP.

### Esempio di arricchimento

```
curl --location -i --request POST --data @JSONinput
'https://astra.example.com/accounts/<ACCOUNT_ID>/core/v1/users' --header
'Content-Type: application/astra-user+json' --header 'Accept: */*'
--header 'Authorization: Bearer <API_TOKEN>'
```

## Esempio di risposta JSON

```
{
  "metadata": {
    "creationTimestamp": "2022-07-21T17:44:18Z",
    "modificationTimestamp": "2022-07-21T17:44:18Z",
    "createdBy": "8a02d2b8-a69d-4064-827f-36851b3e1e6e",
    "labels": []
  },
  "type": "application/astra-user",
  "version": "1.2",
  "id": "a7b5e674-a1b1-48f6-9729-6a571426d49f",
  "authProvider": "ldap",
  "authID": "cn=JohnDoe,ou=users,ou=astra,dc=example,dc=com",
  "firstName": "John",
  "lastName": "Doe",
  "companyName": "",
  "email": "john.doe@example.com",
  "postalAddress": {
    "addressCountry": "",
    "addressLocality": "",
    "addressRegion": "",
    "streetAddress1": "",
    "streetAddress2": "",
    "postalCode": ""
  },
  "state": "active",
  "sendWelcomeEmail": "false",
  "isEnabled": "true",
  "isInviteAccepted": "true",
  "enableTimestamp": "2022-07-21T17:44:18Z",
  "lastActTimestamp": ""
}
```

## 2. Aggiungere un'associazione di ruolo per l'utente

Eeguire la seguente chiamata API REST per associare l'utente a un ruolo specifico. È necessario creare l'UUID dell'utente nel passaggio precedente.

Metodo HTTP	Percorso
POST	/Accounts/{account_id}/core/v1/roleBindings

### Esempio di input JSON

```
{
  "type": "application/astra-roleBinding",
  "version": "1.1",
  "accountID": "{account_id}",
  "userID": "a7b5e674-a1b1-48f6-9729-6a571426d49f",
  "role": "member",
  "roleConstraints": ["*"]
}
```

Tenere presente quanto segue sui parametri di input:

- Il valore utilizzato in precedenza per `roleConstraint` È l'unica opzione disponibile per la release corrente di Astra. Indica che l'utente non è limitato a un set limitato di spazi dei nomi e può accedervi tutti.

### Esempio di arricciamento

```
curl --location -i --request POST --data @JSONinput
'https://astra.example.com/accounts/<ACCOUNT_ID>/core/v1/roleBindings'
--header 'Content-Type: application/astra-roleBinding+json' --header
'Accept: */*' --header 'Authorization: Bearer <API_TOKEN>'
```

### Esempio di risposta JSON

```

{
  "metadata": {
    "creationTimestamp": "2022-07-21T18:08:24Z",
    "modificationTimestamp": "2022-07-21T18:08:24Z",
    "createdBy": "8a02d2b8-a69d-4064-827f-36851b3e1e6e",
    "labels": []
  },
  "type": "application/astra-roleBinding",
  "principalType": "user",
  "version": "1.1",
  "id": "b02c7e4d-d483-40d1-aaff-e1f900312114",
  "userID": "a7b5e674-a1b1-48f6-9729-6a571426d49f",
  "groupID": "00000000-0000-0000-0000-000000000000",
  "accountID": "d0fdbfa7-be32-4a71-b59d-13d95b42329a",
  "role": "member",
  "roleConstraints": ["*"]
}

```

Tenere presente quanto segue in merito ai parametri di risposta:

- Il valore `user` per `principalType` il campo indica l'aggiunta dell'associazione di ruoli per un utente (non un gruppo).

## Aggiungere e associare un gruppo

È possibile assegnare un ruolo a un gruppo Astra che viene utilizzato dopo l'autenticazione LDAP. Ciò è appropriato quando vi è un numero elevato di utenti e ciascuno potrebbe avere caratteristiche amministrative simili.

### 1. Aggiungere un gruppo

Eseguire la seguente chiamata API REST per aggiungere un gruppo ad Astra e indicare che LDAP è il provider di autenticazione.

Metodo HTTP	Percorso
POST	/accounts/{account_id}/core/v1/groups

### Esempio di input JSON

```

{
  "type": "application/astra-group",
  "version": "1.0",
  "name": "Engineering",
  "authProvider": "ldap",
  "authID": "CN=Engineering,OU=groups,OU=astra,DC=example,DC=com"
}

```

Tenere presente quanto segue sui parametri di input:

- Sono necessari i seguenti parametri:
  - authProvider
  - authID

### Esempio di arricchimento

```
curl --location -i --request POST --data @JSONinput
'https://astra.example.com/accounts/<ACCOUNT_ID>/core/v1/groups' --header
'Content-Type: application/astra-group+json' --header 'Accept: */*'
--header 'Authorization: Bearer <API_TOKEN>'
```

### Esempio di risposta JSON

```
{
  "type": "application/astra-group",
  "version": "1.0",
  "id": "8b5b54da-ae53-497a-963d-1fc89990525b",
  "name": "Engineering",
  "authProvider": "ldap",
  "authID": "CN=Engineering,OU=groups,OU=astra,DC=example,DC=com",
  "metadata": {
    "creationTimestamp": "2022-07-21T18:42:52Z",
    "modificationTimestamp": "2022-07-21T18:42:52Z",
    "createdBy": "8a02d2b8-a69d-4064-827f-36851b3e1e6e",
    "labels": []
  }
}
```

## 2. Aggiungere un'associazione di ruolo per il gruppo

Eseguire la seguente chiamata API REST per associare il gruppo a un ruolo specifico. È necessario creare l'UUID del gruppo nel passaggio precedente. Gli utenti che sono membri del gruppo potranno accedere ad Astra dopo che LDAP ha eseguito l'autenticazione.

Metodo HTTP	Percorso
POST	/Accounts/{account_id}/core/v1/roleBindings

### Esempio di input JSON

```
{
  "type": "application/astra-roleBinding",
  "version": "1.1",
  "accountID": "{account_id}",
  "groupID": "8b5b54da-ae53-497a-963d-1fc89990525b",
  "role": "viewer",
  "roleConstraints": ["*"]
}
```

Tenere presente quanto segue sui parametri di input:

- Il valore utilizzato in precedenza per `roleConstraint` È l'unica opzione disponibile per la release corrente di Astra. Indica che l'utente non è limitato a determinati spazi dei nomi e può accedervi tutti.

### Esempio di arricciamento

```
curl --location -i --request POST --data @JSONinput
'https://astra.example.com/accounts/<ACCOUNT_ID>/core/v1/roleBindings'
--header 'Content-Type: application/astra-roleBinding+json' --header
'Accept: */*' --header 'Authorization: Bearer <API_TOKEN>'
```

### Esempio di risposta JSON

```
{
  "metadata": {
    "creationTimestamp": "2022-07-21T18:59:43Z",
    "modificationTimestamp": "2022-07-21T18:59:43Z",
    "createdBy": "527329f2-662c-41c0-ada9-2f428f14c137",
    "labels": []
  },
  "type": "application/astra-roleBinding",
  "principalType": "group",
  "version": "1.1",
  "id": "2f91b06d-315e-41d8-ae18-7df7c08fbb77",
  "userID": "00000000-0000-0000-0000-000000000000",
  "groupID": "8b5b54da-ae53-497a-963d-1fc89990525b",
  "accountID": "d0fdbfa7-be32-4a71-b59d-13d95b42329a",
  "role": "viewer",
  "roleConstraints": ["*"]
}
```

Tenere presente quanto segue in merito ai parametri di risposta:

- Il valore `group` per `principalType` il campo indica l'aggiunta dell'associazione di ruoli per un gruppo

(non per un utente).

## Disattivare e ripristinare LDAP

Sono disponibili due attività amministrative opzionali, sebbene correlate, che è possibile eseguire in base alle necessità per un'implementazione di Astra Control Center. È possibile disattivare globalmente l'autenticazione LDAP e ripristinare la configurazione LDAP.

Entrambe le attività del flusso di lavoro richiedono l'id per `astra.account.ldap` Impostazione Astra. I dettagli su come recuperare l'id impostazione sono inclusi in **Configurazione del server LDAP**. Vedere ["Recuperare l'UUID dell'impostazione LDAP"](#) per ulteriori informazioni.

- ["Disattiva autenticazione LDAP"](#)
- ["Ripristinare la configurazione di autenticazione LDAP"](#)

### Disattiva autenticazione LDAP

È possibile eseguire la seguente chiamata REST API per disattivare globalmente l'autenticazione LDAP per una specifica implementazione Astra. La chiamata aggiorna `astra.account.ldap` e il `isEnabled` il valore è impostato su `false`.

Metodo HTTP	Percorso
IN PRIMO PIANO	<code>/accounts/{account_id}/core/v1/settings/{setting_id}</code>

### Esempio di input JSON

```
{
  "type": "application/astra-setting",
  "version": "1.0",
  "desiredConfig": {
    "connectionHost": "myldap.example.com",
    "credentialId": "3bd9c8a7-f5a4-4c44-b778-90a85fc7d154",
    "groupBaseDN": "OU=groups,OU=astra,DC=example,DC=com",
    "isEnabled": "false",
    "port": 686,
    "secureMode": "LDAPS",
    "userBaseDN": "OU=users,OU=astra,DC=example,dc=com",
    "userSearchFilter": "((objectClass=User))",
    "vendor": "Active Directory"
  }
}
```

```
curl --location -i --request PUT --data @JSONinput
'https://astra.example.com/accounts/<ACCOUNT_ID>/core/v1/settings/<SETTING_ID>' --header 'Content-Type: application/astra-setting+json' --header
'Accept: */*' --header 'Authorization: Bearer <API_TOKEN>'
```

Se la chiamata ha esito positivo, il HTTP 204 la risposta viene restituita. È possibile recuperare di nuovo le impostazioni di configurazione per confermare la modifica.

### Ripristinare la configurazione di autenticazione LDAP

È possibile eseguire la seguente chiamata REST API per disconnettere Astra dal server LDAP e reimpostare la configurazione LDAP in Astra. La chiamata aggiorna `astra.account.ldap` e il valore di `connectionHost` è deselezionato.

Il valore di `isEnabled` deve anche essere impostato su `false`. È possibile impostare questo valore prima di effettuare la chiamata di ripristino o come parte della chiamata di ripristino. Nel secondo caso, `connectionHost` devono essere cancellati e `isEnabled` impostare su `false` per la stessa chiamata di ripristino.



Si tratta di un'operazione di interruzione e si consiglia di procedere con cautela. Elimina tutti gli utenti e i gruppi LDAP importati. Inoltre, elimina tutti gli utenti, i gruppi e le associazioni di `roleBinding` Astra (tipo LDAP) creati in Astra Control Center.

Metodo HTTP	Percorso
IN PRIMO PIANO	/accounts/{account_id}/core/v1/settings/{setting_id}

### Esempio di input JSON

```
{
  "type": "application/astra-setting",
  "version": "1.0",
  "desiredConfig": {
    "connectionHost": "",
    "credentialId": "3bd9c8a7-f5a4-4c44-b778-90a85fc7d154",
    "groupBaseDN": "OU=groups,OU=astra,DC=example,DC=com",
    "isEnabled": "false",
    "port": 686,
    "secureMode": "LDAPS",
    "userBaseDN": "OU=users,OU=astra,DC=example,dc=com",
    "userSearchFilter": "((objectClass=User))",
    "vendor": "Active Directory"
  }
}
```

Tenere presente quanto segue:



- Per modificare il server LDAP, è necessario disattivare e reimpostare LDAP Changing connectHost su un valore nullo come mostrato nell'esempio precedente.

```
curl --location -i --request PUT --data @JSONinput
'https://astra.example.com/accounts/<ACCOUNT_ID>/core/v1/settings/<SETTING_ID>' --header 'Content-Type: application/astra-setting+json' --header 'Accept: */*' --header 'Authorization: Bearer <API_TOKEN>'
```

Se la chiamata ha esito positivo, il HTTP 204 la risposta viene restituita. È possibile recuperare nuovamente la configurazione per confermare la modifica.

## Cluster

### Elencare i cluster

È possibile elencare i cluster disponibili in un cloud specifico.

#### 1. Selezionare il cloud

Eseguire il flusso di lavoro ["Elencare i cloud"](#) e seleziona il cloud che contiene i cluster.

#### 2. Elencare i cluster

Eseguire la seguente chiamata API REST per elencare i cluster in un cloud specifico.

Metodo HTTP	Percorso
OTTIENI	/accounts/{account_id}/topology/v1/cloud/{cloud_id}/cluster

### Esempio di curl: Restituisce tutti i dati per tutti i cluster

```
curl --location -i --request GET
'https://astra.netapp.io/accounts/<ACCOUNT_ID>/topology/v1/clouds/<CLOUD_ID>/clusters' --header 'Accept: */*' --header 'Authorization: Bearer <API_TOKEN>'
```

### Esempio di output JSON

```
{
  "items": [
    {
      "type": "application/astra-cluster",
      "version": "1.1",
      "id": "7ce83fba-6aa1-4e0c-a194-26e714f5eb46",
      "name": "openshift-clstr-ol-07",
      "state": "running",
    }
  ]
}
```

```
"stateUnready": [],
"managedState": "managed",
"protectionState": "full",
"protectionStateDetails": [],
"restoreTargetSupported": "true",
"snapshotSupported": "true",
"managedStateUnready": [],
"managedTimestamp": "2022-11-03T15:50:59Z",
"inUse": "true",
"clusterType": "openshift",
"accHost": "true",
"clusterVersion": "1.23",
"clusterVersionString": "v1.23.12+6b34f32",
"namespaces": [
  "default",
  "kube-node-lease",
  "kube-public",
  "kube-system",
  "metallb-system",
  "mysql",
  "mysql-clone1",
  "mysql-clone2",
  "mysql-clone3",
  "mysql-clone4",
  "netapp-acc-operator",
  "netapp-monitoring",
  "openshift",
  "openshift-apiserver",
  "openshift-apiserver-operator",
  "openshift-authentication",
  "openshift-authentication-operator",
  "openshift-cloud-controller-manager",
  "openshift-cloud-controller-manager-operator",
  "openshift-cloud-credential-operator",
  "openshift-cloud-network-config-controller",
  "openshift-cluster-csi-drivers",
  "openshift-cluster-machine-approver",
  "openshift-cluster-node-tuning-operator",
  "openshift-cluster-samples-operator",
  "openshift-cluster-storage-operator",
  "openshift-cluster-version",
  "openshift-config",
  "openshift-config-managed",
  "openshift-config-operator",
  "openshift-console",
  "openshift-console-operator",
```

```
"openshift-console-user-settings",
"openshift-controller-manager",
"openshift-controller-manager-operator",
"openshift-dns",
"openshift-dns-operator",
"openshift-etcd",
"openshift-etcd-operator",
"openshift-host-network",
"openshift-image-registry",
"openshift-infra",
"openshift-ingress",
"openshift-ingress-canary",
"openshift-ingress-operator",
"openshift-insights",
"openshift-kni-infra",
"openshift-kube-apiserver",
"openshift-kube-apiserver-operator",
"openshift-kube-controller-manager",
"openshift-kube-controller-manager-operator",
"openshift-kube-scheduler",
"openshift-kube-scheduler-operator",
"openshift-kube-storage-version-migrator",
"openshift-kube-storage-version-migrator-operator",
"openshift-machine-api",
"openshift-machine-config-operator",
"openshift-marketplace",
"openshift-monitoring",
"openshift-multus",
"openshift-network-diagnostics",
"openshift-network-operator",
"openshift-node",
"openshift-oauth-apiserver",
"openshift-openstack-infra",
"openshift-operator-lifecycle-manager",
"openshift-operators",
"openshift-ovirt-infra",
"openshift-sdn",
"openshift-service-ca",
"openshift-service-ca-operator",
"openshift-user-workload-monitoring",
"openshift-vsphere-infra",
"pcloud",
"postgresql",
"trident"
],
"defaultStorageClass": "4bacbb3c-0727-4f58-b13c-3a2a069baf89",
```

```

    "cloudID": "4f1e1086-f415-4451-a051-c7299cd672ff",
    "credentialID": "7ffd7354-b6c2-4efa-8e7b-cf64d5598463",
    "isMultizonal": "false",
    "tridentManagedStateAllowed": [
      "unmanaged"
    ],
    "tridentVersion": "22.10.0",
    "apiServiceID": "98df44dc-2baf-40d5-8826-e198b1b40909",
    "metadata": {
      "labels": [
        {
          "name": "astra.netapp.io/labels/read-
only/cloudName",
          "value": "private"
        }
      ],
      "creationTimestamp": "2022-11-03T15:50:59Z",
      "modificationTimestamp": "2022-11-04T14:42:32Z",
      "createdBy": "00000000-0000-0000-0000-000000000000"
    }
  }
]
}

```

## Aggiungere un cluster utilizzando le credenziali

È possibile aggiungere un cluster in modo che sia disponibile per la gestione da parte di Astra. A partire dalla release Astra 22.11, è possibile aggiungere un cluster con Astra Control Center e Astra Control Service.



L'aggiunta di un cluster non è necessaria quando si utilizza un servizio Kubernetes di uno dei principali provider di cloud (AKS, EKS, GKE).

### 1. Ottenere il file kubeconfig

È necessario ottenere una copia del file **kubeconfig** dall'amministratore o dal servizio Kubernetes.

#### Preparare il file kubeconfig

Prima di utilizzare il file **kubeconfig**, eseguire le seguenti operazioni:

#### Convertire il file dal formato YAML a JSON

Se si riceve il file kubeconfig formattato come YAML, è necessario convertirlo in JSON.

#### Codificare JSON in base64

È necessario codificare il file JSON in base64. Ad esempio:

```
yq -o=json ~/.kube/config | base64
```

### 3. Selezionare il cloud

Eseguire il flusso di lavoro "Elencare i cloud" e selezionare il cloud in cui verrà aggiunto il cluster.



L'unico cloud che puoi selezionare è il cloud **privato**.

### 4. Creare una credenziale

Eseguire la seguente chiamata API REST per creare una credenziale utilizzando il file kubeconfig.

Metodo HTTP	Percorso
POST	/accounts/{account_id}/core/v1/credentials

### Esempio di input JSON

```
{
  "type" : "application/astra-credential",
  "version" : "1.1",
  "name" : "Cloud One",
  "keyType" : "kubeconfig",
  "keyStore" : {
    "base64": encoded_kubeconfig
  },
  "valid" : "true"
}
```

### Esempio di arriccamento

```
curl --location -i --request POST
'https://astra.netapp.io/accounts/<ACCOUNT_ID>/core/v1/credentials'
--header 'Accept: */*' --header 'Authorization: Bearer <API_TOKEN>' --data
@JSONinput
```

### 5. Aggiungere il cluster

Eseguire la seguente chiamata API REST per aggiungere il cluster al cloud. Il valore di `credentialID` il campo di immissione viene ottenuto dalla chiamata API REST nel passaggio precedente.

Metodo HTTP	Percorso
POST	/accounts/{account_id}/topology/v1/cloud/{cloud_id}/cluster

### Esempio di input JSON

```
{
  "type" : "application/astra-cluster",
  "version" : "1.1",
  "credentialID": credential_id
}
```

## Esempio di arricciamento

```
curl --location -i --request POST
'https://astra.netapp.io/accounts/<ACCOUNT_ID>/topology/v1/clouds/<CLOUD_ID>/clusters' --header 'Accept: */*' --header 'Authorization: Bearer <API_TOKEN>' --data @JSONinput
```

## Elencare i cluster gestiti

Puoi elencare i cluster Kubernetes attualmente gestiti da Astra.

### 1. Elencare i cluster gestiti

Eseguire la seguente chiamata API REST.

Metodo HTTP	Percorso
OTTIENI	/Accounts/{account_id}/topology/v1/managedClusters

### Esempio di curl: Restituisce tutti i dati per tutti i cluster

```
curl --location -i --request GET
'https://astra.netapp.io/accounts/<ACCOUNT_ID>/topology/v1/managedClusters' --header 'Accept: */*' --header 'Authorization: Bearer <API_TOKEN>'
```

## Gestire un cluster

È possibile gestire un cluster Kubernetes in modo da poter eseguire la protezione dei dati.

### 1. Selezionare il cluster da gestire

Eseguire il flusso di lavoro ["Elencare i cluster"](#) e selezionare il cluster desiderato. La proprietà `managedState` del cluster deve essere `unmanaged`.

### 2. Se si desidera, selezionare la classe di storage

Eseguire il flusso di lavoro come opzione ["Elencare le classi di storage"](#) e selezionare la classe di storage desiderata.



Se non si fornisce una classe di storage durante la chiamata per gestire il cluster, viene utilizzata la classe di storage predefinita.

### 3. Gestire il cluster

Eseguire la seguente chiamata API REST per gestire il cluster.

Metodo HTTP	Percorso
POST	/Accounts/{account_id}/topology/v1/managedClusters

#### Esempio di input JSON

```
{
  "type": "application/astra-managedCluster",
  "version": "1.0",
  "id": "d0fdf455-4330-476d-bb5d-4d109714e07d"
}
```

#### Esempio di arricciamento

```
curl --location -i --request POST
'https://astra.netapp.io/accounts/<ACCOUNT_ID>/topology/v1/managedClusters
' --header 'Accept: */*' --header 'Authorization: Bearer <API_TOKEN>'
--data @JSONinput
```

## Cloud

### Elencare i cloud

Puoi elencare i cloud definiti e disponibili per un account Astra specifico.

#### 1. Elencare i cloud

Eseguire la seguente chiamata API REST per elencare i cloud.

Metodo HTTP	Percorso
OTTIENI	/accounts/{account_id}/topology/v1/cloud

#### Esempio di curl: Restituisce tutti i dati per tutti i cloud

```
curl --location -i --request GET
'https://astra.netapp.io/accounts/<ACCOUNT_ID>/topology/v1/clouds'
--header 'Accept: */*' --header 'Authorization: Bearer <API_TOKEN>'
```

# Bucket

## Elencare i bucket

È possibile elencare i bucket S3 definiti per un account Astra specifico.

### 1. Elencare i bucket

Eseguire la seguente chiamata API REST per elencare i bucket.

Metodo HTTP	Percorso
OTTIENI	/accounts/{account_id}/topology/v1/bucket

### Esempio di curl: Restituisce tutti i dati per tutti i bucket

```
curl --location -i --request GET
'https://astra.netapp.io/accounts/<ACCOUNT_ID>/topology/v1/buckets'
--header 'Accept: */*' --header 'Authorization: Bearer <API_TOKEN>'
```

# Storage

## Elencare le classi di storage

È possibile elencare le classi di storage disponibili.

### 1. Selezionare il cloud

Eseguire il flusso di lavoro ["Elencare i cloud"](#) e seleziona il cloud in cui lavorerai.

### 2. Selezionare il cluster

Eseguire il flusso di lavoro ["Elencare i cluster"](#) e selezionare il cluster.

### 3. Elencare le classi di storage per un cluster specifico

Eseguire la seguente chiamata API REST per elencare le classi di storage per un cluster e un cloud specifici.

Metodo HTTP	Percorso
OTTIENI	/Accounts/{account_id}/topology/v1/cloud/<CLOUD_ID>/Clusters/<CLUSTER_ID>/storageClasses

### Esempio di curl: Restituisce tutti i dati per tutte le classi di storage



```
curl --location -i --request GET
'https://astra.netapp.io/accounts/<ACCOUNT_ID>/topology/v1/clouds/<CLOUD_ID>/clusters/<CLUSTER_ID>/storageClasses' --header 'Accept: */*' --header
'Authorization: Bearer <API_TOKEN>'
```

## Esempio di output JSON

```
{
  "items": [
    {
      "type": "application/astra-storageClass",
      "version": "1.1",
      "id": "4bacbb3c-0727-4f58-b13c-3a2a069baf89",
      "name": "ontap-basic",
      "provisioner": "csi.trident.netapp.io",
      "available": "eligible",
      "allowVolumeExpansion": "true",
      "reclaimPolicy": "Delete",
      "volumeBindingMode": "Immediate",
      "isDefault": "true",
      "metadata": {
        "createdBy": "system",
        "creationTimestamp": "2022-10-26T05:16:19Z",
        "modificationTimestamp": "2022-10-26T05:16:19Z",
        "labels": []
      }
    },
    {
      "type": "application/astra-storageClass",
      "version": "1.1",
      "id": "150fe657-4a42-47a3-abc6-5dafba3de8bf",
      "name": "thin",
      "provisioner": "kubernetes.io/vsphere-volume",
      "available": "ineligible",
      "reclaimPolicy": "Delete",
      "volumeBindingMode": "Immediate",
      "metadata": {
        "createdBy": "system",
        "creationTimestamp": "2022-10-26T04:46:08Z",
        "modificationTimestamp": "2022-11-04T14:58:19Z",
        "labels": []
      }
    }
  ]
}
```

```

    "type": "application/astra-storageClass",
    "version": "1.1",
    "id": "7c6a5c58-6a0d-4cb6-98a0-8202ad2de74a",
    "name": "thin-csi",
    "provisioner": "csi.vsphere.vmware.com",
    "available": "ineligible",
    "allowVolumeExpansion": "true",
    "reclaimPolicy": "Delete",
    "volumeBindingMode": "WaitForFirstConsumer",
    "metadata": {
      "createdBy": "system",
      "creationTimestamp": "2022-10-26T04:46:17Z",
      "modificationTimestamp": "2022-10-26T04:46:17Z",
      "labels": []
    }
  },
  {
    "type": "application/astra-storageClass",
    "version": "1.1",
    "id": "7010ef09-92a5-4c90-a5e5-3118e02dc9a7",
    "name": "vsim-san",
    "provisioner": "csi.trident.netapp.io",
    "available": "eligible",
    "allowVolumeExpansion": "true",
    "reclaimPolicy": "Delete",
    "volumeBindingMode": "Immediate",
    "metadata": {
      "createdBy": "system",
      "creationTimestamp": "2022-11-03T18:40:03Z",
      "modificationTimestamp": "2022-11-03T18:40:03Z",
      "labels": []
    }
  }
]
}

```

## Elenca i backend di storage

È possibile elencare i backend di storage disponibili.

### 1. Elencare i backend

Eseguire la seguente chiamata API REST.

Metodo HTTP	Percorso
OTTIENI	/Accounts/{account_id}/topology/v1/storageBackends

## Esempio di curl: Restituisce tutti i dati per tutti i backend di storage

```
curl --location -i --request GET
'https://astra.netapp.io/accounts/<ACCOUNT_ID>/topology/v1/storageBackends
' --header 'Accept: */*' --header 'Authorization: Bearer <API_TOKEN>'
```

## Esempio di output JSON

```
{
  "items": [
    {
      "backendCredentialsName": "10.191.77.177",
      "backendName": "myinchunhcluster-1",
      "backendType": "ONTAP",
      "backendVersion": "9.8.0",
      "configVersion": "Not applicable",
      "health": "Not applicable",
      "id": "46467c16-1585-4b71-8e7f-f0bc5ff9da15",
      "location": "nalab2",
      "metadata": {
        "createdBy": "4c483a7e-207b-4f9a-87b7-799a4629d7c8",
        "creationTimestamp": "2021-07-30T14:26:19Z",
        "modificationTimestamp": "2021-07-30T14:26:19Z"
      },
      "ontap": {
        "backendManagementIP": "10.191.77.177",
        "managementIPs": [
          "10.191.77.177",
          "10.191.77.179"
        ]
      },
      "protectionPolicy": "Not applicable",
      "region": "Not applicable",
      "state": "Running",
      "stateUnready": [],
      "type": "application/astra-storageBackend",
      "version": "1.0",
      "zone": "Not applicable"
    }
  ]
}
```

# Workflow di gestione

## Prima di iniziare

È possibile utilizzare questi flussi di lavoro come parte dell'amministrazione delle applicazioni in un cluster gestito da Astra.



Questi flussi di lavoro possono essere ampliati e migliorati da NetApp in qualsiasi momento, pertanto è necessario esaminarli periodicamente.

## Preparazione generale

Prima di utilizzare uno qualsiasi dei flussi di lavoro Astra, assicurarsi di rivedere ["Preparati a utilizzare i flussi di lavoro"](#).

## Categorie di workflow

I flussi di lavoro di gestione sono organizzati in diverse categorie per facilitare l'individuazione di quello desiderato.

Categoria	Descrizione
Controllo delle applicazioni	Questi flussi di lavoro consentono di controllare le applicazioni gestite e non gestite. È possibile elencare le applicazioni, nonché creare e rimuovere un'applicazione gestita.
Protezione dell'applicazione	È possibile utilizzare questi flussi di lavoro per proteggere le applicazioni gestite attraverso snapshot e backup.
Clonare e ripristinare le applicazioni	Questo flusso di lavoro descrive come clonare e ripristinare le applicazioni gestite.
Supporto	Sono disponibili diversi flussi di lavoro per il debug e il supporto delle applicazioni, oltre all'ambiente Kubernetes generale.

## Considerazioni aggiuntive

Quando si utilizzano i flussi di lavoro di gestione, è necessario considerare alcune considerazioni aggiuntive.

### Clonare un'applicazione

Quando si clonano un'applicazione, è necessario prendere in considerazione alcuni aspetti. I parametri descritti di seguito fanno parte dell'input JSON.

#### Identificatore del cluster di origine

Il valore di `sourceClusterID` identifica sempre il cluster in cui è installata l'applicazione originale.

#### Identificatore del cluster

Il valore di `clusterID` identifica il cluster in cui verrà installata la nuova applicazione.

- Durante la clonazione all'interno dello stesso cluster, `clusterID` e `sourceClusterID` hanno lo stesso valore.

- Quando si esegue la clonazione tra cluster, i due valori sono diversi e. `clusterID` Deve essere l'ID del cluster di destinazione.

## Spazi dei nomi

Il `namespace` il valore deve essere diverso dall'applicazione di origine. Inoltre, lo spazio dei nomi per il clone non può esistere e Astra lo crea.

## Backup e snapshot

È possibile clonare un'applicazione da un backup o da uno snapshot esistente utilizzando `backupID` oppure `snapshotID` parametri. Se non si fornisce un backup o uno snapshot, Astra crea prima un backup dell'applicazione e poi clonerà dal backup.

## Ripristino di un'applicazione

Di seguito sono riportati alcuni aspetti da considerare durante il ripristino di un'applicazione.

- Il ripristino di un'applicazione è molto simile all'operazione di clonazione.
- Durante il ripristino di un'applicazione, è necessario fornire un backup o uno snapshot.

# Controllo dell'app

## Elencare le applicazioni

È possibile elencare le applicazioni attualmente gestite da Astra. È possibile eseguire questa operazione nell'ambito della ricerca di snapshot o backup per un'applicazione specifica.

### 1. Elencare le applicazioni

Eeguire la seguente chiamata API REST.

Metodo HTTP	Percorso
OTTIENI	/account/{account_id}/k8s/v2/apps

## Parametri di input aggiuntivi

Oltre ai parametri comuni a tutte le chiamate API REST, negli esempi di curl vengono utilizzati anche i seguenti parametri.

Parametro	Tipo	Obbligatorio	Descrizione
includi	Query	No	Se si desidera, selezionare i valori che si desidera restituire nella risposta.

## Esempio di curl: Restituisce tutti i dati per tutte le applicazioni

```
curl --location -i --request GET
'https://astra.netapp.io/accounts/<ACCOUNT_ID>/k8s/v2/apps' --header
'Accept: */*' --header 'Authorization: Bearer <API_TOKEN>'
```

### Esempio di curl: Restituisce il nome, l'id e lo stato per tutte le applicazioni

```
curl --location -i --request GET
'https://astra.netapp.io/accounts/<ACCOUNT_ID>/k8s/v2/apps?include=name,id
,state' --header 'Accept: */*' --header 'Authorization: Bearer
<API_TOKEN>'
```

### Esempio di output JSON

```
{
  "items": [
    [
      "mysql",
      "4ee2b8fa-3696-4f32-8879-399792f477c3",
      "ready"
    ],
    [
      "postgresql",
      "3b984474-e5c9-4b64-97ee-cdeb9bcd212e",
      "ready"
    ],
  ],
  "metadata": {}
}
```

## Scarica un'app

È possibile recuperare tutte le variabili delle risorse che descrivono una singola applicazione.

### Prima di iniziare

È necessario disporre dell'ID dell'applicazione che si desidera recuperare. Se necessario, è possibile utilizzare il flusso di lavoro ["Elencare le applicazioni"](#) per individuare l'applicazione.

#### 1. Scarica l'applicazione

Eseguire la seguente chiamata API REST.

Metodo HTTP	Percorso
OTTIENI	/accounts/{account_id}/k8s/v2/apps/{app_id}

### Parametri di input aggiuntivi

Oltre ai parametri comuni a tutte le chiamate API REST, negli esempi di curl vengono utilizzati anche i seguenti parametri.

Parametro	Tipo	Obbligatorio	Descrizione
id app	Percorso	Sì	Valore ID dell'applicazione da recuperare.

### Esempio di curl: Restituisce tutti i dati per l'applicazione

```
curl --location -i --request GET
'https://astra.netapp.io/accounts/<ACCOUNT_ID>/k8s/v2/apps/<APP_ID>'
--header 'Accept: */*' --header 'Authorization: Bearer <API_TOKEN>'
```

## Gestire un'applicazione

È possibile creare un'applicazione gestita in base a un'applicazione già nota ad Astra in uno spazio dei nomi specifico. Quando un'applicazione viene gestita o definita in Astra, è possibile proteggerla eseguendo backup e snapshot.

#### 1. Selezionare lo spazio dei nomi

Eeguire il flusso di lavoro ["Elencare gli spazi dei nomi"](#) e selezionare lo spazio dei nomi.

#### 2. Selezionare il cluster

Eeguire il flusso di lavoro ["Elencare i cluster"](#) e selezionare il cluster.

#### 3. Gestire l'applicazione

Eeguire la seguente chiamata API REST per gestire l'applicazione.

Metodo HTTP	Percorso
POST	/accounts/{account_id}/k8s/v2/apps

### Parametri di input aggiuntivi

Oltre ai parametri comuni a tutte le chiamate API REST, negli esempi di curl vengono utilizzati anche i seguenti parametri.

Parametro	Tipo	Obbligatorio	Descrizione
JSON	Corpo	Sì	Fornisce i parametri necessari per identificare l'applicazione da gestire. Vedere l'esempio riportato di seguito.

### Esempio di input JSON

```
{
  "clusterID": "7ce83fba-6aa1-4e0c-a194-26e714f5eb46",
  "name": "subtext",
  "namespaceScopedResources": [{"namespace": "kube-matrix"}],
  "type": "application/astra-app",
  "version": "2.0"
}
```

### Esempio di curl: Gestire un'applicazione

```
curl --location -i --request POST
'https://astra.netapp.io/accounts/<ACCOUNT_ID>/k8s/v2/apps' --header
'Content-Type: application/astra-app+json' --header 'Accept: */*' --header
'Authorization: Bearer <API_TOKEN>' --data @JSONinput
```

## Annullare la gestione di un'applicazione

Puoi rimuovere un'applicazione gestita quando non è più necessaria. La rimozione di un'applicazione gestita elimina anche le pianificazioni associate.

### Prima di iniziare

Devi disporre dell'ID dell'applicazione che desideri annullare la gestione. Se necessario, è possibile utilizzare il flusso di lavoro ["Elencare le applicazioni"](#) per individuare l'applicazione.

I backup e le snapshot dell'applicazione non vengono rimossi automaticamente quando vengono eliminati. Se non sono più necessari backup e snapshot, è necessario eliminarli prima di rimuovere l'applicazione.

#### 1. Applicazione non gestita

Eseguire la seguente chiamata API REST per rimuovere l'applicazione.

Metodo HTTP	Percorso
ELIMINARE	/accounts/{account_id}/k8s/v2/apps/{app_id}

### Parametri di input aggiuntivi

Oltre ai parametri comuni a tutte le chiamate API REST, negli esempi di curl vengono utilizzati anche i seguenti parametri.



Parametro	Tipo	Obbligatorio	Descrizione
id app	Percorso	Sì	Identifica l'applicazione da rimuovere.

### Esempio di curl: Rimuovere un'applicazione gestita

```
curl --location -i --request DELETE
'https://astra.netapp.io/accounts/<ACCOUNT_ID>/k8s/v2/apps/<APP_ID>'
--header 'Accept: */*' --header 'Authorization: Bearer <API_TOKEN>'
```

## Protezione delle applicazioni

### Elencare le istantanee

È possibile elencare le istantanee acquisite per un'applicazione specifica.

#### Prima di iniziare

È necessario disporre dell'ID dell'applicazione per la quale si desidera elencare le snapshot. Se necessario, è possibile utilizzare il flusso di lavoro ["Elencare le applicazioni"](#) per individuare l'applicazione.

#### 1. Elencare le istantanee

Eseguire la seguente chiamata API REST per elencare le snapshot.

Metodo HTTP	Percorso
OTTIENI	/Accounts/{account_id}/k8s/v1/apps/{app_id}/appSnap

#### Parametri di input aggiuntivi

Oltre ai parametri comuni a tutte le chiamate API REST, negli esempi di curl vengono utilizzati anche i seguenti parametri.

Parametro	Tipo	Obbligatorio	Descrizione
id app	Percorso	Sì	Identifica l'applicazione proprietaria delle istantanee elencate.
conta	Query	No	Se <code>count=true</code> il numero di snapshot è incluso nella sezione dei metadati della risposta.

### Esempio di curl: Restituire tutte le snapshot per l'applicazione

```
curl --location -i --request GET
'https://astra.netapp.io/accounts/<ACCOUNT_ID>/k8s/v1/apps/<APP_ID>/appSnap
ps' --header 'Accept: */*' --header 'Authorization: Bearer <API_TOKEN>'
```

## Esempio di curl: Restituisce tutte le snapshot per l'applicazione e il numero

```
curl --location -i --request GET
'https://astra.netapp.io/accounts/<ACCOUNT_ID>/k8s/v1/apps/<APP_ID>/appSnap
sps?count=true' --header 'Accept: */*' --header 'Authorization: Bearer
<API_TOKEN>'
```

## Esempio di output JSON

```
{
  "items": [
    {
      "type": "application/astra-appSnap",
      "version": "1.1",
      "id": "1ce34da4-bb0a-4926-b925-4a5d85dda8c2",
      "hookState": "success",
      "metadata": {
        "createdBy": "a530e865-23e8-4e2e-8020-e92c419a3867",
        "creationTimestamp": "2022-10-30T22:44:20Z",
        "modificationTimestamp": "2022-10-30T22:44:20Z",
        "labels": []
      },
      "snapshotAppAsset": "0ebfe3f8-40ed-4bdc-88c4-2144fbda85a0",
      "snapshotCreationTimestamp": "2022-10-30T22:44:33Z",
      "name": "snapshot-david-1",
      "state": "completed",
      "stateUnready": []
    }
  ],
  "metadata": {}
}
```

## Elencare i backup

È possibile elencare i backup creati per un'applicazione specifica.

### Prima di iniziare

È necessario disporre dell'ID dell'applicazione per cui si desidera elencare i backup. Se necessario, è possibile utilizzare il flusso di lavoro ["Elencare le applicazioni"](#) per individuare l'applicazione.

### 1. Elencare i backup

Eeguire la seguente chiamata API REST.

Metodo HTTP	Percorso
OTTIENI	/Accounts/{account_id}/k8s/v1/apps/{app_id}/appBackups

### Parametri di input aggiuntivi

Oltre ai parametri comuni a tutte le chiamate API REST, negli esempi di curl vengono utilizzati anche i seguenti parametri.

Parametro	Tipo	Obbligatorio	Descrizione
id app	Percorso	Sì	Identifica l'applicazione gestita proprietaria dei backup elencati.

### Esempio di curl: Restituire tutti i backup per l'applicazione

```
curl --location -i --request GET
'https://astra.netapp.io/accounts/<ACCOUNT_ID>/k8s/v1/apps/<APP_ID>/appBackups' --header 'Accept: */*' --header 'Authorization: Bearer <API_TOKEN>'
```

### Esempio di output JSON

```

{
  "items": [
    {
      "type": "application/astra-appBackup",
      "version": "1.1",
      "id": "8edeb4a4-fd8b-4222-a559-1013145b28fc",
      "name": "backup-david-oct28-1",
      "bucketID": "a443e58f-59bd-4d45-835a-1bc7813f659a",
      "snapshotID": "dfe237cb-57b7-4576-af4d-00ba3a8f2828",
      "state": "completed",
      "stateUnready": [],
      "hookState": "success",
      "totalBytes": 205219132,
      "bytesDone": 205219132,
      "percentDone": 100,
      "metadata": {
        "labels": [
          {
            "name": "astra.netapp.io/labels/read-
only/triggerType",
            "value": "backup"
          }
        ],
        "creationTimestamp": "2022-10-28T21:58:37Z",
        "modificationTimestamp": "2022-10-28T21:58:55Z",
        "createdBy": "a530e865-23e8-4e2e-8020-e92c419a3867"
      }
    }
  ],
  "metadata": {}
}

```

## Creare un'istantanea per un'applicazione

È possibile creare uno snapshot per un'applicazione specifica.

### Prima di iniziare

È necessario disporre dell'ID dell'applicazione per la quale si desidera creare uno snapshot. Se necessario, è possibile utilizzare il flusso di lavoro ["Elencare le applicazioni"](#) per individuare l'applicazione.

#### 1. Creare un'istantanea

Eseguire la seguente chiamata API REST.

Metodo HTTP	Percorso
POST	/Accounts/{account_id}/k8s/v1/apps/{app_id}/appSnap

### Parametri di input aggiuntivi

Oltre ai parametri comuni a tutte le chiamate API REST, negli esempi di curl vengono utilizzati anche i seguenti parametri.

Parametro	Tipo	Obbligatorio	Descrizione
id app	Percorso	Sì	Identifica l'applicazione gestita in cui verrà creata l'istantanea.
JSON	Corpo	Sì	Fornisce i parametri per lo snapshot. Vedere l'esempio riportato di seguito.

### Esempio di input JSON

```
{
  "type": "application/astra-appSnap",
  "version": "1.1",
  "name": "snapshot-david-1"
}
```

### Esempio di curl: Creare un'istantanea per l'applicazione

```
curl --location -i --request POST
'https://astra.netapp.io/accounts/<ACCOUNT_ID>/k8s/v1/apps/<APP_ID>/appSnap
ps' --header 'Content-Type: application/astra-appSnap+json' --header
'Accept: */*' --header 'Authorization: Bearer <API_TOKEN>' --data
@JSONinput
```

## Creare un backup per un'applicazione

È possibile creare un backup per un'applicazione specifica e utilizzarlo per ripristinare o clonare l'applicazione.

#### Prima di iniziare

Devi disporre dell'ID dell'applicazione di cui desideri eseguire il backup. Se necessario, è possibile utilizzare il flusso di lavoro ["Elencare le applicazioni"](#) per individuare l'applicazione.

#### 1. Creare un backup

Eseguire la seguente chiamata API REST.

Metodo HTTP	Percorso
POST	/Accounts/{account_id}/k8s/v1/apps/{app_id}/appBackups

### Parametri di input aggiuntivi

Oltre ai parametri comuni a tutte le chiamate API REST, negli esempi di curl vengono utilizzati anche i seguenti parametri.

Parametro	Tipo	Obbligatorio	Descrizione
id app	Percorso	Sì	Identifica l'applicazione in cui verrà creato il backup.
JSON	Corpo	Sì	Fornisce i parametri per il backup. Vedere l'esempio riportato di seguito.

### Esempio di input JSON

```
{
  "type": "application/astra-appBackup",
  "version": "1.1",
  "name": "backup-david-1"
}
```

### Esempio di curl: Creare un backup per l'applicazione

```
curl --location -i --request POST
'https://astra.netapp.io/accounts/<ACCOUNT_ID>/k8s/v1/apps/<APP_ID>/appBackups' --header 'Content-Type: application/astra-appBackup+json' --header 'Accept: */*' --header 'Authorization: Bearer <API_TOKEN>' --data @JSONinput
```

## Eliminare uno snapshot

È possibile eliminare uno snapshot associato a un'applicazione.

### Prima di iniziare

È necessario disporre di quanto segue:

- ID dell'applicazione proprietaria dello snapshot. Se necessario, è possibile utilizzare il flusso di lavoro ["Elencare le applicazioni"](#) per individuare l'applicazione.
- ID dello snapshot che si desidera eliminare. Se necessario, è possibile utilizzare il flusso di lavoro ["Elencare le istantanee"](#) per individuare lo snapshot.

## 1. Eliminare l'istantanea

Eseguire la seguente chiamata API REST.

Metodo HTTP	Percorso
ELIMINARE	/Accounts/{account_id}/k8s/v1/apps/{app_id}/appSnap/{appSnap_id}

### Parametri di input aggiuntivi

Oltre ai parametri comuni a tutte le chiamate API REST, negli esempi di curl vengono utilizzati anche i seguenti parametri.

Parametro	Tipo	Obbligatorio	Descrizione
id app	Percorso	Sì	Identifica l'applicazione gestita proprietaria dello snapshot.
id snapshot	Percorso	Sì	Identifica lo snapshot da eliminare.

### Esempio di curl: Eliminare una singola istantanea per l'applicazione

```
curl --location -i --request DELETE
'https://astra.netapp.io/accounts/<ACCOUNT_ID>/k8s/v1/apps/<APP_ID>/appSnap/<SNAPSHOT_ID>' --header 'Accept: */*' --header 'Authorization: Bearer <API_TOKEN>'
```

## Eliminare un backup

È possibile eliminare un backup associato a un'applicazione.

### Prima di iniziare

È necessario disporre di quanto segue:

- ID dell'applicazione proprietaria del backup. Se necessario, è possibile utilizzare il flusso di lavoro ["Elencare le applicazioni"](#) per individuare l'applicazione.
- ID del backup che si desidera eliminare. Se necessario, è possibile utilizzare il flusso di lavoro ["Elencare i backup"](#) per individuare lo snapshot.

### 1. Eliminare il backup

Eseguire la seguente chiamata API REST.



È possibile forzare l'eliminazione di un backup non riuscito utilizzando l'intestazione della richiesta opzionale come descritto di seguito.

Metodo HTTP	Percorso
ELIMINARE	/Accounts/{account_id}/k8s/v1/apps/{app_id}/appBackups/{appBackup_id}

## Parametri di input aggiuntivi

Oltre ai parametri comuni a tutte le chiamate API REST, negli esempi di curl vengono utilizzati anche i seguenti parametri.

Parametro	Tipo	Obbligatorio	Descrizione
id app	Percorso	Sì	Identifica l'applicazione gestita proprietaria del backup.
id backup	Percorso	Sì	Identifica il backup da eliminare.
forza eliminazione	Intestazione	No	Utilizzato per forzare l'eliminazione di un backup non riuscito.

### Esempio di curl: Eliminare un singolo backup per l'applicazione

```
curl --location -i --request DELETE
'https://astra.netapp.io/accounts/<ACCOUNT_ID>/k8s/v1/apps/<APP_ID>/appBackups/<BACKUP_ID>' --header 'Accept: */*' --header 'Authorization: Bearer <API_TOKEN>'
```

### Esempio di curl: Eliminare un singolo backup per l'applicazione con l'opzione force

```
curl --location -i --request DELETE
'https://astra.netapp.io/accounts/<ACCOUNT_ID>/k8s/v1/apps/<APP_ID>/appBackups/<BACKUP_ID>' --header 'Accept: */*' --header 'Authorization: Bearer <API_TOKEN>' --header 'Force-Delete: true'
```

## Creare una policy di protezione dei dati

È possibile creare una policy di protezione dei dati in base a una o più pianificazioni.

### 1. Selezionare l'applicazione

Eseguire il flusso di lavoro ["Elencare le applicazioni"](#) e selezionare l'applicazione desiderata.

### 2. Creare la protezione

Eseguire la seguente chiamata API REST per creare un criterio di protezione per una specifica applicazione.

Metodo HTTP	Percorso
POST	/accounts/{account_id}/k8s/v1/apps/{app_id}/schedules

### Esempio di input JSON



```
{
  "type": "application/astra-schedule",
  "version": "1.3",
  "name": "Backup Schedule",
  "enabled": "true",
  "granularity": "monthly",
  "minute": "0",
  "hour": "0",
  "dayOfMonth": "1",
  "snapshotRetention": "12",
  "backupRetention": "12"
}
```

### Esempio di arricciamento

```
curl --location -i --request POST
'https://astra.netapp.io/accounts/<ACCOUNT_ID>/k8s/v1/apps/<APP_ID>/schedules' --header 'Accept: */*' --header 'Authorization: Bearer <API_TOKEN>'
--data @JSONinput
```

## Clonare e ripristinare un'applicazione

### Clonare un'applicazione

È possibile creare una nuova applicazione clonando un'applicazione esistente.

#### Prima di iniziare

Tenere presente quanto segue a proposito di questo flusso di lavoro:

- Non viene utilizzato un backup o uno snapshot dell'applicazione
- L'operazione di cloni viene eseguita all'interno dello stesso cluster
- La nuova applicazione viene inserita in uno spazio dei nomi diverso



Per clonare un'applicazione in un cluster diverso, è necessario aggiornare `clusterId` Nell'input JSON appropriato per il proprio ambiente.

#### 1. Selezionare l'applicazione da clonare

Eseguire il flusso di lavoro ["Elencare le applicazioni"](#) e selezionare l'applicazione che si desidera clonare. Per la chiamata DI PAUSA utilizzata per clonare l'applicazione sono necessari diversi valori delle risorse.

#### 2. Clonare l'applicazione

Eseguire la seguente chiamata API REST per clonare l'applicazione.

Metodo HTTP	Percorso
POST	/accounts/{account_id}/k8s/v2/apps

### Parametri di input aggiuntivi

Oltre ai parametri comuni a tutte le chiamate API REST, negli esempi di curl vengono utilizzati anche i seguenti parametri.

Parametro	Tipo	Obbligatorio	Descrizione
JSON	Corpo	Sì	Fornisce i parametri per l'applicazione clonata. Vedere l'esempio riportato di seguito.

### Esempio di input JSON

```
{
  "type": "application/astra-app",
  "version": "2.0",
  "name": "mysql-clone",
  "clusterID": "30880586-d579-4d27-930f-a9633e59173b",
  "sourceClusterID": "30880586-d579-4d27-930f-a9633e59173b",
  "namespace": "mysql-ns",
  "sourceAppID": "e591ee59-ea90-4a9f-8e6c-d2b6e8647096"
}
```

### Esempio di curl: Clonare un'applicazione

```
curl --location -i --request POST
'https://astra.netapp.io/accounts/<ACCOUNT_ID>/k8s/v2/apps' --header
'Content-Type: application/astra-app+json' --header '*/*' --header
'Authorization: Bearer <API_TOKEN>' --data @JSONinput
```

## Clonare un'applicazione da uno snapshot

È possibile creare una nuova applicazione clonandola da uno snapshot.

#### Prima di iniziare

Tenere presente quanto segue a proposito di questo flusso di lavoro:

- Viene utilizzata un'istantanea dell'applicazione
- L'operazione di cloni viene eseguita all'interno dello stesso cluster



Per clonare un'applicazione in un cluster diverso, è necessario aggiornare `clusterId`. Nell'input JSON appropriato per il proprio ambiente.

### 1. Selezionare l'applicazione da clonare

Eseguire il flusso di lavoro "Elencare le applicazioni" e selezionare l'applicazione che si desidera clonare. Per la chiamata DI PAUSA utilizzata per clonare l'applicazione sono necessari diversi valori delle risorse.

### 2. Selezionare l'istantanea da utilizzare

Eseguire il flusso di lavoro "Elencare le istantanee" e selezionare lo snapshot da utilizzare.

### 3. Clonare l'applicazione

Eseguire la seguente chiamata API REST.

Metodo HTTP	Percorso
POST	/accounts/{account_id}/k8s/v2/apps

### Parametri di input aggiuntivi

Oltre ai parametri comuni a tutte le chiamate API REST, negli esempi di curl vengono utilizzati anche i seguenti parametri.

Parametro	Tipo	Obbligatorio	Descrizione
JSON	Corpo	Sì	Fornisce i parametri per l'applicazione clonata. Vedere l'esempio riportato di seguito.

### Esempio di input JSON

```
{
  "type": "application/astra-app",
  "version": "2.0",
  "name": "mysql-clone2",
  "clusterID": "30880586-d579-4d27-930f-a9633e59173b",
  "sourceClusterID": "30880586-d579-4d27-930f-a9633e59173b",
  "namespace": "mysql",
  "snapshotID": "e24515bd-a28e-4b28-b832-f3c74dbf32fb"
}
```

### Esempio di curl: Clonare un'applicazione da uno snapshot

```
curl --location -i --request POST
'https://astra.netapp.io/accounts/<ACCOUNT_ID>/k8s/v2/apps' --header
'Content-Type: application/astra-app+json' --header '*/*' --header
'Authorization: Bearer <API_TOKEN>' --data @JSONinput
```

## Clonare un'applicazione da un backup

È possibile creare una nuova applicazione clonandola da un backup.

### Prima di iniziare

Tenere presente quanto segue a proposito di questo flusso di lavoro:

- Viene utilizzato un backup dell'applicazione
- L'operazione di cloni viene eseguita all'interno dello stesso cluster



Per clonare un'applicazione in un cluster diverso, è necessario aggiornare `clusterId` Nell'input JSON appropriato per il proprio ambiente.

### 1. Selezionare l'applicazione da clonare

Eseguire il flusso di lavoro "[Elencare le applicazioni](#)" e selezionare l'applicazione che si desidera clonare. Per la chiamata DI PAUSA utilizzata per clonare l'applicazione sono necessari diversi valori delle risorse.

### 2. Selezionare il backup da utilizzare

Eseguire il flusso di lavoro "[Elencare i backup](#)" e selezionare il backup che si desidera utilizzare.

### 3. Clonare l'applicazione

Eseguire la seguente chiamata API REST.

Metodo HTTP	Percorso
POST	/accounts/{account_id}/k8s/v2/qpps

### Parametri di input aggiuntivi

Oltre ai parametri comuni a tutte le chiamate API REST, negli esempi di curl vengono utilizzati anche i seguenti parametri.

Parametro	Tipo	Obbligatorio	Descrizione
JSON	Corpo	Sì	Fornisce i parametri per l'applicazione clonata. Vedere l'esempio riportato di seguito.

### Esempio di input JSON

```
{
  "type": "application/astra-app",
  "version": "2.0",
  "name": "mysql-clone3",
  "clusterID": "30880586-d579-4d27-930f-a9633e59173b",
  "sourceClusterID": "30880586-d579-4d27-930f-a9633e59173b",
  "namespace": "mysql",
  "backupID": "e24515bd-a28e-4b28-b832-f3c74dbf32fb"
}
```

## Esempio di curl: Clonare un'applicazione da un backup

```
curl --location -i --request POST
'https://astra.netapp.io/accounts/<ACCOUNT_ID>/k8s/v2/apps' --header
'Content-Type: application/astra-app+json' --header '*/*' --header
'Authorization: Bearer <API_TOKEN>' --data @JSONinput
```

## Ripristinare un'applicazione da un backup

È possibile ripristinare un'applicazione creando una nuova applicazione da un backup.

### 1. Selezionare l'applicazione da ripristinare

Eseguire il flusso di lavoro ["Elencare le applicazioni"](#) e selezionare l'applicazione che si desidera clonare. Per la chiamata DI PAUSA utilizzata per ripristinare l'applicazione sono necessari diversi valori di risorse.

### 2. Selezionare il backup da utilizzare

Eseguire il flusso di lavoro ["Elencare i backup"](#) e selezionare il backup che si desidera utilizzare.

### 3. Ripristinare l'applicazione

Eseguire la seguente chiamata API REST. È necessario fornire l'ID per un backup (come mostrato di seguito) o uno snapshot.

Metodo HTTP	Percorso
IN PRIMO PIANO	/accounts/{account_id}/k8s/v2/apps/{app_id}

## Parametri di input aggiuntivi

Oltre ai parametri comuni a tutte le chiamate API REST, negli esempi di curl vengono utilizzati anche i seguenti parametri.

Parametro	Tipo	Obbligatorio	Descrizione
JSON	Corpo	Sì	Fornisce i parametri per l'applicazione clonata. Vedere l'esempio riportato di seguito.

### Esempio di input JSON

```
{
  "type": "application/astra-app",
  "version": "2.0",
  "backupID": "e24515bd-a28e-4b28-b832-f3c74dbf32fb"
}
```

### Esempio di curl: Ripristinare un'applicazione in uso da un backup

```
curl --location -i --request PUT
'https://astra.netapp.io/accounts/<ACCOUNT_ID>/k8s/v2/apps/<APP_ID>'
--header 'Content-Type: application/astra-app+json' --header '*/*'
--header 'ForceUpdate: true' --header 'Authorization: Bearer <API_TOKEN>'
--data @JSONinput
```

## Spazi dei nomi

### Elencare gli spazi dei nomi

È possibile elencare gli spazi dei nomi disponibili.

#### 1. Elencare gli spazi dei nomi

Eseguire la seguente chiamata API REST per elencare gli spazi dei nomi.

Metodo HTTP	Percorso
OTTIENI	/accounts/{account_id}/topology/v1/namespaces

### Esempio di curl: Restituisce tutti i dati per tutti gli spazi dei nomi

```
curl --location -i --request GET
'https://astra.netapp.io/accounts/<ACCOUNT_ID>/topology/v1/namespaces'
--header 'Accept: */*' --header 'Authorization: Bearer <API_TOKEN>'
```

### Esempio di curl: Restituisce nome, stato e ID cluster per tutti gli spazi dei nomi

```
curl --location -i --request GET
'https://astra.netapp.io/accounts/<ACCOUNT_ID>/topology/v1/namespaces?include=name,namespaceState,clusterID' --header 'Accept: */*' --header
'Authorization: Bearer <API_TOKEN>'
```

## Esempio di output JSON

```
{
  "items": [
    [
      "default",
      "discovered",
      "922f924a-a476-4a79-97f6-472571698154"
    ],
    [
      "kube-node-lease",
      "discovered",
      "922f924a-a476-4a79-97f6-472571698154"
    ],
    [
      "kube-public",
      "discovered",
      "922f924a-a476-4a79-97f6-472571698154"
    ],
    [
      "kube-system",
      "discovered",
      "922f924a-a476-4a79-97f6-472571698154"
    ],
    [
      "mysql",
      "discovered",
      "922f924a-a476-4a79-97f6-472571698154"
    ],
    [
      "mysql-clone1",
      "discovered",
      "922f924a-a476-4a79-97f6-472571698154"
    ],
    [
      "netapp-acc-operator",
      "discovered",
      "922f924a-a476-4a79-97f6-472571698154"
    ]
  ],
}
```

```

    [
      "openshift",
      "discovered",
      "922f924a-a476-4a79-97f6-472571698154"
    ],
    [
      "trident",
      "discovered",
      "922f924a-a476-4a79-97f6-472571698154"
    ]
  ],
  "metadata": {}
}

```

## Supporto

### Elencare le notifiche

Puoi elencare le notifiche per un account Astra specifico. Questa operazione potrebbe essere eseguita durante il monitoraggio dell'attività del sistema o il debug di un problema.

#### 1. Elencare le notifiche

Eseguire la seguente chiamata API REST.

Metodo HTTP	Percorso
OTTIENI	/accounts/{account_id}/core/v1/notifications

#### Parametri di input aggiuntivi

Oltre ai parametri comuni a tutte le chiamate API REST, negli esempi di curl vengono utilizzati anche i seguenti parametri.

Parametro	Tipo	Obbligat orio	Descrizione
filtro	Query	No	Se si desidera, filtrare le notifiche che si desidera restituire nella risposta.
includi	Query	No	Se si desidera, selezionare i valori che si desidera restituire nella risposta.

#### Esempio di curl: Restituisce tutte le notifiche

```

curl --location -i --request GET
'https://astra.netapp.io/accounts/<ACCOUNT_ID>/core/v1/notifications'
--header 'Accept: */*' --header 'Authorization: Bearer <API_TOKEN>'

```



## Esempio di curl: Restituisce la descrizione delle notifiche con severità di avviso

```
curl --location -i --request GET
'https://astra.netapp.io/accounts/<ACCOUNT_ID>/core/v1/notifications?filter=severity%20eq%20'warning'&include=description' --header 'Accept: */*'
--header 'Authorization: Bearer <API_TOKEN>'
```

## Esempio di output JSON

```
{
  "items": [
    [
      "Trident on cluster david-ie-00 has failed or timed out;
installation of the Trident operator failed or is not yet complete;
operator failed to reach an installed state within 300.00 seconds;
container trident-operator not found in operator deployment"
    ],
    [
      "Trident on cluster david-ie-00 has failed or timed out;
installation of the Trident operator failed or is not yet complete;
operator failed to reach an installed state within 300.00 seconds;
container trident-operator not found in operator deployment"
    ]
  ],
  "metadata": {}
}
```

## Eliminare un'applicazione non riuscita

Potrebbe non essere possibile rimuovere un'applicazione gestita in caso di backup o snapshot in stato di errore. In questo caso, puoi rimuovere manualmente l'applicazione utilizzando il flusso di lavoro descritto di seguito.

### 1. Selezionare l'applicazione da eliminare

Eseguire il flusso di lavoro ["Elencare le applicazioni"](#) e selezionare l'applicazione che si desidera rimuovere.

### 2. Elencare i backup esistenti per l'applicazione

Eseguire il flusso di lavoro ["Elencare i backup"](#).

### 3. Eliminare tutti i backup

Eliminare tutti i backup delle applicazioni eseguendo il workflow ["Eliminare un backup"](#) per ogni backup nell'elenco.

#### **4. Elencare le snapshot esistenti per l'applicazione**

Eseguire il flusso di lavoro ["Elencare le istantanee"](#).

#### **5. Eliminare tutte le istantanee**

Eseguire il flusso di lavoro ["Eliminare uno snapshot"](#) da ogni snapshot nell'elenco.

#### **6. Rimuovere l'applicazione**

Eseguire il flusso di lavoro ["Annullare la gestione di un'applicazione"](#) per rimuovere l'applicazione.

# Utilizzo di Python

## SDK NetApp Astra Control Python

NetApp Astra Control Python SDK è un pacchetto open source che puoi utilizzare per automatizzare un'implementazione di Astra Control. Il pacchetto è anche una risorsa preziosa per imparare a conoscere l'API REST di Astra Control, magari come parte della creazione della tua piattaforma di automazione.



Per semplicità, NetApp Astra Control Python SDK verrà indicato come **SDK** nella parte restante di questa pagina.

### Due tool software correlati

L'SDK include due tool diversi, sebbene correlati, che operano a diversi livelli di astrazione quando si accede all'API REST di Astra Control.

#### SDK Astra

Astra SDK offre le funzionalità principali della piattaforma. Include un insieme di classi Python che astraggono le chiamate API REST sottostanti. Le classi supportano azioni amministrative su varie risorse di Astra Control, tra cui app, backup, snapshot e cluster.

Astra SDK è una parte del pacchetto e viene fornito nel singolo `astraSDK.py` file. È possibile importare questo file nel proprio ambiente e utilizzare direttamente le classi.



L'SDK \* NetApp Astra Control Python (o solo SDK) è il nome dell'intero pacchetto. L'SDK \* Astra si riferisce alle classi Python principali nel singolo file `astraSDK.py`.

#### Script del toolkit

Oltre al file Astra SDK, il `toolkit.py` è disponibile anche uno script. Questo script opera a un livello di astrazione superiore fornendo l'accesso a azioni amministrative discrete definite internamente come funzioni Python. Lo script importa l'SDK Astra ed effettua chiamate alle classi in base alle necessità.

### Come accedere

È possibile accedere all'SDK nei seguenti modi.

#### Pacchetto Python

L'SDK è disponibile all'indirizzo "[Python Package Index](#)" sotto il nome **actoolkit**. Al pacchetto viene assegnato un numero di versione e continuerà ad essere aggiornato in base alle necessità. Per installare il pacchetto nel proprio ambiente, è necessario utilizzare l'utility di gestione dei pacchetti **PIP**.

Una volta installate, le `astraSDK.py` classi possono essere utilizzate collocando `import astraSDK` negli script. Inoltre, `actoolkit` può essere richiamato direttamente dal prompt dei comandi ed è equivalente a `toolkit.py` (`actoolkit list clusters` è uguale a `./toolkit.py list clusters`).

Vedere "[PyPI: SDK NetApp Astra Control Python](#)" per ulteriori informazioni.

#### Codice sorgente di GitHub

Il codice sorgente dell'SDK è disponibile anche su GitHub. Il repository include quanto segue:

- `astraSDK.py` (SDK Astra con classi Python)
- `toolkit.py` (script basato sulle funzioni di livello superiore)
- Istruzioni e requisiti di installazione dettagliati
- Script di installazione
- Documentazione aggiuntiva

È possibile clonare "[GitHub: NetApp/netapp-astra-toolkit](#)" repository nel tuo ambiente locale.

## Installazione e requisiti di base

Esistono diverse opzioni e requisiti da prendere in considerazione durante l'installazione del pacchetto e la preparazione per l'utilizzo.

### Riepilogo delle opzioni di installazione

È possibile installare l'SDK in uno dei seguenti modi:

- Utilizzare il preparato "[Docker: NetApp/astra-toolkit](#)" immagine, che ha tutte le dipendenze necessarie installate, tra cui `actoolkit`
- Utilizzare PIP per installare `actoolkit` Pacchetto da PyPI nel tuo ambiente Python
- Clonare il repository di GitHub e copiare/modificare i due file Python principali in modo che siano accessibili al codice client Python

Per ulteriori informazioni, fare riferimento alle pagine PyPI e GitHub.

### Requisiti per l'ambiente Astra Control

Sia che si utilizzi direttamente le classi Python nell'SDK Astra o le funzioni in `toolkit.py` Script, in ultima analisi, potrai accedere all'API REST in un'implementazione di Astra Control. Per questo motivo, avrai bisogno di un account Astra con un token API. Vedere "[Prima di iniziare](#)" E le altre pagine della sezione **Get Started** di questa documentazione per ulteriori informazioni.

### Requisiti per NetApp Astra Control Python SDK

L'SDK ha diversi prerequisiti relativi all'ambiente Python locale. Ad esempio, è necessario utilizzare Python 3.8 o versione successiva. Inoltre, sono necessari diversi pacchetti Python. Per ulteriori informazioni, consulta la pagina del repository GitHub o la pagina del pacchetto PyPI.

## Riepilogo delle risorse utili

Ecco alcune delle risorse necessarie per iniziare.

- "[PyPI: SDK NetApp Astra Control Python](#)"
- "[GitHub: NetApp/netapp-astra-toolkit](#)"
- "[Docker: NetApp/astra-toolkit](#)"

## Python nativo

## Prima di iniziare

Python è un popolare linguaggio di sviluppo per l'automazione dei data center. Prima di utilizzare le funzionalità native di Python insieme a diversi pacchetti comuni, è necessario preparare l'ambiente e i file di input richiesti.



Oltre ad accedere direttamente all'API REST di Astra Control utilizzando Python, NetApp fornisce anche un pacchetto di toolkit che astratta l'API e rimuove alcune delle complessità. Vedere "[SDK NetApp Astra Control Python](#)" per ulteriori informazioni.

## Preparare l'ambiente

I requisiti di configurazione di base per eseguire gli script Python sono descritti di seguito.

### Python 3

Devi avere l'ultima versione di Python 3 installata.

### Librerie aggiuntive

Le librerie **requests** e **urllib3** devono essere installate. È possibile utilizzare pip o un altro tool di gestione Python appropriato per il proprio ambiente.

### Accesso alla rete

La workstation in cui vengono eseguiti gli script deve disporre dell'accesso di rete e poter raggiungere Astra Control. Quando si utilizza Astra Control Service, è necessario essere connessi a Internet ed essere in grado di connettersi al servizio all'indirizzo <https://astra.netapp.io>.

### Informazioni sull'identità

È necessario un account Astra valido con l'identificativo dell'account e il token API. Vedere "[Ottieni un token API](#)" per ulteriori informazioni.

## Creare i file di input JSON

Gli script Python si basano sulle informazioni di configurazione contenute nei file di input JSON. I file di esempio sono forniti di seguito.



È necessario aggiornare gli esempi in base all'ambiente in uso.

### Informazioni sull'identità

Il seguente file contiene il token API e l'account Astra. È necessario passare questo file agli script Python utilizzando `-i` (o `--identity`) Parametro CLI.

```
{
  "api_token": "kH4CA_uVIa8q9UuPzhJaAHaGlaR7-no901DkkrVjIXk=",
  "account_id": "5131dfdf-03a4-5218-ad4b-fe84442b9786"
}
```

## Elencare le applicazioni

Puoi utilizzare il seguente script per elencare le applicazioni per il tuo account Astra.



Vedere ["Prima di iniziare"](#) Per un esempio del file di input JSON richiesto.

```
#!/usr/bin/env python3
##-----
-----
#
# Usage: python3 list_man_apps.py -i identity_file.json
#
# (C) Copyright 2022 NetApp, Inc.
#
# This sample code is provided AS IS, with no support or warranties of
# any kind, including but not limited for warranties of merchantability
# or fitness of any kind, expressed or implied. Permission to use,
# reproduce, modify and create derivatives of the sample code is granted
# solely for the purpose of researching, designing, developing and
# testing a software application product for use with NetApp products,
# provided that the above copyright notice appears in all copies and
# that the software application product is distributed pursuant to terms
# no less restrictive than those set forth herein.
#
##-----
-----

import argparse
import json
import requests
import urllib3
import sys

# Global variables
api_token = ""
account_id = ""

def get_managed_apps():
    ''' Get and print the list of apps '''

    # Global variables
    global api_token
    global account_id

    # Create an HTTP session
    sess1 = requests.Session()
```

```

# Suppress SSL unsigned certificate warning
urllib3.disable_warnings(urllib3.exceptions.InsecureRequestWarning)

# Create URL
url1 = "https://astra.netapp.io/accounts/" + account_id +
"/k8s/v2/apps"

# Headers and response output
req_headers = {}
resp_headers = {}
resp_data = {}

# Prepare the request headers
req_headers.clear
req_headers['Authorization'] = "Bearer " + api_token
req_headers['Content-Type'] = "application/astra-app+json"
req_headers['Accept'] = "application/astra-app+json"

# Make the REST call
try:
    resp1 = sess1.request('get', url1, headers=req_headers,
allow_redirects=True, verify=False)

except requests.exceptions.ConnectionError:
    print("Connection failed")
    sys.exit(1)

# Retrieve the output
http_code = resp1.status_code
resp_headers = resp1.headers

# Print the list of apps
if resp1.ok:
    resp_data = json.loads(resp1.text)
    items = resp_data['items']
    for i in items:
        print(" ")
        print("Name: " + i['name'])
        print("ID: " + i['id'])
        print("State: " + i['state'])
else:
    print("Failed with HTTP status code: " + str(http_code))

print(" ")

```

```

# Close the session
sess1.close()

return

def read_id_file(idf):
    ''' Read the identity file and save values '''

    # Global variables
    global api_token
    global account_id

    with open(idf) as f:
        data = json.load(f)

    api_token = data['api_token']
    account_id = data['account_id']

    return

def main(args):
    ''' Main top level function '''

    # Global variables
    global api_token
    global account_id

    # Retrieve name of JSON input file
    identity_file = args.id_file

    # Get token and account
    read_id_file(identity_file)

    # Issue REST call
    get_managed_apps()

    return

def parseArgs():
    ''' Parse the CLI input parameters '''

    parser = argparse.ArgumentParser(description='Astra REST API -
List the apps',
                                   add_help = True)
    parser.add_argument("-i", "--identity", action="store", dest
="id_file", default=None,
                        help='(Req) Name of the identity input file',

```



```
required=True)

    return parser.parse_args()

if __name__ == '__main__':
    ''' Begin here '''

    # Parse input parameters
    args = parseArgs()

    # Call main function
    main(args)
```

# Riferimento API

## Overview

The Astra API reference contains the details describing all the Astra Control REST API calls, including the endpoints, HTTP methods, input parameters, and responses. This complete reference is helpful when developing automation applications using the Astra REST API.

The API reference documentation provided in this section applies to the 23.01 release of Astra Control Service. It can also be used with Astra Control Center 22.11. See [About this release](#) for more information.

## ASUP

### ASUP overview

The ASUP API provides CRUD (Create-Read-Update-Delete) access to asup resources in order to create and optionally upload the AutoSupport bundles.

### Create a new ASUP resource

POST `/accounts/{account_id}/core/v1/asups`

Indicates the desired values for the ASUP API resource to be created.

#### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"><li>example: {{.Account}}</li></ul>

#### Request Body

Indicates the desired values for the ASUP API resource to be created.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>"application/astra-asup"</li></ul>

Name	Type	Required	Description
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>"1.0"</li> </ul>
upload	string	True	JSON string containing a value indicating whether to upload the AutoSupport bundle after successful creation. Defined values are: <ul style="list-style-type: none"> <li>"true" - Upload the AutoSupport bundle.</li> <li>"false" - Do not upload the AutoSupport bundle.</li> </ul>
dataWindowStart	string	False	JSON string containing a timestamp indicating the start time of the AutoSupport bundle data collection window. Defaults to 24 hours before the "dataWindowEnd" key value. Must occur before the "dataWindowEnd" key value. Maximum is 7 days before the current time of the request. Defined values are: <ul style="list-style-type: none"> <li>Conforms to the ISO-8601 Date Time Schema</li> </ul>
dataWindowEnd	string	False	JSON string containing a timestamp indicating the end time of the AutoSupport bundle data collection window. Defaults to the current time of the request. Defined values are: <ul style="list-style-type: none"> <li>Conforms to the ISO-8601 Date Time Schema</li> </ul>

Name	Type	Required	Description
metadata	<a href="#">type_astra_metadata</a>	False	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels.</li> </ul>

### Example request

```
{
  "type": "application/astra-asup",
  "version": "1.0",
  "upload": "true"
}
```

### Response

Status: 201, Returns the newly created asup resource in the JSON response body.

Name	Type	Required	Description
type	string	True	<p>Media type of the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "application/astra-asup"</li> </ul>
version	string	True	<p>Version of the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "1.0"</li> </ul>

Name	Type	Required	Description
id	string	True	<p>Globally unique identifier of the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the UUIDv4 Schema</li> </ul>
creationState	string	True	<p>JSON string containing a value indicating the creation state of the AutoSupport bundle. For "completed" and "partial" states, the bundle can be downloaded by performing a GET of the resource URI with an Accept header containing "/" or "application/gzip".</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "running" - AutoSupport bundle generation is running normally.</li> <li>• "completed" - AutoSupport bundle generation has completed.</li> <li>• "partial" - AutoSupport bundle generation has completed but some data was not included in the bundle.</li> <li>• "failed" - AutoSupport bundle generation is in a permanent failure state.</li> </ul>
creationStateDetails	array[type_astra_stateDetails]	True	<p>JSON array of JSON objects that lists additional details about why "creationState" transitioned into "partial" or "failed".</p> <p>If no details are available, this array will be empty.</p> <ul style="list-style-type: none"> <li>• Minimum items: 0</li> </ul>

Name	Type	Required	Description
upload	string	True	<p>JSON string containing a value indicating whether to upload the AutoSupport bundle after successful creation.</p> <p>Defined values are:</p> <ul style="list-style-type: none"><li>• "true" - Upload the AutoSupport bundle.</li><li>• "false" - Do not upload the AutoSupport bundle.</li></ul>

Name	Type	Required	Description
uploadState	string	False	<p>JSON string containing a value that indicates the state of the AutoSupport bundle upload if it was requested.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "pending" - AutoSupport bundle upload is scheduled for when AutoSupport bundle creation completes ("creationState" is "running").</li> <li>• "blocked" - AutoSupport bundle upload was not attempted because the bundle was not created ("creationState" is "failed") or upload was blocked because there is no license.</li> <li>• "running" - AutoSupport bundle upload is running normally ("creationState" is "completed" or "partial").</li> <li>• "completed" - AutoSupport bundle upload has completed.</li> <li>• "failed" - AutoSupport bundle upload is in a permanent failure state.</li> </ul>

Name	Type	Required	Description
uploadStateDetails	array[type_astra_stateDetails]	False	<p>JSON array of JSON objects that lists additional details about why "uploadState" transitioned into "failed". If no details are available, this array will be empty.</p> <ul style="list-style-type: none"> <li>• Minimum items: 0</li> </ul>
triggerType	string	True	<p>JSON string containing a value that indicates what triggered the creation of the asup resource. Defined values are:</p> <ul style="list-style-type: none"> <li>• "manual" - The asup resource and associated AutoSupport bundle were created manually.</li> <li>• "scheduled" - The asup resource and associated AutoSupport bundle were created according to a configured schedule.</li> </ul>
dataWindowStart	string	True	<p>JSON string containing a timestamp indicating the start time of the AutoSupport bundle data collection window. Defaults to 24 hours before the "dataWindowEnd" key value. Must occur before the "dataWindowEnd" key value. Maximum is 7 days before the current time of the request. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>



Name	Type	Required	Description
dataWindowEnd	string	True	<p>JSON string containing a timestamp indicating the end time of the AutoSupport bundle data collection window. Defaults to the current time of the request. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>
metadata	type_astra_metadata	True	<p>Client and service-specified metadata associated with the resource. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels.</li> </ul>

## Example response

```
{
  "type": "application/astra-asup",
  "version": "1.0",
  "id": "9950003f-a1c7-5ca7-8930-06eec25f60aa",
  "creationState": "running",
  "creationStateDetails": [],
  "upload": "true",
  "uploadState": "pending",
  "uploadStateDetails": [],
  "triggerType": "manual",
  "dataWindowStart": "2020-08-05T12:24:00.000000Z",
  "dataWindowEnd": "2020-08-06T12:24:52.000000Z",
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 409, Conflict

Name	Type	Required	Description
type	string	True	

Name	Type	Required	Description
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

### Example response

```
{
  "type": "https://astra.netapp.io/problems/10",
  "title": "JSON resource conflict",
  "detail": "The request body JSON contains a field that conflicts with an idempotent value.",
  "status": "409"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

## Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

## Definitions

## See Definitions

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### type\_astra\_metadata

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.

Name	Type	Required	Description
labels	array[ <a href="#">type_astra_label</a> ]	True	
creationTimestamp	string	True	
modificationTimestamp	string	True	
createdBy	string	True	
modifiedBy	string	False	

### type\_astra\_stateDetails

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	

### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

### invalidFields

Name	Type	Required	Description
name	string	True	Name of the invalid request body field
reason	string	True	Reason why the request body field is invalid

## List all ASUP resources

GET /accounts/{account\_id}/core/v1/asups

Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"> <li>example: <code>{{.Account}}</code></li> </ul>
include	string	query	False	Indicates which fields should be returned when listing a collection. <p>URL examples: "include=id", "include=id,name"</p> <p>OpenAPI examples: "id"</p>
limit	string	query	False	Indicates the maximum number of resources to return when listing a collection. <p>URL examples: "limit=2"</p> <p>OpenAPI examples: "2"</p>

## Response

Status: 200, Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

Name	Type	Required	Description
items	array[Any of: <a href="#">asup_1.0_get_response_body</a> , array[]]	True	
metadata	<a href="#">type_astra_metadata_list</a>	True	



## Example response

```
{
  "type": "application/astra-asups",
  "version": "1.0",
  "items": [
    {
      "type": "application/astra-asup",
      "version": "1.0",
      "id": "80796606-79ba-480b-966c-e4c600fbf623",
      "creationState": "completed",
      "creationStateDetails": [],
      "upload": "true",
      "uploadState": "running",
      "uploadStateDetails": [],
      "triggerType": "manual",
      "dataWindowStart": "2020-08-05T12:24:00.000000Z",
      "dataWindowEnd": "2020-08-06T12:24:52.000000Z",
      "metadata": {
        "labels": [],
        "creationTimestamp": "2020-08-06T12:24:52.256624Z",
        "modificationTimestamp": "2020-08-06T12:24:52.256624Z",
        "createdBy": "1b32a508-cc6f-4f1b-809f-c42fd91b4848"
      }
    },
    {
      "type": "application/astra-asup",
      "version": "1.0",
      "id": "6503131d-8b36-4434-b34f-73661ae8100b",
      "creationState": "completed",
      "creationStateDetails": [],
      "upload": "true",
      "uploadState": "completed",
      "uploadStateDetails": [],
      "triggerType": "scheduled",
      "dataWindowStart": "2020-08-04T13:30:00.000000Z",
      "dataWindowEnd": "2020-08-05T13:30:00.000000Z",
      "metadata": {
        "labels": [],
        "creationTimestamp": "2020-08-05T13:30:00.012321Z",
        "modificationTimestamp": "2020-08-05T13:30:00.012321Z",
        "createdBy": "1b32a508-cc6f-4f1b-809f-c42fd91b4848"
      }
    }
  ],
  "metadata": {
```

```
"labels": [],
"creationTimestamp": "2022-10-06T20:58:16.305662Z",
"modificationTimestamp": "2022-10-06T20:58:16.305662Z",
"createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
}
}
```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

## Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

Name	Type	Required	Description
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

### Definitions

## See Definitions

### type\_astra\_stateDetails

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### type\_astra\_metadata

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.

Name	Type	Required	Description
labels	array[type_astra_label]	True	
creationTimestamp	string	True	
modificationTimestamp	string	True	
createdBy	string	True	
modifiedBy	string	False	

### asup\_1.0\_get\_response\_body

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>• "application/astra-asup"</li></ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"><li>• "1.0"</li></ul>

Name	Type	Required	Description
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the UUIDv4 Schema</li> </ul>
creationState	string	True	JSON string containing a value indicating the creation state of the AutoSupport bundle. For "completed" and "partial" states, the bundle can be downloaded by performing a GET of the resource URI with an Accept header containing "/" or "application/gzip". Defined values are: <ul style="list-style-type: none"> <li>• "running" - AutoSupport bundle generation is running normally.</li> <li>• "completed" - AutoSupport bundle generation has completed.</li> <li>• "partial" - AutoSupport bundle generation has completed but some data was not included in the bundle.</li> <li>• "failed" - AutoSupport bundle generation is in a permanent failure state.</li> </ul>

Name	Type	Required	Description
creationStateDetails	array[type_astra_stateDetails]	True	<p>JSON array of JSON objects that lists additional details about why "creationState" transitioned into "partial" or "failed".</p> <p>If no details are available, this array will be empty.</p> <ul style="list-style-type: none"> <li>• Minimum items: 0</li> </ul>
upload	string	True	<p>JSON string containing a value indicating whether to upload the AutoSupport bundle after successful creation.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - Upload the AutoSupport bundle.</li> <li>• "false" - Do not upload the AutoSupport bundle.</li> </ul>

Name	Type	Required	Description
uploadState	string	False	<p>JSON string containing a value that indicates the state of the AutoSupport bundle upload if it was requested.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "pending" - AutoSupport bundle upload is scheduled for when AutoSupport bundle creation completes ("creationState" is "running").</li> <li>• "blocked" - AutoSupport bundle upload was not attempted because the bundle was not created ("creationState" is "failed") or upload was blocked because there is no license.</li> <li>• "running" - AutoSupport bundle upload is running normally ("creationState" is "completed" or "partial").</li> <li>• "completed" - AutoSupport bundle upload has completed.</li> <li>• "failed" - AutoSupport bundle upload is in a permanent failure state.</li> </ul>



Name	Type	Required	Description
uploadStateDetails	array[type_astra_stateDetails]	False	<p>JSON array of JSON objects that lists additional details about why "uploadState" transitioned into "failed". If no details are available, this array will be empty.</p> <ul style="list-style-type: none"> <li>• Minimum items: 0</li> </ul>
triggerType	string	True	<p>JSON string containing a value that indicates what triggered the creation of the asup resource. Defined values are:</p> <ul style="list-style-type: none"> <li>• "manual" - The asup resource and associated AutoSupport bundle were created manually.</li> <li>• "scheduled" - The asup resource and associated AutoSupport bundle were created according to a configured schedule.</li> </ul>
dataWindowStart	string	True	<p>JSON string containing a timestamp indicating the start time of the AutoSupport bundle data collection window. Defaults to 24 hours before the "dataWindowEnd" key value. Must occur before the "dataWindowEnd" key value. Maximum is 7 days before the current time of the request. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>

Name	Type	Required	Description
dataWindowEnd	string	True	JSON string containing a timestamp indicating the end time of the AutoSupport bundle data collection window. Defaults to the current time of the request. Defined values are: <ul style="list-style-type: none"> <li>Conforms to the ISO-8601 Date Time Schema</li> </ul>
metadata	<a href="#">type_astra_metadata</a>	True	Client and service-specified metadata associated with the resource. Defined values are: <ul style="list-style-type: none"> <li>Conforms to the Astra Metadata Schema</li> </ul> If not specified on create, a metadata object will be created with no labels.

#### type\_astra\_metadata\_list

Name	Type	Required	Description
continue	string	False	
count	number	False	
labels	array[ <a href="#">type_astra_label</a> ]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

#### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter

Name	Type	Required	Description
reason	string	True	Reason why the query parameter is invalid

## Retrieve an ASUP resource

GET /accounts/{account\_id}/core/v1/asups/{asup\_id}

Returns the stored ASUP API resource in the JSON response body. If the AutoSupport bundle "creationState" is "completed" or "partial", the AutoSupport bundle can be downloaded by specifying an Accept header containing "/" or "application/gzip".

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"> <li>example: <code>{{.Account}}</code></li> </ul>
asup_id	string	path	True	ID of the asup collection to list

### Response

Status: 200, Returns the stored ASUP API resource in the JSON response body. If the AutoSupport bundle "creationState" is "completed" or "partial", the AutoSupport bundle can be downloaded by specifying an Accept header containing "\*/\*" or "application/gzip".

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"> <li>"application/astra-asup"</li> </ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>"1.0"</li> </ul>

Name	Type	Required	Description
id	string	True	<p>Globally unique identifier of the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the UUIDv4 Schema</li> </ul>
creationState	string	True	<p>JSON string containing a value indicating the creation state of the AutoSupport bundle. For "completed" and "partial" states, the bundle can be downloaded by performing a GET of the resource URI with an Accept header containing "/" or "application/gzip".</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "running" - AutoSupport bundle generation is running normally.</li> <li>• "completed" - AutoSupport bundle generation has completed.</li> <li>• "partial" - AutoSupport bundle generation has completed but some data was not included in the bundle.</li> <li>• "failed" - AutoSupport bundle generation is in a permanent failure state.</li> </ul>
creationStateDetails	array[type_astra_stateDetails]	True	<p>JSON array of JSON objects that lists additional details about why "creationState" transitioned into "partial" or "failed".</p> <p>If no details are available, this array will be empty.</p> <ul style="list-style-type: none"> <li>• Minimum items: 0</li> </ul>

Name	Type	Required	Description
upload	string	True	<p>JSON string containing a value indicating whether to upload the AutoSupport bundle after successful creation.</p> <p>Defined values are:</p> <ul style="list-style-type: none"><li>• "true" - Upload the AutoSupport bundle.</li><li>• "false" - Do not upload the AutoSupport bundle.</li></ul>

Name	Type	Required	Description
uploadState	string	False	<p>JSON string containing a value that indicates the state of the AutoSupport bundle upload if it was requested.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "pending" - AutoSupport bundle upload is scheduled for when AutoSupport bundle creation completes ("creationState" is "running").</li> <li>• "blocked" - AutoSupport bundle upload was not attempted because the bundle was not created ("creationState" is "failed") or upload was blocked because there is no license.</li> <li>• "running" - AutoSupport bundle upload is running normally ("creationState" is "completed" or "partial").</li> <li>• "completed" - AutoSupport bundle upload has completed.</li> <li>• "failed" - AutoSupport bundle upload is in a permanent failure state.</li> </ul>

Name	Type	Required	Description
uploadStateDetails	array[type_astra_stateDetails]	False	<p>JSON array of JSON objects that lists additional details about why "uploadState" transitioned into "failed". If no details are available, this array will be empty.</p> <ul style="list-style-type: none"> <li>• Minimum items: 0</li> </ul>
triggerType	string	True	<p>JSON string containing a value that indicates what triggered the creation of the asup resource. Defined values are:</p> <ul style="list-style-type: none"> <li>• "manual" - The asup resource and associated AutoSupport bundle were created manually.</li> <li>• "scheduled" - The asup resource and associated AutoSupport bundle were created according to a configured schedule.</li> </ul>
dataWindowStart	string	True	<p>JSON string containing a timestamp indicating the start time of the AutoSupport bundle data collection window. Defaults to 24 hours before the "dataWindowEnd" key value. Must occur before the "dataWindowEnd" key value. Maximum is 7 days before the current time of the request. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>

Name	Type	Required	Description
dataWindowEnd	string	True	<p>JSON string containing a timestamp indicating the end time of the AutoSupport bundle data collection window. Defaults to the current time of the request. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>
metadata	type_astra_metadata	True	<p>Client and service-specified metadata associated with the resource. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels.</li> </ul>

### Example response

```

{
  "type": "application/astra-asup",
  "version": "1.0",
  "id": "9950003f-a1c7-5ca7-8930-06eec25f60aa",
  "creationState": "completed",
  "creationStateDetails": [],
  "upload": "false",
  "triggerType": "manual",
  "dataWindowStart": "2020-08-05T12:24:00.000000Z",
  "dataWindowEnd": "2020-08-06T12:24:52.000000Z",
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}

```



## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

## Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	

Name	Type	Required	Description
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

### Definitions

## See Definitions

### type\_astra\_stateDetails

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### type\_astra\_metadata

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.

Name	Type	Required	Description
labels	array[ <a href="#">type_astra_label</a> ]	True	
creationTimestamp	string	True	
modificationTimestamp	string	True	
createdBy	string	True	
modifiedBy	string	False	

### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Account

## Account overview

The Account API provides CRUD (Create-Read-Update-Delete) access to account resources in order to represent isolated tenants in a multitenant system.

## Create a new account

POST /accounts

Indicates the desired values for the Account API resource to be created.

### Request Body

Indicates the desired values for the Account API resource to be created.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>"application/astra-account"</li></ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"><li>"1.0"</li></ul>
name	string	True	JSON string containing a name for the account. Defined values are: <ul style="list-style-type: none"><li>Minimum length: 1</li><li>Maximum length: 63</li><li>This string is internally validated to prevent XSS, Unicode, directory traversal, and SQL-injection attacks.</li></ul>

Name	Type	Required	Description
metadata	type_astra_metadata_update	False	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>Conforms to the Astra Metadata Schema</li> </ul> <p>If not specified on create, a metadata object will be created with no labels.</p> <p>If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</p>

### Example request

```
{
  "type": "application/astra-account",
  "version": "1.0",
  "name": "Testing 123"
}
```

### Response

Status: 201, Returns the newly created account resource in the JSON response body.

Name	Type	Required	Description
type	string	True	<p>Media type of the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>"application/astra-account"</li> </ul>

Name	Type	Required	Description
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>"1.0"</li> </ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>Conforms to the UUIDv4 Schema</li> </ul>
name	string	True	JSON string containing a name for the account. Defined values are: <ul style="list-style-type: none"> <li>Minimum length: 1</li> <li>Maximum length: 63</li> <li>This string is internally validated to prevent XSS, Unicode, directory traversal, and SQL-injection attacks.</li> </ul>
state	string	True	JSON string containing a value indicating the operational state of the account. Defined values are: <ul style="list-style-type: none"> <li>"pending" - Changes can only be made to user and role resources under the account (default value)</li> <li>"active" - Changes can be made to any resource under the account</li> <li>"deletePending" - Users cannot log in, data protection operations are suspended, charges no longer accrue</li> </ul>

Name	Type	Required	Description
isEnabled	string	True	<p>JSON string indicating the account is enabled. Defined values are:</p> <ul style="list-style-type: none"> <li>• "false" - Users are not permitted to use this account</li> <li>• "true" - Users are permitted to use this account</li> </ul>
enabledTimestamp	string	False	<p>JSON string containing the timestamp indicating when the account was last enabled. If the account has never been enabled, this field is absent. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>
accountContact	<a href="#">accountContact</a>	False	<p>JSON object containing user contact information to create an owner user at the time of account activation.</p>
metadata	<a href="#">type_astra_metadata_update</a>	True	<p>Client and service-specified metadata associated with the resource. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</li> </ul>



## Example response

```
{
  "type": "application/astra-account",
  "version": "1.0",
  "id": "666a3f38-d4fa-5b62-a391-a69029758d32",
  "name": "fraught-pines",
  "state": "pending",
  "isEnabled": "false",
  "enabledTimestamp": "2020-08-06T12:24:52.256624Z",
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

## Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

## Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

## Response

Status: 409, Conflict

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

### Example response

```
{
  "type": "https://astra.netapp.io/problems/10",
  "title": "JSON resource conflict",
  "detail": "The request body JSON contains a field that conflicts with
an idempotent value.",
  "status": "409"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	

Name	Type	Required	Description
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

### Definitions

## See Definitions

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[type_astra_label]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

### postalAddress

JSON object containing a collection of JSON strings specifying an address. If this key does not exist, it indicates that an address has not been provided.

If this key exists, all six of the contained JSON strings will be present. If you provide nothing, the string will be empty.

Name	Type	Required	Description
addressCountry	string	True	JSON string containing the country name or country code associated with the postal address, as specified in ISO 3166 Alpha-2. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 2</li><li>• Maximum length: 2</li></ul>

Name	Type	Required	Description
addressLocality	string	True	JSON string containing the locality (for example, city) associated with the postal address. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>
addressRegion	string	True	JSON string containing the region (for example, state) associated with the postal address. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>
postalCode	string	True	JSON string containing the postal code associated with the postal address. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 31</li> </ul>
streetAddress1	string	True	JSON string containing the street address associated with the postal address. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>
streetAddress2	string	False	JSON string containing optional ancillary street address information, post office box, and more. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>

accountContact

JSON object containing user contact information to create an owner user at the time of account activation.

Name	Type	Required	Description
firstName	string	True	JSON string containing a user specified long-form first name. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 1</li><li>• Maximum length: 63</li><li>• This string is internally validated to prevent XSS, Unicode, directory traversal, and SQL-injection attacks.</li></ul>
lastName	string	True	JSON string containing a user specified long-form last name. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 1</li><li>• Maximum length: 63</li><li>• This string is internally validated to prevent XSS, Unicode, directory traversal, and SQL-injection attacks.</li></ul>
companyName	string	False	JSON string containing the company name associated with the user. If this key does not exist, it indicates that a company name has not been provided. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 1</li><li>• Maximum length: 63</li><li>• This string is internally validated to prevent XSS, Unicode, directory traversal, and SQL-injection attacks.</li></ul>

Name	Type	Required	Description
email	string	True	JSON strings containing a user specified email address. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>
phone	string	False	JSON string containing the phone number of the user. If this key does not exist, it indicates that a phone number has not been provided. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 31</li> </ul>
postalAddress	<a href="#">postalAddress</a>	True	JSON object containing a collection of JSON strings specifying an address. If this key does not exist, it indicates that an address has not been provided. If this key exists, all six of the contained JSON strings will be present. If you provide nothing, the string will be empty.

#### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

#### invalidFields

Name	Type	Required	Description
name	string	True	Name of the invalid request body field



Name	Type	Required	Description
reason	string	True	Reason why the request body field is invalid

## List all accounts

GET /accounts

Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

### Parameters

Name	Type	In	Required	Description
include	string	query	False	Indicates which fields should be returned when listing a collection.  URL examples: "include=id", "include=id,name"  OpenAPI examples: "id"
limit	string	query	False	Indicates the maximum number of resources to return when listing a collection.  URL examples: "limit=2"  OpenAPI examples: "2"

Name	Type	In	Required	Description
filter	string	query	False	<p>Indicates which fields should be matched in order to return a resource when listing a collection.</p> <p>Supported operators are:</p> <ul style="list-style-type: none"> <li>• eq - Equality</li> <li>• lt/gt - Less than/Greater than</li> <li>• lte/gte - Less than or equals to/Greater than or equals to</li> </ul> <p>URL example: "filter=field%20eq%20%27value%27"</p> <p>OpenAPI examples: "field eq 'value'"</p>
orderBy	string	query	False	<p>Indicates the sort order of resource when listing a collection.</p> <p>URL examples: "orderBy=name", "orderBy=name%20desc"</p> <p>OpenAPI examples: "name desc"</p>
skip	string	query	False	<p>Indicates the number of resources to skip over when listing a collection.</p> <p>URL examples: "skip=1"</p> <p>OpenAPI examples: "1"</p>

Name	Type	In	Required	Description
count	string	query	False	Indicates if the total number of resources should be returned in the metadata object.  URL examples: "count=true"  OpenAPI examples: "true"
continue		query	False	Indicates the token to resume listing from.  URL examples: "continue=<continue token="" from="" collection="" metadata="">"</continue>  OpenAPI examples: "<continue token="" from="" collection="" metadata="">"</continue>&lt;/continue&gt;"

## Response

Status: 200, Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

Name	Type	Required	Description
items	array[Any of: <a href="#">account_1.0_get_response_body</a> , array[]]	True	
metadata	<a href="#">type_astra_metadata_list</a>	True	

## Example response

```
{
  "type": "application/astra-accounts",
  "version": "1.0",
  "items": [
    {
      "type": "application/astra-account",
      "version": "1.0",
      "id": "70796606-79ba-480b-966c-e4c600fbf622",
      "name": "fraught-pines",
      "state": "active",
      "isEnabled": "true",
      "enabledTimestamp": "2020-08-06T12:24:52.256624Z",
      "metadata": {
        "labels": [],
        "creationTimestamp": "2020-08-06T12:24:52.256624Z",
        "modificationTimestamp": "2020-08-06T12:24:52.256624Z",
        "createdBy": "1723a17e-9fd1-4636-86e1-2ec9e04bce51"
      }
    },
    {
      "type": "application/astra-account",
      "version": "1.0",
      "id": "7976114d-35ec-48a7-ba31-22d8e94a8bb2",
      "name": "sad-dino",
      "state": "active",
      "isEnabled": "true",
      "enabledTimestamp": "2020-08-06T12:24:52.256624Z",
      "metadata": {
        "labels": [],
        "creationTimestamp": "2020-08-06T12:24:52.256624Z",
        "modificationTimestamp": "2020-08-06T12:24:52.256624Z",
        "createdBy": "1723a17e-9fd1-4636-86e1-2ec9e04bce51"
      }
    }
  ],
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

## Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	

Name	Type	Required	Description
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

### Definitions

## See Definitions

### postalAddress

JSON object containing a collection of JSON strings specifying an address. If this key does not exist, it indicates that an address has not been provided.

If this key exists, all six of the contained JSON strings will be present. If you provide nothing, the string will be empty.

Name	Type	Required	Description
addressCountry	string	True	JSON string containing the country name or country code associated with the postal address, as specified in ISO 3166 Alpha-2. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 2</li><li>• Maximum length: 2</li></ul>
addressLocality	string	True	JSON string containing the locality (for example, city) associated with the postal address. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 1</li><li>• Maximum length: 63</li></ul>
addressRegion	string	True	JSON string containing the region (for example, state) associated with the postal address. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 1</li><li>• Maximum length: 63</li></ul>
postalCode	string	True	JSON string containing the postal code associated with the postal address. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 1</li><li>• Maximum length: 31</li></ul>



Name	Type	Required	Description
streetAddress1	string	True	JSON string containing the street address associated with the postal address. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>
streetAddress2	string	False	JSON string containing optional ancillary street address information, post office box, and more. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>

#### accountContact

JSON object containing user contact information to create an owner user at the time of account activation.

Name	Type	Required	Description
firstName	string	True	JSON string containing a user specified long-form first name. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> <li>• This string is internally validated to prevent XSS, Unicode, directory traversal, and SQL-injection attacks.</li> </ul>

Name	Type	Required	Description
lastName	string	True	<p>JSON string containing a user specified long-form last name.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> <li>• This string is internally validated to prevent XSS, Unicode, directory traversal, and SQL-injection attacks.</li> </ul>
companyName	string	False	<p>JSON string containing the company name associated with the user. If this key does not exist, it indicates that a company name has not been provided.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> <li>• This string is internally validated to prevent XSS, Unicode, directory traversal, and SQL-injection attacks.</li> </ul>
email	string	True	<p>JSON strings containing a user specified email address.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>

Name	Type	Required	Description
phone	string	False	JSON string containing the phone number of the user. If this key does not exist, it indicates that a phone number has not been provided. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 31</li> </ul>
postalAddress	<a href="#">postalAddress</a>	True	JSON object containing a collection of JSON strings specifying an address. If this key does not exist, it indicates that an address has not been provided. If this key exists, all six of the contained JSON strings will be present. If you provide nothing, the string will be empty.

#### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

#### type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.  
Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[ <a href="#">type_astra_label</a> ]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	

Name	Type	Required	Description
modifiedBy	string	False	

account\_1.0\_get\_response\_body

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "application/astra-account"</li> </ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "1.0"</li> </ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the UUIDv4 Schema</li> </ul>
name	string	True	JSON string containing a name for the account. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> <li>• This string is internally validated to prevent XSS, Unicode, directory traversal, and SQL-injection attacks.</li> </ul>

Name	Type	Required	Description
state	string	True	<p>JSON string containing a value indicating the operational state of the account.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "pending" - Changes can only be made to user and role resources under the account (default value)</li> <li>• "active" - Changes can be made to any resource under the account</li> <li>• "deletePending" - Users cannot log in, data protection operations are suspended, charges no longer accrue</li> </ul>
isEnabled	string	True	<p>JSON string indicating the account is enabled.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "false" - Users are not permitted to use this account</li> <li>• "true" - Users are permitted to use this account</li> </ul>
enabledTimestamp	string	False	<p>JSON string containing the timestamp indicating when the account was last enabled.</p> <p>If the account has never been enabled, this field is absent.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>

Name	Type	Required	Description
accountContact	<a href="#">accountContact</a>	False	JSON object containing user contact information to create an owner user at the time of account activation.
metadata	<a href="#">type_astra_metadata_update</a>	True	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema</li> </ul> <p>If not specified on create, a metadata object will be created with no labels.</p> <p>If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</p>

#### type\_astra\_metadata\_list

Name	Type	Required	Description
continue	string	False	
count	number	False	
labels	array[ <a href="#">type_astra_label</a> ]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

#### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter

Name	Type	Required	Description
reason	string	True	Reason why the query parameter is invalid

## Retrieve an account

GET /accounts/{account\_id}

Returns the stored Account API resource in the JSON response body.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the account collection to list <ul style="list-style-type: none"> <li>example: <code>{{.Account}}</code></li> </ul>

### Response

Status: 200, Returns the stored Account API resource in the JSON response body.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"> <li>"application/astra-account"</li> </ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>"1.0"</li> </ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>Conforms to the UUIDv4 Schema</li> </ul>

Name	Type	Required	Description
name	string	True	<p>JSON string containing a name for the account. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> <li>• This string is internally validated to prevent XSS, Unicode, directory traversal, and SQL-injection attacks.</li> </ul>
state	string	True	<p>JSON string containing a value indicating the operational state of the account. Defined values are:</p> <ul style="list-style-type: none"> <li>• "pending" - Changes can only be made to user and role resources under the account (default value)</li> <li>• "active" - Changes can be made to any resource under the account</li> <li>• "deletePending" - Users cannot log in, data protection operations are suspended, charges no longer accrue</li> </ul>
isEnabled	string	True	<p>JSON string indicating the account is enabled. Defined values are:</p> <ul style="list-style-type: none"> <li>• "false" - Users are not permitted to use this account</li> <li>• "true" - Users are permitted to use this account</li> </ul>



Name	Type	Required	Description
enabledTimestamp	string	False	<p>JSON string containing the timestamp indicating when the account was last enabled.</p> <p>If the account has never been enabled, this field is absent.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>
accountContact	<a href="#">accountContact</a>	False	<p>JSON object containing user contact information to create an owner user at the time of account activation.</p>
metadata	<a href="#">type_astra_metadata_update</a>	True	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema</li> </ul> <p>If not specified on create, a metadata object will be created with no labels.</p> <p>If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</p>

## Example response

```
{
  "type": "application/astra-account",
  "version": "1.0",
  "id": "666a3f38-d4fa-5b62-a391-a69029758d32",
  "name": "fraught-pines",
  "state": "active",
  "isEnabled": "true",
  "enabledTimestamp": "2020-08-06T12:24:52.256624Z",
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

## Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

## Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

## Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

## Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

## Definitions

## See Definitions

### postalAddress

JSON object containing a collection of JSON strings specifying an address. If this key does not exist, it indicates that an address has not been provided.

If this key exists, all six of the contained JSON strings will be present. If you provide nothing, the string will be empty.

Name	Type	Required	Description
addressCountry	string	True	JSON string containing the country name or country code associated with the postal address, as specified in ISO 3166 Alpha-2. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 2</li><li>• Maximum length: 2</li></ul>
addressLocality	string	True	JSON string containing the locality (for example, city) associated with the postal address. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 1</li><li>• Maximum length: 63</li></ul>
addressRegion	string	True	JSON string containing the region (for example, state) associated with the postal address. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 1</li><li>• Maximum length: 63</li></ul>
postalCode	string	True	JSON string containing the postal code associated with the postal address. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 1</li><li>• Maximum length: 31</li></ul>

Name	Type	Required	Description
streetAddress1	string	True	JSON string containing the street address associated with the postal address. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>
streetAddress2	string	False	JSON string containing optional ancillary street address information, post office box, and more. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>

accountContact

JSON object containing user contact information to create an owner user at the time of account activation.

Name	Type	Required	Description
firstName	string	True	JSON string containing a user specified long-form first name. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> <li>• This string is internally validated to prevent XSS, Unicode, directory traversal, and SQL-injection attacks.</li> </ul>

Name	Type	Required	Description
lastName	string	True	<p>JSON string containing a user specified long-form last name.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> <li>• This string is internally validated to prevent XSS, Unicode, directory traversal, and SQL-injection attacks.</li> </ul>
companyName	string	False	<p>JSON string containing the company name associated with the user. If this key does not exist, it indicates that a company name has not been provided.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> <li>• This string is internally validated to prevent XSS, Unicode, directory traversal, and SQL-injection attacks.</li> </ul>
email	string	True	<p>JSON strings containing a user specified email address.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>

Name	Type	Required	Description
phone	string	False	JSON string containing the phone number of the user. If this key does not exist, it indicates that a phone number has not been provided. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 31</li> </ul>
postalAddress	<a href="#">postalAddress</a>	True	JSON object containing a collection of JSON strings specifying an address. If this key does not exist, it indicates that an address has not been provided. If this key exists, all six of the contained JSON strings will be present. If you provide nothing, the string will be empty.

#### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

#### type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.  
Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[ <a href="#">type_astra_label</a> ]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	



Name	Type	Required	Description
modifiedBy	string	False	

invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Modify an account

PUT /accounts/{account\_id}

Replaces the entire stored resource with the supplied JSON request body while preserving the key values that are not user-modifiable.

### Side Effects

- Changing "isEnabled" from "false" to "true" sets "enabledTimestamp" to the current time.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the account collection to list <ul style="list-style-type: none"> <li>• example: <code>{{.Account}}</code></li> </ul>

### Request Body

Replaces the entire stored resource with the supplied JSON request body while preserving the key values that are not user-modifiable.

### Side Effects

- Changing "isEnabled" from "false" to "true" sets "enabledTimestamp" to the current time.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "application/astra-account"</li> </ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "1.0"</li> </ul>
id	string	False	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the UUIDv4 Schema</li> </ul>
name	string	False	JSON string containing a name for the account. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> <li>• This string is internally validated to prevent XSS, Unicode, directory traversal, and SQL-injection attacks.</li> </ul>

Name	Type	Required	Description
state	string	False	<p>JSON string containing a value indicating the operational state of the account.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "pending" - Changes can only be made to user and role resources under the account (default value)</li> <li>• "active" - Changes can be made to any resource under the account</li> <li>• "deletePending" - Users cannot log in, data protection operations are suspended, charges no longer accrue</li> </ul>
isEnabled	string	False	<p>JSON string indicating the account is enabled.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "false" - Users are not permitted to use this account</li> <li>• "true" - Users are permitted to use this account</li> </ul>
enabledTimestamp	string	False	<p>JSON string containing the timestamp indicating when the account was last enabled.</p> <p>If the account has never been enabled, this field is absent.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>

Name	Type	Required	Description
accountContact	<a href="#">accountContact</a>	False	JSON object containing user contact information to create an owner user at the time of account activation.
metadata	<a href="#">type_astra_metadata_update</a>	False	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</li> </ul>

### Example request

```
{
  "type": "application/astra-account",
  "version": "1.0",
  "name": "frightened-pine"
}
```

### Response

Status: 204, Indicates if the account resource was updated.

### Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 409, Conflict

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

### Example response

```
{
  "type": "https://astra.netapp.io/problems/10",
  "title": "JSON resource conflict",
  "detail": "The request body JSON contains a field that conflicts with an idempotent value.",
  "status": "409"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/1",
  "title": "Resource not found",
  "detail": "The resource specified in the request URI wasn't found.",
  "status": "404"
}
```

## Definitions



## See Definitions

### postalAddress

JSON object containing a collection of JSON strings specifying an address. If this key does not exist, it indicates that an address has not been provided.

If this key exists, all six of the contained JSON strings will be present. If you provide nothing, the string will be empty.

Name	Type	Required	Description
addressCountry	string	False	JSON string containing the country name or country code associated with the postal address, as specified in ISO 3166 Alpha-2. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 2</li><li>• Maximum length: 2</li></ul>
addressLocality	string	False	JSON string containing the locality (for example, city) associated with the postal address. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 1</li><li>• Maximum length: 63</li></ul>
addressRegion	string	False	JSON string containing the region (for example, state) associated with the postal address. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 1</li><li>• Maximum length: 63</li></ul>
postalCode	string	False	JSON string containing the postal code associated with the postal address. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 1</li><li>• Maximum length: 31</li></ul>

Name	Type	Required	Description
streetAddress1	string	False	JSON string containing the street address associated with the postal address. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>
streetAddress2	string	False	JSON string containing optional ancillary street address information, post office box, and more. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>

#### accountContact

JSON object containing user contact information to create an owner user at the time of account activation.

Name	Type	Required	Description
firstName	string	False	JSON string containing a user specified long-form first name. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> <li>• This string is internally validated to prevent XSS, Unicode, directory traversal, and SQL-injection attacks.</li> </ul>

Name	Type	Required	Description
lastName	string	False	<p>JSON string containing a user specified long-form last name.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> <li>• This string is internally validated to prevent XSS, Unicode, directory traversal, and SQL-injection attacks.</li> </ul>
companyName	string	False	<p>JSON string containing the company name associated with the user. If this key does not exist, it indicates that a company name has not been provided.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> <li>• This string is internally validated to prevent XSS, Unicode, directory traversal, and SQL-injection attacks.</li> </ul>
email	string	False	<p>JSON strings containing a user specified email address.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>

Name	Type	Required	Description
phone	string	False	JSON string containing the phone number of the user. If this key does not exist, it indicates that a phone number has not been provided. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 31</li> </ul>
postalAddress	<a href="#">postalAddress</a>	False	JSON object containing a collection of JSON strings specifying an address. If this key does not exist, it indicates that an address has not been provided. If this key exists, all six of the contained JSON strings will be present. If you provide nothing, the string will be empty.

#### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

#### type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.  
Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[ <a href="#">type_astra_label</a> ]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	

Name	Type	Required	Description
modifiedBy	string	False	

#### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

#### invalidFields

Name	Type	Required	Description
name	string	True	Name of the invalid request body field
reason	string	True	Reason why the request body field is invalid

## Delete an account

DELETE /accounts/{account\_id}

Removes the specified Account API resource.

### Side Effects

- "deletePending" is set to "true" and the account can no longer be accessed.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the account collection to list  • example: {{.Account}}

### Response

Status: 204, Indicates if the account resource was deleted.

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

## Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	

Name	Type	Required	Description
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/1",
  "title": "Resource not found",
  "detail": "The resource specified in the request URI wasn't found.",
  "status": "404"
}
```

### Definitions

#### See Definitions

invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## App

### App overview

The App API provides CRUD (Create-Read-Update-Delete) access to application resources in order to represent Kubernetes (K8s) applications.

### Create a new app for a managed cluster

POST /accounts/{account\_id}/topology/v2/managedClusters/{managedCluster\_id}/apps

Indicates the desired values for the App API resource to be created.

### Parameters



Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"> <li>example: <code>{{.Account}}</code></li> </ul>
managedCluster_id	string	path	True	ID of the containing managedCluster resource

## Request Body

Indicates the desired values for the App API resource to be created.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"> <li>"application/astra-app"</li> </ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>"2.0"</li> <li>"2.1"</li> </ul>
name	string	True	JSON string containing a name for the application. Defined values are: <ul style="list-style-type: none"> <li>Minimum length: 1</li> <li>Maximum length: 63</li> <li>This string is internally validated to prevent XSS, Unicode, directory traversal, and SQL-injection attacks.</li> <li>Conforms to the DNS 1123 Label Schema</li> </ul>
clusterScopedResources	array[clusterScopedResources]	False	JSON array of JSON objects describing the cluster-scoped resources that are part of this app

Name	Type	Required	Description
namespaceScopedResources	array[ <a href="#">namespaceScopedResources</a> ]	False	JSON array of JSON objects describing the resources that are part of this app
namespaceMapping	array[ <a href="#">namespaceMapping</a> ]	False	<p>JSON array of JSON objects, each mapping a source namespace to a destination namespace for a clone operation. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum Items: 0</li> </ul>
clusterID	string	False	<p>JSON string containing the ID of the cluster that the application is running on. Not returned if the application is not currently running. When specified on create, clusterID indicates which cluster the application must be cloned into. If the specified cluster does not exist, or if the cluster specified does not match the clusterID specified in the request URI, the clone will fail. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
sourceAppID	string	False	<p>JSON string containing the ID of a source application. Only returned if the application was cloned from another application, or was restored from a backup or snapshot.</p> <p>When specified on create, the sourceAppID is used in conjunction with the sourceClusterID and indicates which running application will be cloned. If the specified application does not exist on the specified source cluster, the clone will fail.</p> <p>Only one of sourceAppID, backupID, or snapshotID can be specified when creating an application. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
sourceClusterID	string	False	<p>JSON string containing the ID of the cluster the application was previously running on.</p> <p>Only returned if the application was cloned from another cluster.</p> <p>When specified on create, the sourceClusterID is used in conjunction with the sourceAppID and indicates the source cluster of the application to be cloned. If the specified source cluster does not exist, the clone will fail.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
backupID	string	False	<p>JSON string containing the ID of the backup that the application was restored from.</p> <p>Only returned if the application was restored from a backup.</p> <p>When specified on create, backupID indicates that an application will be cloned from an existing backup. If the specified backup does not exist, the clone will fail. Only one of sourceAppID, backupID, or snapshotID can be specified when creating an application.</p> <p>When specified on a replace, backupID indicates the application backup from which the application will be in-place restored. If the specified backup does not exist, the restore will fail. Only one of backupID or snapshotID can be specified when updating an application</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
snapshotID	string	False	<p>JSON string containing the ID of the snapshot that the application was restored from.</p> <p>Only returned if the application was restored from a snapshot.</p> <p>When specified on create, snapshotID indicates that an application will be cloned from an existing snapshot. If the specified snapshot does not exist, the clone will fail. Only one of sourceAppID, backupID, or snapshotID can be specified when creating an application.</p> <p>When specified on a replace, snapshotID indicates the application snapshot from which the application will be in-place restored. If the specified snapshot does not exist, the restore will fail. Only one of backupID or snapshotID can be specified when updating an application.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
metadata	<a href="#">type_astra_metadata_update</a>	False	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</li> </ul>

### Example request

```
{
  "type": "application/astra-app",
  "version": "2.1",
  "name": "jenkins",
  "clusterID": "0f284377-e5dc-4dcd-bacd-3197f2b8a347",
  "namespaceScopedResources": [
    {
      "namespace": "production"
    }
  ]
}
```

### Response

Status: 201, Returns the newly created app resource in the JSON response body.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "application/astra-app"</li> </ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "2.0"</li> <li>• "2.1"</li> </ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the UUIDv4 Schema</li> </ul>
name	string	True	JSON string containing a name for the application. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> <li>• This string is internally validated to prevent XSS, Unicode, directory traversal, and SQL-injection attacks.</li> <li>• Conforms to the DNS 1123 Label Schema</li> </ul>
clusterScopedResources	array[ <a href="#">clusterScopedResources</a> ]	False	JSON array of JSON objects describing the cluster-scoped resources that are part of this app
namespaceScopedResources	array[ <a href="#">namespaceScopedResources</a> ]	True	JSON array of JSON objects describing the resources that are part of this app

Name	Type	Required	Description
lastResourceCollectionTimestamp	string	False	<p>JSON string containing the timestamp when the last resource collection was performed. This field is unset if no resource collection has been performed for this application yet.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>



Name	Type	Required	Description
state	string	True	<p>JSON string containing a value indicating the operational state of the application.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "pending" - The application is scheduled for discovery</li> <li>• "discovering" - The application is in the process of being discovered</li> <li>• "provisioning" - The application is in the process of being provisioned</li> <li>• "ready" - The application is running normally</li> <li>• "failed" - The application is in a permanent failure state</li> <li>• "restoring" - The application is being restored from backup or snapshot</li> <li>• "unavailable" - The application is not currently accessible</li> <li>• "unknown" - The application state cannot be determined</li> </ul>

Name	Type	Required	Description
stateTransitions	array[ <a href="#">type_astra_stateTransitions</a> ]	False	<p>JSON array of JSON objects, each representing the set of permitted state transitions from a given defined state.</p> <p>Each JSON object contains the fields "from" and "to", where the "from" value is the name of a state, and the "to" value is an array of permitted destination states.</p>
stateDetails	array[ <a href="#">type_astra_stateDetails</a> ]	True	<p>JSON array of JSON objects which lists additional details about the current state, including why the current state was reached.</p> <p>If no details are available, this array will be empty.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum Items: 0</li> </ul>

Name	Type	Required	Description
protectionState	string	True	<p>JSON string containing a value indicating the protection state of the application.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "protected" - The application has a protection policy defined and is in conformance with that policy</li> <li>• "partial" - The application has a protection policy defined, but is out of conformance with that policy</li> <li>• "none" - The application does not have a protection policy defined</li> <li>• "atRisk" - The default storage class on the cluster does not support snapshots, the application is at risk of gaining an unsupported volume</li> </ul>
protectionStateDetails	array[type_astra_stateDetails]	True	<p>JSON array of JSON objects which lists additional details about the current protection state, including why the current state was reached.</p> <p>If no details are available, this array will be empty.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum Items: 0</li> </ul>

Name	Type	Required	Description
appDetectedType	string	False	<p>JSON string that uniquely represents the specific type of application that is detected.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "system" - The application contains a resource that identifies it as part of the Kubernetes environment</li> <li>• "acc" - The application contains resources that identify it as an Astra Control Center instance</li> </ul>
namespaces	array[string]	True	<p>JSON array of JSON strings containing the names of the namespaces in which the application is running.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 253</li> <li>• Conforms to the DNS 1123 Label Schema</li> </ul>
namespaceMapping	array[namespaceMapping]	False	<p>JSON array of JSON objects, each mapping a source namespace to a destination namespace for a clone operation.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum Items: 0</li> </ul>
clusterName	string	False	<p>JSON string containing the name of the cluster that the application is running on.</p> <p>Not returned if the application is not currently running.</p>

Name	Type	Required	Description
clusterID	string	False	<p>JSON string containing the ID of the cluster that the application is running on.</p> <p>Not returned if the application is not currently running.</p> <p>When specified on create, clusterID indicates which cluster the application must be cloned into. If the specified cluster does not exist, or if the cluster specified does not match the clusterID specified in the request URI, the clone will fail.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
clusterType	string	False	<p>JSON string containing a value indicating the type of cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "gke" - Kubernetes hosted on Google Kubernetes Engine (GKE)</li> <li>• "aks" - Kubernetes hosted on Microsoft Azure Kubernetes Service (AKS)</li> <li>• "eks" - Kubernetes hosted on Amazon Elastic Kubernetes Service (Amazon EKS)</li> <li>• "openshift" - The cluster is of type OpenShift</li> <li>• "kubernetes" - The cluster is generic Kubernetes</li> </ul>

Name	Type	Required	Description
sourceAppID	string	False	<p>JSON string containing the ID of a source application. Only returned if the application was cloned from another application, or was restored from a backup or snapshot.</p> <p>When specified on create, the sourceAppID is used in conjunction with the sourceClusterID and indicates which running application will be cloned. If the specified application does not exist on the specified source cluster, the clone will fail.</p> <p>Only one of sourceAppID, backupID, or snapshotID can be specified when creating an application. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
sourceClusterName	string	False	<p>JSON string containing the name of the cluster the application was previously running on. Only returned if the application was cloned from another cluster.</p>

Name	Type	Required	Description
sourceClusterID	string	False	<p>JSON string containing the ID of the cluster the application was previously running on.</p> <p>Only returned if the application was cloned from another cluster.</p> <p>When specified on create, the sourceClusterID is used in conjunction with the sourceAppID and indicates the source cluster of the application to be cloned. If the specified source cluster does not exist, the clone will fail.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
backupID	string	False	<p>JSON string containing the ID of the backup that the application was restored from.</p> <p>Only returned if the application was restored from a backup.</p> <p>When specified on create, backupID indicates that an application will be cloned from an existing backup. If the specified backup does not exist, the clone will fail. Only one of sourceAppID, backupID, or snapshotID can be specified when creating an application.</p> <p>When specified on a replace, backupID indicates the application backup from which the application will be in-place restored. If the specified backup does not exist, the restore will fail. Only one of backupID or snapshotID can be specified when updating an application</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>



Name	Type	Required	Description
snapshotID	string	False	<p>JSON string containing the ID of the snapshot that the application was restored from.</p> <p>Only returned if the application was restored from a snapshot.</p> <p>When specified on create, snapshotID indicates that an application will be cloned from an existing snapshot. If the specified snapshot does not exist, the clone will fail. Only one of sourceAppID, backupID, or snapshotID can be specified when creating an application.</p> <p>When specified on a replace, snapshotID indicates the application snapshot from which the application will be in-place restored. If the specified snapshot does not exist, the restore will fail. Only one of backupID or snapshotID can be specified when updating an application.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
replicationSourceAppID	string	False	<p>JSON string containing the ID of the application that is being replicated to this application.</p> <p>Only returned if the application is currently the destination in an AppMirror relationship, and the relationship is not in the failedOver state. When the relationship is in failedOver state, this field is not returned.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
metadata	type_astra_metadata_update	True	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema</li> </ul> <p>If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</p>

## Example response

```
{
  "type": "application/astra-app",
  "version": "2.1",
  "id": "9703bbe7-def0-5b08-a40b-1edef8c47f7c",
  "name": "jenkins",
  "namespaceScopedResources": [
    {
      "namespace": "production",
      "labelSelectors": []
    }
  ],
  "state": "pending",
  "stateDetails": [],
  "protectionState": "none",
  "protectionStateDetails": [],
  "namespaces": [
    "production"
  ],
  "clusterName": "GKE-22",
  "clusterID": "0f284377-e5dc-4dcd-bacd-3197f2b8a347",
  "clusterType": "kubernetes",
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 409, Conflict

Name	Type	Required	Description
type	string	True	

Name	Type	Required	Description
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

### Example response

```
{
  "type": "https://astra.netapp.io/problems/10",
  "title": "JSON resource conflict",
  "detail": "The request body JSON contains a field that conflicts with an idempotent value.",
  "status": "409"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

## Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

## Definitions

## See Definitions

### GVK

JSON object containing a Kubernetes group/version/kind.

- This object is internally validated against Astra /apiResources.

Name	Type	Required	Description
group	string	True	JSON string containing a group identifier assigned by Kubernetes. <ul style="list-style-type: none"><li>• This string is internally validated against Astra /apiResources</li></ul>
kind	string	True	JSON string containing a kind identifier assigned by Kubernetes. <ul style="list-style-type: none"><li>• This string is internally validated against Astra /apiResources</li></ul>
version	string	True	JSON string containing a version identifier assigned by Kubernetes. <ul style="list-style-type: none"><li>• This string is internally validated against Astra /apiResources</li></ul>

### clusterScopedResources

Name	Type	Required	Description
GVK	<a href="#">GVK</a>	True	JSON object containing a Kubernetes group/version/kind. <ul style="list-style-type: none"><li>• This object is internally validated against Astra /apiResources.</li></ul>

Name	Type	Required	Description
labelSelectors	array[string]	False	<p>JSON array of JSON strings representing a label selector for the cluster-scoped GroupVersionKinds (GVKs) within the cluster. If this is empty, then all GVK instances on the cluster are included.</p> <p>Each element in this array is a Kubernetes label selector string and follows the same grammar for those values.</p> <p>Examples:</p> <ul style="list-style-type: none"> <li>• [ "app=mysql" ] — Select all resources that have a label whose name is app and whose value is mysql</li> </ul> <p>More examples can be found here: <a href="https://kubernetes.io/docs/concepts/overview/working-with-objects/labels/#set-based-requirement">https://kubernetes.io/docs/concepts/overview/working-with-objects/labels/#set-based-requirement</a></p>

#### namespaceScopedResources

Name	Type	Required	Description
namespace	string	True	<p>JSON string containing the name of a namespace in which the application is defined.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 253</li> <li>• Conforms to the DNS 1123 Label Schema</li> </ul>



Name	Type	Required	Description
labelSelectors	array[string]	False	<p>JSON array of JSON strings representing a label selector within the namespace. If this is empty, then all resources in the namespace are included.</p> <p>Each element in this array is a Kubernetes label selector string and follows the grammar for those values.</p> <p>Examples:</p> <ul style="list-style-type: none"> <li>• [ "app=mysql" ] — Select all resources that have a label whose name is app and whose value is mysql</li> <li>• [ "app != mysql" ] — Select all resources that have a label whose name is app and whose value is not mysql</li> <li>• [ "app in (mysql, mariadb)" ] — Select all resources that have a label whose name is app and value is mysql or mariadb</li> <li>• [ "app notin (nginx, wordpress)" ] — Select all resources that do not have a label whose name is app and whose values are nginx or wordpress</li> <li>• [ "app" ] — Select all resources that have a label named app</li> <li>• [ "!app" ] — Select all resources that do not have a label named app</li> </ul> <p>Note that multiple selection operators can be included in a single selector, separated by commas. In that</p>

## namespaceMapping

Name	Type	Required	Description
source	string	True	JSON string containing the name of the namespace on the source cluster. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 253</li> <li>• Conforms to the DNS 1123 Label Schema</li> </ul>
destination	string	True	JSON string containing the name of the namespace on the destination cluster. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 253</li> <li>• Conforms to the DNS 1123 Label Schema</li> </ul>

## type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

## type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[ <a href="#">type_astra_label</a> ]	False	

Name	Type	Required	Description
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

#### namespaceScopedResources

Name	Type	Required	Description
namespace	string	True	<p>JSON string containing the name of a namespace in which the application is defined. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 253</li> <li>• Conforms to the DNS 1123 Label Schema</li> </ul>

Name	Type	Required	Description
labelSelectors	array[string]	True	<p>JSON array of JSON strings representing a label selector within the namespace. If this is empty, then all resources in the namespace are included.</p> <p>Each element in this array is a Kubernetes label selector string and follows the grammar for those values.</p> <p>Examples:</p> <ul style="list-style-type: none"> <li>• [ "app=mysql" ] — Select all resources that have a label whose name is app and whose value is mysql</li> <li>• [ "app != mysql" ] — Select all resources that have a label whose name is app and whose value is not mysql</li> <li>• [ "app in (mysql, mariadb)" ] — Select all resources that have a label whose name is app and value is mysql or mariadb</li> <li>• [ "app notin (nginx, wordpress)" ] — Select all resources that do not have a label whose name is app and whose values are nginx or wordpress</li> <li>• [ "app" ] — Select all resources that have a label named app</li> <li>• [ "!app" ] — Select all resources that do not have a label named app</li> </ul> <p>Note that multiple selection operators can be included in a single selector, separated by commas. In that</p>

#### type\_astra\_stateTransitions

Name	Type	Required	Description
from	string	True	
to	array[string]	True	

#### type\_astra\_stateDetails

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	

#### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

#### invalidFields

Name	Type	Required	Description
name	string	True	Name of the invalid request body field
reason	string	True	Reason why the request body field is invalid

## List the apps for a managed cluster

GET /accounts/{account\_id}/topology/v2/managedClusters/{managedCluster\_id}/apps

Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource  <ul style="list-style-type: none"> <li>example: {{.Account}}</li> </ul>
managedCluster_id	string	path	True	ID of the containing managedCluster resource
include	string	query	False	Indicates which fields should be returned when listing a collection.  URL examples: "include=id", "include=id,name"  OpenAPI examples: "id"  <ul style="list-style-type: none"> <li>example: id,name,state</li> </ul>
limit	string	query	False	Indicates the maximum number of resources to return when listing a collection.  URL examples: "limit=2"  OpenAPI examples: "2"

Name	Type	In	Required	Description
filter	string	query	False	<p>Indicates which fields should be matched in order to return a resource when listing a collection.</p> <p>Supported operators are:</p> <ul style="list-style-type: none"> <li>• eq - Equality</li> <li>• lt/gt - Less than/Greater than</li> <li>• lte/gte - Less than or equals to/Greater than or equals to</li> </ul> <p>URL example: "filter=field%20eq%20%27value%27"</p> <p>OpenAPI examples: "field eq 'value'"</p>

## Response

Status: 200, Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

Name	Type	Required	Description
items	array[Any of: <a href="#">app_2.1_get_response_body</a> , array[]]	True	
metadata	<a href="#">type_astra_metadata_list</a>	True	

## Example response

```
{
  "type": "application/astra-apps",
  "version": "2.1",
  "items": [
    [
      "2ff50f4b-fe40-4980-913f-8a4469184822",
      "mysql",
      "ready"
    ],
    [
      "ae1e6561-9e22-406c-8a5a-762f4604da00",
      "jenkins",
      "ready"
    ]
  ],
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	



### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	

Name	Type	Required	Description
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't found.",
  "status": "404"
}
```

**Definitions**

## See Definitions

### GVK

JSON object containing a Kubernetes group/version/kind.

- This object is internally validated against Astra /apiResources.

Name	Type	Required	Description
group	string	True	JSON string containing a group identifier assigned by Kubernetes. <ul style="list-style-type: none"><li>• This string is internally validated against Astra /apiResources</li></ul>
kind	string	True	JSON string containing a kind identifier assigned by Kubernetes. <ul style="list-style-type: none"><li>• This string is internally validated against Astra /apiResources</li></ul>
version	string	True	JSON string containing a version identifier assigned by Kubernetes. <ul style="list-style-type: none"><li>• This string is internally validated against Astra /apiResources</li></ul>

### clusterScopedResources

Name	Type	Required	Description
GVK	<a href="#">GVK</a>	True	JSON object containing a Kubernetes group/version/kind. <ul style="list-style-type: none"><li>• This object is internally validated against Astra /apiResources.</li></ul>

Name	Type	Required	Description
labelSelectors	array[string]	False	<p>JSON array of JSON strings representing a label selector for the cluster-scoped GroupVersionKinds (GVKs) within the cluster. If this is empty, then all GVK instances on the cluster are included.</p> <p>Each element in this array is a Kubernetes label selector string and follows the same grammar for those values.</p> <p>Examples:</p> <ul style="list-style-type: none"> <li>• [ "app=mysql" ] — Select all resources that have a label whose name is app and whose value is mysql</li> </ul> <p>More examples can be found here: <a href="https://kubernetes.io/docs/concepts/overview/working-with-objects/labels/#set-based-requirement">https://kubernetes.io/docs/concepts/overview/working-with-objects/labels/#set-based-requirement</a></p>

#### namespaceScopedResources

Name	Type	Required	Description
namespace	string	True	<p>JSON string containing the name of a namespace in which the application is defined.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 253</li> <li>• Conforms to the DNS 1123 Label Schema</li> </ul>

Name	Type	Required	Description
labelSelectors	array[string]	True	<p>JSON array of JSON strings representing a label selector within the namespace. If this is empty, then all resources in the namespace are included.</p> <p>Each element in this array is a Kubernetes label selector string and follows the grammar for those values.</p> <p>Examples:</p> <ul style="list-style-type: none"> <li>• [ "app=mysql" ]— Select all resources that have a label whose name is app and whose value is mysql</li> <li>• [ "app != mysql" ]— Select all resources that have a label whose name is app and whose value is not mysql</li> <li>• [ "app in (mysql, mariadb)" ]— Select all resources that have a label whose name is app and value is mysql or mariadb</li> <li>• [ "app notin (nginx, wordpress)" ]— Select all resources that do not have a label whose name is app and whose values are nginx or wordpress</li> <li>• [ "app" ]— Select all resources that have a label named app</li> <li>• [ "!app" ]— Select all resources that do not have a label named app</li> </ul> <p>Note that multiple selection operators can be included in a single selector, separated by commas. In that</p>

### type\_astra\_stateTransitions

Name	Type	Required	Description
from	string	True	
to	array[string]	True	

### type\_astra\_stateDetails

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	

### namespaceMapping

Name	Type	Required	Description
source	string	True	<p>JSON string containing the name of the namespace on the source cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 253</li> <li>• Conforms to the DNS 1123 Label Schema</li> </ul>
destination	string	True	<p>JSON string containing the name of the namespace on the destination cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 253</li> <li>• Conforms to the DNS 1123 Label Schema</li> </ul>

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

#### type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
 If not specified on create, a metadata object will be created with no labels.  
 If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[type_astra_label]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

#### app\_2.1\_get\_response\_body

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "application/astra-app"</li> </ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "2.0"</li> <li>• "2.1"</li> </ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the UUIDv4 Schema</li> </ul>



Name	Type	Required	Description
name	string	True	<p>JSON string containing a name for the application. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> <li>• This string is internally validated to prevent XSS, Unicode, directory traversal, and SQL-injection attacks.</li> <li>• Conforms to the DNS 1123 Label Schema</li> </ul>
clusterScopedResources	array[ <a href="#">clusterScopedResources</a> ]	False	JSON array of JSON objects describing the cluster-scoped resources that are part of this app
namespaceScopedResources	array[ <a href="#">namespaceScopedResources</a> ]	True	JSON array of JSON objects describing the resources that are part of this app
lastResourceCollectionTimestamp	string	False	<p>JSON string containing the timestamp when the last resource collection was performed. This field is unset if no resource collection has been performed for this application yet. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>

Name	Type	Required	Description
state	string	True	<p>JSON string containing a value indicating the operational state of the application.</p> <p>Defined values are:</p> <ul style="list-style-type: none"><li>• "pending" - The application is scheduled for discovery</li><li>• "discovering" - The application is in the process of being discovered</li><li>• "provisioning" - The application is in the process of being provisioned</li><li>• "ready" - The application is running normally</li><li>• "failed" - The application is in a permanent failure state</li><li>• "restoring" - The application is being restored from backup or snapshot</li><li>• "unavailable" - The application is not currently accessible</li><li>• "unknown" - The application state cannot be determined</li></ul>

Name	Type	Required	Description
stateTransitions	array[ <a href="#">type_astra_stateTransitions</a> ]	False	<p>JSON array of JSON objects, each representing the set of permitted state transitions from a given defined state. Each JSON object contains the fields "from" and "to", where the "from" value is the name of a state, and the "to" value is an array of permitted destination states.</p>
stateDetails	array[ <a href="#">type_astra_stateDetails</a> ]	True	<p>JSON array of JSON objects which lists additional details about the current state, including why the current state was reached. If no details are available, this array will be empty. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum Items: 0</li> </ul>

Name	Type	Required	Description
protectionState	string	True	<p>JSON string containing a value indicating the protection state of the application.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "protected" - The application has a protection policy defined and is in conformance with that policy</li> <li>• "partial" - The application has a protection policy defined, but is out of conformance with that policy</li> <li>• "none" - The application does not have a protection policy defined</li> <li>• "atRisk" - The default storage class on the cluster does not support snapshots, the application is at risk of gaining an unsupported volume</li> </ul>
protectionStateDetails	array[ <a href="#">type_astra_stateDetails</a> ]	True	<p>JSON array of JSON objects which lists additional details about the current protection state, including why the current state was reached.</p> <p>If no details are available, this array will be empty.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum Items: 0</li> </ul>

Name	Type	Required	Description
appDetectedType	string	False	<p>JSON string that uniquely represents the specific type of application that is detected.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "system" - The application contains a resource that identifies it as part of the Kubernetes environment</li> <li>• "acc" - The application contains resources that identify it as an Astra Control Center instance</li> </ul>
namespaces	array[string]	True	<p>JSON array of JSON strings containing the names of the namespaces in which the application is running.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 253</li> <li>• Conforms to the DNS 1123 Label Schema</li> </ul>
namespaceMapping	array[namespaceMapping]	False	<p>JSON array of JSON objects, each mapping a source namespace to a destination namespace for a clone operation.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum Items: 0</li> </ul>

Name	Type	Required	Description
clusterName	string	False	<p>JSON string containing the name of the cluster that the application is running on.</p> <p>Not returned if the application is not currently running.</p>
clusterID	string	False	<p>JSON string containing the ID of the cluster that the application is running on.</p> <p>Not returned if the application is not currently running.</p> <p>When specified on create, clusterID indicates which cluster the application must be cloned into. If the specified cluster does not exist, or if the cluster specified does not match the clusterID specified in the request URI, the clone will fail.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
clusterType	string	False	<p>JSON string containing a value indicating the type of cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"><li>• "gke" - Kubernetes hosted on Google Kubernetes Engine (GKE)</li><li>• "aks" - Kubernetes hosted on Microsoft Azure Kubernetes Service (AKS)</li><li>• "eks" - Kubernetes hosted on Amazon Elastic Kubernetes Service (Amazon EKS)</li><li>• "openshift" - The cluster is of type OpenShift</li><li>• "kubernetes" - The cluster is generic Kubernetes</li></ul>

Name	Type	Required	Description
sourceAppID	string	False	<p>JSON string containing the ID of a source application. Only returned if the application was cloned from another application, or was restored from a backup or snapshot. When specified on create, the sourceAppID is used in conjunction with the sourceClusterID and indicates which running application will be cloned. If the specified application does not exist on the specified source cluster, the clone will fail. Only one of sourceAppID, backupID, or snapshotID can be specified when creating an application. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
sourceClusterName	string	False	<p>JSON string containing the name of the cluster the application was previously running on. Only returned if the application was cloned from another cluster.</p>



Name	Type	Required	Description
sourceClusterID	string	False	<p>JSON string containing the ID of the cluster the application was previously running on. Only returned if the application was cloned from another cluster. When specified on create, the sourceClusterID is used in conjunction with the sourceAppID and indicates the source cluster of the application to be cloned. If the specified source cluster does not exist, the clone will fail.</p> <p>Defined values are:</p> <ul style="list-style-type: none"><li>• Conforms to the Astra Identifier Schema</li></ul>

Name	Type	Required	Description
backupID	string	False	<p>JSON string containing the ID of the backup that the application was restored from.</p> <p>Only returned if the application was restored from a backup.</p> <p>When specified on create, backupID indicates that an application will be cloned from an existing backup. If the specified backup does not exist, the clone will fail. Only one of sourceAppID, backupID, or snapshotID can be specified when creating an application.</p> <p>When specified on a replace, backupID indicates the application backup from which the application will be in-place restored. If the specified backup does not exist, the restore will fail. Only one of backupID or snapshotID can be specified when updating an application</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
snapshotID	string	False	<p>JSON string containing the ID of the snapshot that the application was restored from.</p> <p>Only returned if the application was restored from a snapshot.</p> <p>When specified on create, snapshotID indicates that an application will be cloned from an existing snapshot. If the specified snapshot does not exist, the clone will fail. Only one of sourceAppID, backupID, or snapshotID can be specified when creating an application.</p> <p>When specified on a replace, snapshotID indicates the application snapshot from which the application will be in-place restored. If the specified snapshot does not exist, the restore will fail. Only one of backupID or snapshotID can be specified when updating an application.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
replicationSourceAppID	string	False	<p>JSON string containing the ID of the application that is being replicated to this application. Only returned if the application is currently the destination in an AppMirror relationship, and the relationship is not in the failedOver state. When the relationship is in failedOver state, this field is not returned. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
metadata	<a href="#">type_astra_metadata_update</a>	True	<p>Client and service-specified metadata associated with the resource. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema</li> </ul> <p>If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</p>

[type\\_astra\\_metadata\\_list](#)

Name	Type	Required	Description
continue	string	False	
count	number	False	
labels	array[ <a href="#">type_astra_label</a> ]	False	

Name	Type	Required	Description
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Retrieve an app for a managed cluster

GET

/accounts/{account\_id}/topology/v2/managedClusters/{managedCluster\_id}/apps/{app\_id}

Returns the stored App API resource in the JSON response body.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"> <li>example: <code>{{.Account}}</code></li> </ul>
managedCluster_id	string	path	True	ID of the containing managedCluster resource
app_id	string	path	True	ID of the app collection to list

### Response

Status: 200, Returns the stored App API resource in the JSON response body.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "application/astra-app"</li> </ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "2.0"</li> <li>• "2.1"</li> </ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the UUIDv4 Schema</li> </ul>
name	string	True	JSON string containing a name for the application. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> <li>• This string is internally validated to prevent XSS, Unicode, directory traversal, and SQL-injection attacks.</li> <li>• Conforms to the DNS 1123 Label Schema</li> </ul>
clusterScopedResources	array[ <a href="#">clusterScopedResources</a> ]	False	JSON array of JSON objects describing the cluster-scoped resources that are part of this app
namespaceScopedResources	array[ <a href="#">namespaceScopedResources</a> ]	True	JSON array of JSON objects describing the resources that are part of this app

Name	Type	Required	Description
lastResourceCollectionTimestamp	string	False	<p>JSON string containing the timestamp when the last resource collection was performed. This field is unset if no resource collection has been performed for this application yet.</p> <p>Defined values are:</p> <ul style="list-style-type: none"><li>• Conforms to the ISO-8601 Date Time Schema</li></ul>

Name	Type	Required	Description
state	string	True	<p>JSON string containing a value indicating the operational state of the application.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "pending" - The application is scheduled for discovery</li> <li>• "discovering" - The application is in the process of being discovered</li> <li>• "provisioning" - The application is in the process of being provisioned</li> <li>• "ready" - The application is running normally</li> <li>• "failed" - The application is in a permanent failure state</li> <li>• "restoring" - The application is being restored from backup or snapshot</li> <li>• "unavailable" - The application is not currently accessible</li> <li>• "unknown" - The application state cannot be determined</li> </ul>



Name	Type	Required	Description
stateTransitions	array[ <a href="#">type_astra_stateTransitions</a> ]	False	<p>JSON array of JSON objects, each representing the set of permitted state transitions from a given defined state.</p> <p>Each JSON object contains the fields "from" and "to", where the "from" value is the name of a state, and the "to" value is an array of permitted destination states.</p>
stateDetails	array[ <a href="#">type_astra_stateDetails</a> ]	True	<p>JSON array of JSON objects which lists additional details about the current state, including why the current state was reached.</p> <p>If no details are available, this array will be empty.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum Items: 0</li> </ul>

Name	Type	Required	Description
protectionState	string	True	<p>JSON string containing a value indicating the protection state of the application.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "protected" - The application has a protection policy defined and is in conformance with that policy</li> <li>• "partial" - The application has a protection policy defined, but is out of conformance with that policy</li> <li>• "none" - The application does not have a protection policy defined</li> <li>• "atRisk" - The default storage class on the cluster does not support snapshots, the application is at risk of gaining an unsupported volume</li> </ul>
protectionStateDetails	array[type_astra_stateDetails]	True	<p>JSON array of JSON objects which lists additional details about the current protection state, including why the current state was reached.</p> <p>If no details are available, this array will be empty.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum Items: 0</li> </ul>

Name	Type	Required	Description
appDetectedType	string	False	<p>JSON string that uniquely represents the specific type of application that is detected.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "system" - The application contains a resource that identifies it as part of the Kubernetes environment</li> <li>• "acc" - The application contains resources that identify it as an Astra Control Center instance</li> </ul>
namespaces	array[string]	True	<p>JSON array of JSON strings containing the names of the namespaces in which the application is running.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 253</li> <li>• Conforms to the DNS 1123 Label Schema</li> </ul>
namespaceMapping	array[namespaceMapping]	False	<p>JSON array of JSON objects, each mapping a source namespace to a destination namespace for a clone operation.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum Items: 0</li> </ul>
clusterName	string	False	<p>JSON string containing the name of the cluster that the application is running on.</p> <p>Not returned if the application is not currently running.</p>

Name	Type	Required	Description
clusterID	string	False	<p>JSON string containing the ID of the cluster that the application is running on.</p> <p>Not returned if the application is not currently running.</p> <p>When specified on create, clusterID indicates which cluster the application must be cloned into. If the specified cluster does not exist, or if the cluster specified does not match the clusterID specified in the request URI, the clone will fail.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
clusterType	string	False	<p>JSON string containing a value indicating the type of cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "gke" - Kubernetes hosted on Google Kubernetes Engine (GKE)</li> <li>• "aks" - Kubernetes hosted on Microsoft Azure Kubernetes Service (AKS)</li> <li>• "eks" - Kubernetes hosted on Amazon Elastic Kubernetes Service (Amazon EKS)</li> <li>• "openshift" - The cluster is of type OpenShift</li> <li>• "kubernetes" - The cluster is generic Kubernetes</li> </ul>

Name	Type	Required	Description
sourceAppID	string	False	<p>JSON string containing the ID of a source application. Only returned if the application was cloned from another application, or was restored from a backup or snapshot.</p> <p>When specified on create, the sourceAppID is used in conjunction with the sourceClusterID and indicates which running application will be cloned. If the specified application does not exist on the specified source cluster, the clone will fail.</p> <p>Only one of sourceAppID, backupID, or snapshotID can be specified when creating an application. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
sourceClusterName	string	False	<p>JSON string containing the name of the cluster the application was previously running on. Only returned if the application was cloned from another cluster.</p>

Name	Type	Required	Description
sourceClusterID	string	False	<p>JSON string containing the ID of the cluster the application was previously running on.</p> <p>Only returned if the application was cloned from another cluster.</p> <p>When specified on create, the sourceClusterID is used in conjunction with the sourceAppID and indicates the source cluster of the application to be cloned. If the specified source cluster does not exist, the clone will fail.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
backupID	string	False	<p>JSON string containing the ID of the backup that the application was restored from.</p> <p>Only returned if the application was restored from a backup.</p> <p>When specified on create, backupID indicates that an application will be cloned from an existing backup. If the specified backup does not exist, the clone will fail. Only one of sourceAppID, backupID, or snapshotID can be specified when creating an application.</p> <p>When specified on a replace, backupID indicates the application backup from which the application will be in-place restored. If the specified backup does not exist, the restore will fail. Only one of backupID or snapshotID can be specified when updating an application</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
snapshotID	string	False	<p>JSON string containing the ID of the snapshot that the application was restored from.</p> <p>Only returned if the application was restored from a snapshot.</p> <p>When specified on create, snapshotID indicates that an application will be cloned from an existing snapshot. If the specified snapshot does not exist, the clone will fail. Only one of sourceAppID, backupID, or snapshotID can be specified when creating an application.</p> <p>When specified on a replace, snapshotID indicates the application snapshot from which the application will be in-place restored. If the specified snapshot does not exist, the restore will fail. Only one of backupID or snapshotID can be specified when updating an application.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>



Name	Type	Required	Description
replicationSourceAppID	string	False	<p>JSON string containing the ID of the application that is being replicated to this application.</p> <p>Only returned if the application is currently the destination in an AppMirror relationship, and the relationship is not in the failedOver state. When the relationship is in failedOver state, this field is not returned.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
metadata	type_astra_metadata_update	True	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema</li> </ul> <p>If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</p>

## Example response

```
{
  "type": "application/astra-app",
  "version": "2.1",
  "id": "9703bbe7-def0-5b08-a40b-1edef8c47f7c",
  "name": "jenkins",
  "namespaceScopedResources": [
    {
      "namespace": "production-clone",
      "labelSelectors": [
        "app = jenkins,release = production"
      ]
    }
  ],
  "namespaceMapping": [
    {
      "source": "production",
      "destination": "production-clone"
    }
  ],
  "state": "ready",
  "stateDetails": [],
  "protectionState": "none",
  "protectionStateDetails": [],
  "namespaces": [
    "production-clone"
  ],
  "snapshotID": "8d561930-0437-4647-b3e6-49b8a5362e3d",
  "clusterName": "GKE-24",
  "clusterID": "0f284377-e5dc-4dcd-bacd-3197f2b8a347",
  "clusterType": "kubernetes",
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	

Name	Type	Required	Description
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

### Definitions

## See Definitions

### GVK

JSON object containing a Kubernetes group/version/kind.

- This object is internally validated against Astra /apiResources.

Name	Type	Required	Description
group	string	True	JSON string containing a group identifier assigned by Kubernetes. <ul style="list-style-type: none"><li>• This string is internally validated against Astra /apiResources</li></ul>
kind	string	True	JSON string containing a kind identifier assigned by Kubernetes. <ul style="list-style-type: none"><li>• This string is internally validated against Astra /apiResources</li></ul>
version	string	True	JSON string containing a version identifier assigned by Kubernetes. <ul style="list-style-type: none"><li>• This string is internally validated against Astra /apiResources</li></ul>

### clusterScopedResources

Name	Type	Required	Description
GVK	<a href="#">GVK</a>	True	JSON object containing a Kubernetes group/version/kind. <ul style="list-style-type: none"><li>• This object is internally validated against Astra /apiResources.</li></ul>

Name	Type	Required	Description
labelSelectors	array[string]	False	<p>JSON array of JSON strings representing a label selector for the cluster-scoped GroupVersionKinds (GVKs) within the cluster. If this is empty, then all GVK instances on the cluster are included.</p> <p>Each element in this array is a Kubernetes label selector string and follows the same grammar for those values.</p> <p>Examples:</p> <ul style="list-style-type: none"> <li>• [ "app=mysql" ] — Select all resources that have a label whose name is app and whose value is mysql</li> </ul> <p>More examples can be found here: <a href="https://kubernetes.io/docs/concepts/overview/working-with-objects/labels/#set-based-requirement">https://kubernetes.io/docs/concepts/overview/working-with-objects/labels/#set-based-requirement</a></p>

#### namespaceScopedResources

Name	Type	Required	Description
namespace	string	True	<p>JSON string containing the name of a namespace in which the application is defined.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 253</li> <li>• Conforms to the DNS 1123 Label Schema</li> </ul>

Name	Type	Required	Description
labelSelectors	array[string]	True	<p>JSON array of JSON strings representing a label selector within the namespace. If this is empty, then all resources in the namespace are included.</p> <p>Each element in this array is a Kubernetes label selector string and follows the grammar for those values.</p> <p>Examples:</p> <ul style="list-style-type: none"> <li>• [ "app=mysql" ]— Select all resources that have a label whose name is app and whose value is mysql</li> <li>• [ "app != mysql" ]— Select all resources that have a label whose name is app and whose value is not mysql</li> <li>• [ "app in (mysql, mariadb)" ]— Select all resources that have a label whose name is app and value is mysql or mariadb</li> <li>• [ "app notin (nginx, wordpress)" ]— Select all resources that do not have a label whose name is app and whose values are nginx or wordpress</li> <li>• [ "app" ]— Select all resources that have a label named app</li> <li>• [ "!app" ]— Select all resources that do not have a label named app</li> </ul> <p>Note that multiple selection operators can be included in a single selector, separated by commas. In that</p>



### type\_astra\_stateTransitions

Name	Type	Required	Description
from	string	True	
to	array[string]	True	

### type\_astra\_stateDetails

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	

### namespaceMapping

Name	Type	Required	Description
source	string	True	<p>JSON string containing the name of the namespace on the source cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 253</li> <li>• Conforms to the DNS 1123 Label Schema</li> </ul>
destination	string	True	<p>JSON string containing the name of the namespace on the destination cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 253</li> <li>• Conforms to the DNS 1123 Label Schema</li> </ul>

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema
  - If not specified on create, a metadata object will be created with no labels.
  - If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[type_astra_label]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Modify an app for a managed cluster

PUT

/accounts/{account\_id}/topology/v2/managedClusters/{managedCluster\_id}/apps/{app\_id}

Replaces the entire stored resource with the supplied JSON request body while preserving key values that are not user-modifiable.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"> <li>example: <code>{{.Account}}</code></li> </ul>
managedCluster_id	string	path	True	ID of the containing managedCluster resource
app_id	string	path	True	ID of the app collection to list
forceUpdate	string	header	False	<ul style="list-style-type: none"> <li>example: true</li> </ul>

### Request Body

Replaces the entire stored resource with the supplied JSON request body while preserving key values that are not user-modifiable.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"> <li>"application/astra-app"</li> </ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>"2.0"</li> <li>"2.1"</li> </ul>
id	string	False	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>Conforms to the UUIDv4 Schema</li> </ul>

Name	Type	Required	Description
name	string	False	<p>JSON string containing a name for the application. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> <li>• This string is internally validated to prevent XSS, Unicode, directory traversal, and SQL-injection attacks.</li> <li>• Conforms to the DNS 1123 Label Schema</li> </ul>
clusterScopedResources	array[ <a href="#">clusterScopedResources</a> ]	False	JSON array of JSON objects describing the cluster-scoped resources that are part of this app
namespaceScopedResources	array[ <a href="#">namespaceScopedResources</a> ]	False	JSON array of JSON objects describing the resources that are part of this app
lastResourceCollectionTimestamp	string	False	<p>JSON string containing the timestamp when the last resource collection was performed. This field is unset if no resource collection has been performed for this application yet. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>

Name	Type	Required	Description
state	string	False	<p>JSON string containing a value indicating the operational state of the application.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "pending" - The application is scheduled for discovery</li> <li>• "discovering" - The application is in the process of being discovered</li> <li>• "provisioning" - The application is in the process of being provisioned</li> <li>• "ready" - The application is running normally</li> <li>• "failed" - The application is in a permanent failure state</li> <li>• "restoring" - The application is being restored from backup or snapshot</li> <li>• "unavailable" - The application is not currently accessible</li> <li>• "unknown" - The application state cannot be determined</li> </ul>

Name	Type	Required	Description
stateTransitions	array[ <a href="#">type_astra_stateTransitions</a> ]	False	<p>JSON array of JSON objects, each representing the set of permitted state transitions from a given defined state.</p> <p>Each JSON object contains the fields "from" and "to", where the "from" value is the name of a state, and the "to" value is an array of permitted destination states.</p>
stateDetails	array[ <a href="#">type_astra_stateDetails</a> ]	False	<p>JSON array of JSON objects which lists additional details about the current state, including why the current state was reached.</p> <p>If no details are available, this array will be empty.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum Items: 0</li> </ul>

Name	Type	Required	Description
protectionState	string	False	<p>JSON string containing a value indicating the protection state of the application.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "protected" - The application has a protection policy defined and is in conformance with that policy</li> <li>• "partial" - The application has a protection policy defined, but is out of conformance with that policy</li> <li>• "none" - The application does not have a protection policy defined</li> <li>• "atRisk" - The default storage class on the cluster does not support snapshots, the application is at risk of gaining an unsupported volume</li> </ul>
protectionStateDetails	array[type_astra_stateDetails]	False	<p>JSON array of JSON objects which lists additional details about the current protection state, including why the current state was reached.</p> <p>If no details are available, this array will be empty.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum Items: 0</li> </ul>

Name	Type	Required	Description
appDetectedType	string	False	<p>JSON string that uniquely represents the specific type of application that is detected.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "system" - The application contains a resource that identifies it as part of the Kubernetes environment</li> <li>• "acc" - The application contains resources that identify it as an Astra Control Center instance</li> </ul>
namespaces	array[string]	False	<p>JSON array of JSON strings containing the names of the namespaces in which the application is running.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 253</li> <li>• Conforms to the DNS 1123 Label Schema</li> </ul>
namespaceMapping	array[ <a href="#">namespaceMapping</a> ]	False	<p>JSON array of JSON objects, each mapping a source namespace to a destination namespace for a clone operation.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum Items: 0</li> </ul>
clusterName	string	False	<p>JSON string containing the name of the cluster that the application is running on.</p> <p>Not returned if the application is not currently running.</p>



Name	Type	Required	Description
clusterID	string	False	<p>JSON string containing the ID of the cluster that the application is running on.</p> <p>Not returned if the application is not currently running.</p> <p>When specified on create, clusterID indicates which cluster the application must be cloned into. If the specified cluster does not exist, or if the cluster specified does not match the clusterID specified in the request URI, the clone will fail.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
clusterType	string	False	<p>JSON string containing a value indicating the type of cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "gke" - Kubernetes hosted on Google Kubernetes Engine (GKE)</li> <li>• "aks" - Kubernetes hosted on Microsoft Azure Kubernetes Service (AKS)</li> <li>• "eks" - Kubernetes hosted on Amazon Elastic Kubernetes Service (Amazon EKS)</li> <li>• "openshift" - The cluster is of type OpenShift</li> <li>• "kubernetes" - The cluster is generic Kubernetes</li> </ul>

Name	Type	Required	Description
sourceAppID	string	False	<p>JSON string containing the ID of a source application. Only returned if the application was cloned from another application, or was restored from a backup or snapshot.</p> <p>When specified on create, the sourceAppID is used in conjunction with the sourceClusterID and indicates which running application will be cloned. If the specified application does not exist on the specified source cluster, the clone will fail.</p> <p>Only one of sourceAppID, backupID, or snapshotID can be specified when creating an application. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
sourceClusterName	string	False	<p>JSON string containing the name of the cluster the application was previously running on. Only returned if the application was cloned from another cluster.</p>

Name	Type	Required	Description
sourceClusterID	string	False	<p>JSON string containing the ID of the cluster the application was previously running on.</p> <p>Only returned if the application was cloned from another cluster.</p> <p>When specified on create, the sourceClusterID is used in conjunction with the sourceAppID and indicates the source cluster of the application to be cloned. If the specified source cluster does not exist, the clone will fail.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
backupID	string	False	<p>JSON string containing the ID of the backup that the application was restored from.</p> <p>Only returned if the application was restored from a backup.</p> <p>When specified on create, backupID indicates that an application will be cloned from an existing backup. If the specified backup does not exist, the clone will fail. Only one of sourceAppID, backupID, or snapshotID can be specified when creating an application.</p> <p>When specified on a replace, backupID indicates the application backup from which the application will be in-place restored. If the specified backup does not exist, the restore will fail. Only one of backupID or snapshotID can be specified when updating an application</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
snapshotID	string	False	<p>JSON string containing the ID of the snapshot that the application was restored from.</p> <p>Only returned if the application was restored from a snapshot.</p> <p>When specified on create, snapshotID indicates that an application will be cloned from an existing snapshot. If the specified snapshot does not exist, the clone will fail. Only one of sourceAppID, backupID, or snapshotID can be specified when creating an application.</p> <p>When specified on a replace, snapshotID indicates the application snapshot from which the application will be in-place restored. If the specified snapshot does not exist, the restore will fail. Only one of backupID or snapshotID can be specified when updating an application.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
replicationSourceAppID	string	False	<p>JSON string containing the ID of the application that is being replicated to this application.</p> <p>Only returned if the application is currently the destination in an AppMirror relationship, and the relationship is not in the failedOver state. When the relationship is in failedOver state, this field is not returned.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
metadata	<a href="#">type_astra_metadata_update</a>	False	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema</li> </ul> <p>If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</p>

### Example request

```
{
  "type": "application/astra-app",
  "version": "2.1",
  "name": "mysql-old"
}
```

## Response

Status: 204, Indicates if the app resource was updated.

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

## Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 409, Conflict

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

### Example response

```
{
  "type": "https://astra.netapp.io/problems/10",
  "title": "JSON resource conflict",
  "detail": "The request body JSON contains a field that conflicts with an idempotent value.",
  "status": "409"
}
```

### Response

Status: 403, Forbidden



Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/1",
  "title": "Resource not found",
  "detail": "The resource specified in the request URI wasn't found.",
  "status": "404"
}
```

## Definitions

## See Definitions

### GVK

JSON object containing a Kubernetes group/version/kind.

- This object is internally validated against Astra /apiResources.

Name	Type	Required	Description
group	string	False	JSON string containing a group identifier assigned by Kubernetes. <ul style="list-style-type: none"><li>• This string is internally validated against Astra /apiResources</li></ul>
kind	string	False	JSON string containing a kind identifier assigned by Kubernetes. <ul style="list-style-type: none"><li>• This string is internally validated against Astra /apiResources</li></ul>
version	string	False	JSON string containing a version identifier assigned by Kubernetes. <ul style="list-style-type: none"><li>• This string is internally validated against Astra /apiResources</li></ul>

### clusterScopedResources

Name	Type	Required	Description
GVK	<a href="#">GVK</a>	False	JSON object containing a Kubernetes group/version/kind. <ul style="list-style-type: none"><li>• This object is internally validated against Astra /apiResources.</li></ul>

Name	Type	Required	Description
labelSelectors	array[string]	False	<p>JSON array of JSON strings representing a label selector for the cluster-scoped GroupVersionKinds (GVKs) within the cluster. If this is empty, then all GVK instances on the cluster are included.</p> <p>Each element in this array is a Kubernetes label selector string and follows the same grammar for those values.</p> <p>Examples:</p> <ul style="list-style-type: none"> <li>• [ "app=mysql" ] — Select all resources that have a label whose name is app and whose value is mysql</li> </ul> <p>More examples can be found here: <a href="https://kubernetes.io/docs/concepts/overview/working-with-objects/labels/#set-based-requirement">https://kubernetes.io/docs/concepts/overview/working-with-objects/labels/#set-based-requirement</a></p>

#### namespaceScopedResources

Name	Type	Required	Description
namespace	string	False	<p>JSON string containing the name of a namespace in which the application is defined.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 253</li> <li>• Conforms to the DNS 1123 Label Schema</li> </ul>

Name	Type	Required	Description
labelSelectors	array[string]	False	<p>JSON array of JSON strings representing a label selector within the namespace. If this is empty, then all resources in the namespace are included.</p> <p>Each element in this array is a Kubernetes label selector string and follows the grammar for those values.</p> <p>Examples:</p> <ul style="list-style-type: none"> <li>• [ "app=mysql" ]— Select all resources that have a label whose name is app and whose value is mysql</li> <li>• [ "app != mysql" ]— Select all resources that have a label whose name is app and whose value is not mysql</li> <li>• [ "app in (mysql, mariadb)" ]— Select all resources that have a label whose name is app and value is mysql or mariadb</li> <li>• [ "app notin (nginx, wordpress)" ]— Select all resources that do not have a label whose name is app and whose values are nginx or wordpress</li> <li>• [ "app" ]— Select all resources that have a label named app</li> <li>• [ "!app" ]— Select all resources that do not have a label named app</li> </ul> <p>Note that multiple selection operators can be included in a single selector, separated by commas. In that</p>

### type\_astra\_stateTransitions

Name	Type	Required	Description
from	string	True	
to	array[string]	True	

### type\_astra\_stateDetails

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	

### namespaceMapping

Name	Type	Required	Description
source	string	False	<p>JSON string containing the name of the namespace on the source cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 253</li> <li>• Conforms to the DNS 1123 Label Schema</li> </ul>
destination	string	False	<p>JSON string containing the name of the namespace on the destination cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 253</li> <li>• Conforms to the DNS 1123 Label Schema</li> </ul>

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

#### type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema
  - If not specified on create, a metadata object will be created with no labels.
  - If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[type_astra_label]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

#### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

#### invalidFields

Name	Type	Required	Description
name	string	True	Name of the invalid request body field
reason	string	True	Reason why the request body field is invalid

## Delete an app for a managed cluster

DELETE

/accounts/{account\_id}/topology/v2/managedClusters/{managedCluster\_id}/apps/{app\_

id}

Removes the specified App API resource.

### Side Effects

- Billing stops.
- If the application is still running on a cluster, the application is no longer considered to be under management and will no longer show up under /apps, but it will still show up under /apps.
- If the application is not running on a cluster, the application is no longer known to the system and will no longer show up under /apps.
- All associated snapshots, backups, and the stored application state are removed.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"><li>• example: <code>{{.Account}}</code></li></ul>
managedCluster_id	string	path	True	ID of the containing managedCluster resource
app_id	string	path	True	ID of the app collection to list

### Response

Status: 204, Indicates if the app resource was deleted.

### Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	



### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	

Name	Type	Required	Description
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/1",
  "title": "Resource not found",
  "detail": "The resource specified in the request URI wasn't found.",
  "status": "404"
}
```

### Definitions

## See Definitions

invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Create a new app

POST /accounts/{account\_id}/k8s/v2/apps

Indicates the desired values for the App API resource to be created.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"><li>example: {{.Account}}</li></ul>

### Request Body

Indicates the desired values for the App API resource to be created.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>"application/astra-app"</li></ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"><li>"2.0"</li><li>"2.1"</li></ul>

Name	Type	Required	Description
name	string	True	<p>JSON string containing a name for the application. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> <li>• This string is internally validated to prevent XSS, Unicode, directory traversal, and SQL-injection attacks.</li> <li>• Conforms to the DNS 1123 Label Schema</li> </ul>
clusterScopedResources	array[ <a href="#">clusterScopedResources</a> ]	False	JSON array of JSON objects describing the cluster-scoped resources that are part of this app
namespaceScopedResources	array[ <a href="#">namespaceScopedResources</a> ]	False	JSON array of JSON objects describing the resources that are part of this app
namespaceMapping	array[ <a href="#">namespaceMapping</a> ]	False	<p>JSON array of JSON objects, each mapping a source namespace to a destination namespace for a clone operation. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum Items: 0</li> </ul>

Name	Type	Required	Description
clusterID	string	False	<p>JSON string containing the ID of the cluster that the application is running on.</p> <p>Not returned if the application is not currently running.</p> <p>When specified on create, clusterID indicates which cluster the application must be cloned into. If the specified cluster does not exist, or if the cluster specified does not match the clusterID specified in the request URI, the clone will fail.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
sourceAppID	string	False	<p>JSON string containing the ID of a source application. Only returned if the application was cloned from another application, or was restored from a backup or snapshot.</p> <p>When specified on create, the sourceAppID is used in conjunction with the sourceClusterID and indicates which running application will be cloned. If the specified application does not exist on the specified source cluster, the clone will fail.</p> <p>Only one of sourceAppID, backupID, or snapshotID can be specified when creating an application.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
sourceClusterID	string	False	<p>JSON string containing the ID of the cluster the application was previously running on.</p> <p>Only returned if the application was cloned from another cluster.</p> <p>When specified on create, the sourceClusterID is used in conjunction with the sourceAppID and indicates the source cluster of the application to be cloned. If the specified source cluster does not exist, the clone will fail.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
backupID	string	False	<p>JSON string containing the ID of the backup that the application was restored from.</p> <p>Only returned if the application was restored from a backup.</p> <p>When specified on create, backupID indicates that an application will be cloned from an existing backup. If the specified backup does not exist, the clone will fail. Only one of sourceAppID, backupID, or snapshotID can be specified when creating an application.</p> <p>When specified on a replace, backupID indicates the application backup from which the application will be in-place restored. If the specified backup does not exist, the restore will fail. Only one of backupID or snapshotID can be specified when updating an application</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
snapshotID	string	False	<p>JSON string containing the ID of the snapshot that the application was restored from.</p> <p>Only returned if the application was restored from a snapshot.</p> <p>When specified on create, snapshotID indicates that an application will be cloned from an existing snapshot. If the specified snapshot does not exist, the clone will fail. Only one of sourceAppID, backupID, or snapshotID can be specified when creating an application.</p> <p>When specified on a replace, snapshotID indicates the application snapshot from which the application will be in-place restored. If the specified snapshot does not exist, the restore will fail. Only one of backupID or snapshotID can be specified when updating an application.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>



Name	Type	Required	Description
metadata	<a href="#">type_astra_metadata_update</a>	False	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>Conforms to the Astra Metadata Schema</li> </ul> <p>If not specified on create, a metadata object will be created with no labels.</p> <p>If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</p>

### Example request

```

{
  "type": "application/astra-app",
  "version": "2.1",
  "name": "jenkins",
  "clusterID": "0f284377-e5dc-4dcd-bacd-3197f2b8a347",
  "namespaceScopedResources": [
    {
      "namespace": "production"
    }
  ]
}

```

### Response

Status: 201, Returns the newly created app resource in the JSON response body.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "application/astra-app"</li> </ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "2.0"</li> <li>• "2.1"</li> </ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the UUIDv4 Schema</li> </ul>
name	string	True	JSON string containing a name for the application. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> <li>• This string is internally validated to prevent XSS, Unicode, directory traversal, and SQL-injection attacks.</li> <li>• Conforms to the DNS 1123 Label Schema</li> </ul>
clusterScopedResources	array[ <a href="#">clusterScopedResources</a> ]	False	JSON array of JSON objects describing the cluster-scoped resources that are part of this app
namespaceScopedResources	array[ <a href="#">namespaceScopedResources</a> ]	True	JSON array of JSON objects describing the resources that are part of this app

Name	Type	Required	Description
lastResourceCollectionTimestamp	string	False	<p>JSON string containing the timestamp when the last resource collection was performed. This field is unset if no resource collection has been performed for this application yet.</p> <p>Defined values are:</p> <ul style="list-style-type: none"><li>• Conforms to the ISO-8601 Date Time Schema</li></ul>

Name	Type	Required	Description
state	string	True	<p>JSON string containing a value indicating the operational state of the application.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "pending" - The application is scheduled for discovery</li> <li>• "discovering" - The application is in the process of being discovered</li> <li>• "provisioning" - The application is in the process of being provisioned</li> <li>• "ready" - The application is running normally</li> <li>• "failed" - The application is in a permanent failure state</li> <li>• "restoring" - The application is being restored from backup or snapshot</li> <li>• "unavailable" - The application is not currently accessible</li> <li>• "unknown" - The application state cannot be determined</li> </ul>

Name	Type	Required	Description
stateTransitions	array[ <a href="#">type_astra_stateTransitions</a> ]	False	<p>JSON array of JSON objects, each representing the set of permitted state transitions from a given defined state.</p> <p>Each JSON object contains the fields "from" and "to", where the "from" value is the name of a state, and the "to" value is an array of permitted destination states.</p>
stateDetails	array[ <a href="#">type_astra_stateDetails</a> ]	True	<p>JSON array of JSON objects which lists additional details about the current state, including why the current state was reached.</p> <p>If no details are available, this array will be empty.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum Items: 0</li> </ul>

Name	Type	Required	Description
protectionState	string	True	<p>JSON string containing a value indicating the protection state of the application.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "protected" - The application has a protection policy defined and is in conformance with that policy</li> <li>• "partial" - The application has a protection policy defined, but is out of conformance with that policy</li> <li>• "none" - The application does not have a protection policy defined</li> <li>• "atRisk" - The default storage class on the cluster does not support snapshots, the application is at risk of gaining an unsupported volume</li> </ul>
protectionStateDetails	array[type_astra_stateDetails]	True	<p>JSON array of JSON objects which lists additional details about the current protection state, including why the current state was reached.</p> <p>If no details are available, this array will be empty.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum Items: 0</li> </ul>

Name	Type	Required	Description
appDetectedType	string	False	<p>JSON string that uniquely represents the specific type of application that is detected.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "system" - The application contains a resource that identifies it as part of the Kubernetes environment</li> <li>• "acc" - The application contains resources that identify it as an Astra Control Center instance</li> </ul>
namespaces	array[string]	True	<p>JSON array of JSON strings containing the names of the namespaces in which the application is running.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 253</li> <li>• Conforms to the DNS 1123 Label Schema</li> </ul>
namespaceMapping	array[namespaceMapping]	False	<p>JSON array of JSON objects, each mapping a source namespace to a destination namespace for a clone operation.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum Items: 0</li> </ul>
clusterName	string	False	<p>JSON string containing the name of the cluster that the application is running on.</p> <p>Not returned if the application is not currently running.</p>

Name	Type	Required	Description
clusterID	string	False	<p>JSON string containing the ID of the cluster that the application is running on.</p> <p>Not returned if the application is not currently running.</p> <p>When specified on create, clusterID indicates which cluster the application must be cloned into. If the specified cluster does not exist, or if the cluster specified does not match the clusterID specified in the request URI, the clone will fail.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
clusterType	string	False	<p>JSON string containing a value indicating the type of cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "gke" - Kubernetes hosted on Google Kubernetes Engine (GKE)</li> <li>• "aks" - Kubernetes hosted on Microsoft Azure Kubernetes Service (AKS)</li> <li>• "eks" - Kubernetes hosted on Amazon Elastic Kubernetes Service (Amazon EKS)</li> <li>• "openshift" - The cluster is of type OpenShift</li> <li>• "kubernetes" - The cluster is generic Kubernetes</li> </ul>



Name	Type	Required	Description
sourceAppID	string	False	<p>JSON string containing the ID of a source application. Only returned if the application was cloned from another application, or was restored from a backup or snapshot.</p> <p>When specified on create, the sourceAppID is used in conjunction with the sourceClusterID and indicates which running application will be cloned. If the specified application does not exist on the specified source cluster, the clone will fail.</p> <p>Only one of sourceAppID, backupID, or snapshotID can be specified when creating an application. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
sourceClusterName	string	False	<p>JSON string containing the name of the cluster the application was previously running on. Only returned if the application was cloned from another cluster.</p>

Name	Type	Required	Description
sourceClusterID	string	False	<p>JSON string containing the ID of the cluster the application was previously running on.</p> <p>Only returned if the application was cloned from another cluster.</p> <p>When specified on create, the sourceClusterID is used in conjunction with the sourceAppID and indicates the source cluster of the application to be cloned. If the specified source cluster does not exist, the clone will fail.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
backupID	string	False	<p>JSON string containing the ID of the backup that the application was restored from.</p> <p>Only returned if the application was restored from a backup.</p> <p>When specified on create, backupID indicates that an application will be cloned from an existing backup. If the specified backup does not exist, the clone will fail. Only one of sourceAppID, backupID, or snapshotID can be specified when creating an application.</p> <p>When specified on a replace, backupID indicates the application backup from which the application will be in-place restored. If the specified backup does not exist, the restore will fail. Only one of backupID or snapshotID can be specified when updating an application</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
snapshotID	string	False	<p>JSON string containing the ID of the snapshot that the application was restored from.</p> <p>Only returned if the application was restored from a snapshot.</p> <p>When specified on create, snapshotID indicates that an application will be cloned from an existing snapshot. If the specified snapshot does not exist, the clone will fail. Only one of sourceAppID, backupID, or snapshotID can be specified when creating an application.</p> <p>When specified on a replace, snapshotID indicates the application snapshot from which the application will be in-place restored. If the specified snapshot does not exist, the restore will fail. Only one of backupID or snapshotID can be specified when updating an application.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
replicationSourceAppID	string	False	<p>JSON string containing the ID of the application that is being replicated to this application.</p> <p>Only returned if the application is currently the destination in an AppMirror relationship, and the relationship is not in the failedOver state. When the relationship is in failedOver state, this field is not returned.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
metadata	type_astra_metadata_update	True	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema</li> </ul> <p>If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</p>

## Example response

```
{
  "type": "application/astra-app",
  "version": "2.1",
  "id": "9703bbe7-def0-5b08-a40b-1edef8c47f7c",
  "name": "jenkins",
  "namespaceScopedResources": [
    {
      "namespace": "production",
      "labelSelectors": []
    }
  ],
  "state": "pending",
  "stateDetails": [],
  "protectionState": "none",
  "protectionStateDetails": [],
  "namespaces": [
    "production"
  ],
  "clusterName": "GKE-22",
  "clusterID": "0f284377-e5dc-4dcd-bacd-3197f2b8a347",
  "clusterType": "kubernetes",
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 409, Conflict

Name	Type	Required	Description
type	string	True	

Name	Type	Required	Description
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

### Example response

```
{
  "type": "https://astra.netapp.io/problems/10",
  "title": "JSON resource conflict",
  "detail": "The request body JSON contains a field that conflicts with an idempotent value.",
  "status": "409"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```



## Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

## Definitions

## See Definitions

### GVK

JSON object containing a Kubernetes group/version/kind.

- This object is internally validated against Astra /apiResources.

Name	Type	Required	Description
group	string	True	JSON string containing a group identifier assigned by Kubernetes. <ul style="list-style-type: none"><li>• This string is internally validated against Astra /apiResources</li></ul>
kind	string	True	JSON string containing a kind identifier assigned by Kubernetes. <ul style="list-style-type: none"><li>• This string is internally validated against Astra /apiResources</li></ul>
version	string	True	JSON string containing a version identifier assigned by Kubernetes. <ul style="list-style-type: none"><li>• This string is internally validated against Astra /apiResources</li></ul>

### clusterScopedResources

Name	Type	Required	Description
GVK	<a href="#">GVK</a>	True	JSON object containing a Kubernetes group/version/kind. <ul style="list-style-type: none"><li>• This object is internally validated against Astra /apiResources.</li></ul>

Name	Type	Required	Description
labelSelectors	array[string]	False	<p>JSON array of JSON strings representing a label selector for the cluster-scoped GroupVersionKinds (GVKs) within the cluster. If this is empty, then all GVK instances on the cluster are included.</p> <p>Each element in this array is a Kubernetes label selector string and follows the same grammar for those values.</p> <p>Examples:</p> <ul style="list-style-type: none"> <li>• [ "app=mysql" ] — Select all resources that have a label whose name is app and whose value is mysql</li> </ul> <p>More examples can be found here: <a href="https://kubernetes.io/docs/concepts/overview/working-with-objects/labels/#set-based-requirement">https://kubernetes.io/docs/concepts/overview/working-with-objects/labels/#set-based-requirement</a></p>

#### namespaceScopedResources

Name	Type	Required	Description
namespace	string	True	<p>JSON string containing the name of a namespace in which the application is defined.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 253</li> <li>• Conforms to the DNS 1123 Label Schema</li> </ul>

Name	Type	Required	Description
labelSelectors	array[string]	False	<p>JSON array of JSON strings representing a label selector within the namespace. If this is empty, then all resources in the namespace are included.</p> <p>Each element in this array is a Kubernetes label selector string and follows the grammar for those values.</p> <p>Examples:</p> <ul style="list-style-type: none"> <li>• [ "app=mysql" ] — Select all resources that have a label whose name is app and whose value is mysql</li> <li>• [ "app != mysql" ] — Select all resources that have a label whose name is app and whose value is not mysql</li> <li>• [ "app in (mysql, mariadb)" ] — Select all resources that have a label whose name is app and value is mysql or mariadb</li> <li>• [ "app notin (nginx, wordpress)" ] — Select all resources that do not have a label whose name is app and whose values are nginx or wordpress</li> <li>• [ "app" ] — Select all resources that have a label named app</li> <li>• [ "!app" ] — Select all resources that do not have a label named app</li> </ul> <p>Note that multiple selection operators can be included in a single selector, separated by commas. In that</p>

## namespaceMapping

Name	Type	Required	Description
source	string	True	JSON string containing the name of the namespace on the source cluster. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 253</li> <li>• Conforms to the DNS 1123 Label Schema</li> </ul>
destination	string	True	JSON string containing the name of the namespace on the destination cluster. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 253</li> <li>• Conforms to the DNS 1123 Label Schema</li> </ul>

## type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

## type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[ <a href="#">type_astra_label</a> ]	False	

Name	Type	Required	Description
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

#### namespaceScopedResources

Name	Type	Required	Description
namespace	string	True	<p>JSON string containing the name of a namespace in which the application is defined. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 253</li> <li>• Conforms to the DNS 1123 Label Schema</li> </ul>

Name	Type	Required	Description
labelSelectors	array[string]	True	<p>JSON array of JSON strings representing a label selector within the namespace. If this is empty, then all resources in the namespace are included.</p> <p>Each element in this array is a Kubernetes label selector string and follows the grammar for those values.</p> <p>Examples:</p> <ul style="list-style-type: none"> <li>• [ "app=mysql" ]— Select all resources that have a label whose name is app and whose value is mysql</li> <li>• [ "app != mysql" ]— Select all resources that have a label whose name is app and whose value is not mysql</li> <li>• [ "app in (mysql, mariadb)" ]— Select all resources that have a label whose name is app and value is mysql or mariadb</li> <li>• [ "app notin (nginx, wordpress)" ]— Select all resources that do not have a label whose name is app and whose values are nginx or wordpress</li> <li>• [ "app" ]— Select all resources that have a label named app</li> <li>• [ "!app" ]— Select all resources that do not have a label named app</li> </ul> <p>Note that multiple selection operators can be included in a single selector, separated by commas. In that</p>

### type\_astra\_stateTransitions

Name	Type	Required	Description
from	string	True	
to	array[string]	True	

### type\_astra\_stateDetails

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	

### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

### invalidFields

Name	Type	Required	Description
name	string	True	Name of the invalid request body field
reason	string	True	Reason why the request body field is invalid

## List all apps

GET /accounts/{account\_id}/k8s/v2/apps

Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

### Parameters



Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"> <li>example: <code>{{.Account}}</code></li> </ul>
include	string	query	False	Indicates which fields should be returned when listing a collection. <p>URL examples: "include=id", "include=id,name"</p> <p>OpenAPI examples: "id"</p> <ul style="list-style-type: none"> <li>example: id,name,state</li> </ul>
limit	string	query	False	Indicates the maximum number of resources to return when listing a collection. <p>URL examples: "limit=2"</p> <p>OpenAPI examples: "2"</p>

Name	Type	In	Required	Description
filter	string	query	False	<p>Indicates which fields should be matched in order to return a resource when listing a collection.</p> <p>Supported operators are:</p> <ul style="list-style-type: none"> <li>• eq - Equality</li> <li>• lt/gt - Less than/Greater than</li> <li>• lte/gte - Less than or equals to/Greater than or equals to</li> </ul> <p>URL example: "filter=field%20eq%20%27value%27"</p> <p>OpenAPI examples: "field eq 'value'"</p>

## Response

Status: 200, Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

Name	Type	Required	Description
items	array[ <a href="#">Any of: app_2.1_get_response_body, array[]</a> ]	True	
metadata	<a href="#">type_astra_metadata_list</a>	True	

## Example response

```
{
  "type": "application/astra-apps",
  "version": "2.1",
  "items": [
    [
      "2ff50f4b-fe40-4980-913f-8a4469184822",
      "mysql",
      "ready"
    ],
    [
      "ae1e6561-9e22-406c-8a5a-762f4604da00",
      "jenkins",
      "ready"
    ]
  ],
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	

Name	Type	Required	Description
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't found.",
  "status": "404"
}
```

**Definitions**

## See Definitions

### GVK

JSON object containing a Kubernetes group/version/kind.

- This object is internally validated against Astra /apiResources.

Name	Type	Required	Description
group	string	True	JSON string containing a group identifier assigned by Kubernetes. <ul style="list-style-type: none"><li>• This string is internally validated against Astra /apiResources</li></ul>
kind	string	True	JSON string containing a kind identifier assigned by Kubernetes. <ul style="list-style-type: none"><li>• This string is internally validated against Astra /apiResources</li></ul>
version	string	True	JSON string containing a version identifier assigned by Kubernetes. <ul style="list-style-type: none"><li>• This string is internally validated against Astra /apiResources</li></ul>

### clusterScopedResources

Name	Type	Required	Description
GVK	<a href="#">GVK</a>	True	JSON object containing a Kubernetes group/version/kind. <ul style="list-style-type: none"><li>• This object is internally validated against Astra /apiResources.</li></ul>

Name	Type	Required	Description
labelSelectors	array[string]	False	<p>JSON array of JSON strings representing a label selector for the cluster-scoped GroupVersionKinds (GVKs) within the cluster. If this is empty, then all GVK instances on the cluster are included.</p> <p>Each element in this array is a Kubernetes label selector string and follows the same grammar for those values.</p> <p>Examples:</p> <ul style="list-style-type: none"> <li>• [ "app=mysql" ] — Select all resources that have a label whose name is app and whose value is mysql</li> </ul> <p>More examples can be found here: <a href="https://kubernetes.io/docs/concepts/overview/working-with-objects/labels/#set-based-requirement">https://kubernetes.io/docs/concepts/overview/working-with-objects/labels/#set-based-requirement</a></p>

#### namespaceScopedResources

Name	Type	Required	Description
namespace	string	True	<p>JSON string containing the name of a namespace in which the application is defined.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 253</li> <li>• Conforms to the DNS 1123 Label Schema</li> </ul>



Name	Type	Required	Description
labelSelectors	array[string]	True	<p>JSON array of JSON strings representing a label selector within the namespace. If this is empty, then all resources in the namespace are included.</p> <p>Each element in this array is a Kubernetes label selector string and follows the grammar for those values.</p> <p>Examples:</p> <ul style="list-style-type: none"> <li>• [ "app=mysql" ] — Select all resources that have a label whose name is app and whose value is mysql</li> <li>• [ "app != mysql" ] — Select all resources that have a label whose name is app and whose value is not mysql</li> <li>• [ "app in (mysql, mariadb)" ] — Select all resources that have a label whose name is app and value is mysql or mariadb</li> <li>• [ "app notin (nginx, wordpress)" ] — Select all resources that do not have a label whose name is app and whose values are nginx or wordpress</li> <li>• [ "app" ] — Select all resources that have a label named app</li> <li>• [ "!app" ] — Select all resources that do not have a label named app</li> </ul> <p>Note that multiple selection operators can be included in a single selector, separated by commas. In that</p>

### type\_astra\_stateTransitions

Name	Type	Required	Description
from	string	True	
to	array[string]	True	

### type\_astra\_stateDetails

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	

### namespaceMapping

Name	Type	Required	Description
source	string	True	<p>JSON string containing the name of the namespace on the source cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 253</li> <li>• Conforms to the DNS 1123 Label Schema</li> </ul>
destination	string	True	<p>JSON string containing the name of the namespace on the destination cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 253</li> <li>• Conforms to the DNS 1123 Label Schema</li> </ul>

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

#### type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
 If not specified on create, a metadata object will be created with no labels.  
 If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[type_astra_label]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

#### app\_2.1\_get\_response\_body

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "application/astra-app"</li> </ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "2.0"</li> <li>• "2.1"</li> </ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the UUIDv4 Schema</li> </ul>

Name	Type	Required	Description
name	string	True	<p>JSON string containing a name for the application. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> <li>• This string is internally validated to prevent XSS, Unicode, directory traversal, and SQL-injection attacks.</li> <li>• Conforms to the DNS 1123 Label Schema</li> </ul>
clusterScopedResources	array[ <a href="#">clusterScopedResources</a> ]	False	JSON array of JSON objects describing the cluster-scoped resources that are part of this app
namespaceScopedResources	array[ <a href="#">namespaceScopedResources</a> ]	True	JSON array of JSON objects describing the resources that are part of this app
lastResourceCollectionTimestamp	string	False	<p>JSON string containing the timestamp when the last resource collection was performed. This field is unset if no resource collection has been performed for this application yet. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>

Name	Type	Required	Description
state	string	True	<p>JSON string containing a value indicating the operational state of the application.</p> <p>Defined values are:</p> <ul style="list-style-type: none"><li>• "pending" - The application is scheduled for discovery</li><li>• "discovering" - The application is in the process of being discovered</li><li>• "provisioning" - The application is in the process of being provisioned</li><li>• "ready" - The application is running normally</li><li>• "failed" - The application is in a permanent failure state</li><li>• "restoring" - The application is being restored from backup or snapshot</li><li>• "unavailable" - The application is not currently accessible</li><li>• "unknown" - The application state cannot be determined</li></ul>

Name	Type	Required	Description
stateTransitions	array[ <a href="#">type_astra_stateTransitions</a> ]	False	<p>JSON array of JSON objects, each representing the set of permitted state transitions from a given defined state. Each JSON object contains the fields "from" and "to", where the "from" value is the name of a state, and the "to" value is an array of permitted destination states.</p>
stateDetails	array[ <a href="#">type_astra_stateDetails</a> ]	True	<p>JSON array of JSON objects which lists additional details about the current state, including why the current state was reached. If no details are available, this array will be empty. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum Items: 0</li> </ul>

Name	Type	Required	Description
protectionState	string	True	<p>JSON string containing a value indicating the protection state of the application.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "protected" - The application has a protection policy defined and is in conformance with that policy</li> <li>• "partial" - The application has a protection policy defined, but is out of conformance with that policy</li> <li>• "none" - The application does not have a protection policy defined</li> <li>• "atRisk" - The default storage class on the cluster does not support snapshots, the application is at risk of gaining an unsupported volume</li> </ul>
protectionStateDetails	array[ <a href="#">type_astra_stateDetails</a> ]	True	<p>JSON array of JSON objects which lists additional details about the current protection state, including why the current state was reached.</p> <p>If no details are available, this array will be empty.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum Items: 0</li> </ul>

Name	Type	Required	Description
appDetectedType	string	False	<p>JSON string that uniquely represents the specific type of application that is detected.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "system" - The application contains a resource that identifies it as part of the Kubernetes environment</li> <li>• "acc" - The application contains resources that identify it as an Astra Control Center instance</li> </ul>
namespaces	array[string]	True	<p>JSON array of JSON strings containing the names of the namespaces in which the application is running.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 253</li> <li>• Conforms to the DNS 1123 Label Schema</li> </ul>
namespaceMapping	array[namespaceMapping]	False	<p>JSON array of JSON objects, each mapping a source namespace to a destination namespace for a clone operation.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum Items: 0</li> </ul>



Name	Type	Required	Description
clusterName	string	False	<p>JSON string containing the name of the cluster that the application is running on.</p> <p>Not returned if the application is not currently running.</p>
clusterID	string	False	<p>JSON string containing the ID of the cluster that the application is running on.</p> <p>Not returned if the application is not currently running.</p> <p>When specified on create, clusterID indicates which cluster the application must be cloned into. If the specified cluster does not exist, or if the cluster specified does not match the clusterID specified in the request URI, the clone will fail.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
clusterType	string	False	<p>JSON string containing a value indicating the type of cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"><li>• "gke" - Kubernetes hosted on Google Kubernetes Engine (GKE)</li><li>• "aks" - Kubernetes hosted on Microsoft Azure Kubernetes Service (AKS)</li><li>• "eks" - Kubernetes hosted on Amazon Elastic Kubernetes Service (Amazon EKS)</li><li>• "openshift" - The cluster is of type OpenShift</li><li>• "kubernetes" - The cluster is generic Kubernetes</li></ul>

Name	Type	Required	Description
sourceAppID	string	False	<p>JSON string containing the ID of a source application. Only returned if the application was cloned from another application, or was restored from a backup or snapshot. When specified on create, the sourceAppID is used in conjunction with the sourceClusterID and indicates which running application will be cloned. If the specified application does not exist on the specified source cluster, the clone will fail. Only one of sourceAppID, backupID, or snapshotID can be specified when creating an application. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
sourceClusterName	string	False	<p>JSON string containing the name of the cluster the application was previously running on. Only returned if the application was cloned from another cluster.</p>

Name	Type	Required	Description
sourceClusterID	string	False	<p>JSON string containing the ID of the cluster the application was previously running on. Only returned if the application was cloned from another cluster. When specified on create, the sourceClusterID is used in conjunction with the sourceAppID and indicates the source cluster of the application to be cloned. If the specified source cluster does not exist, the clone will fail.</p> <p>Defined values are:</p> <ul style="list-style-type: none"><li>• Conforms to the Astra Identifier Schema</li></ul>

Name	Type	Required	Description
backupID	string	False	<p>JSON string containing the ID of the backup that the application was restored from.</p> <p>Only returned if the application was restored from a backup.</p> <p>When specified on create, backupID indicates that an application will be cloned from an existing backup. If the specified backup does not exist, the clone will fail. Only one of sourceAppID, backupID, or snapshotID can be specified when creating an application.</p> <p>When specified on a replace, backupID indicates the application backup from which the application will be in-place restored. If the specified backup does not exist, the restore will fail. Only one of backupID or snapshotID can be specified when updating an application</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
snapshotID	string	False	<p>JSON string containing the ID of the snapshot that the application was restored from.</p> <p>Only returned if the application was restored from a snapshot.</p> <p>When specified on create, snapshotID indicates that an application will be cloned from an existing snapshot. If the specified snapshot does not exist, the clone will fail. Only one of sourceAppID, backupID, or snapshotID can be specified when creating an application.</p> <p>When specified on a replace, snapshotID indicates the application snapshot from which the application will be in-place restored. If the specified snapshot does not exist, the restore will fail. Only one of backupID or snapshotID can be specified when updating an application.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
replicationSourceAppID	string	False	<p>JSON string containing the ID of the application that is being replicated to this application. Only returned if the application is currently the destination in an AppMirror relationship, and the relationship is not in the failedOver state. When the relationship is in failedOver state, this field is not returned. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
metadata	<a href="#">type_astra_metadata_update</a>	True	<p>Client and service-specified metadata associated with the resource. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema</li> </ul> <p>If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</p>

[type\\_astra\\_metadata\\_list](#)

Name	Type	Required	Description
continue	string	False	
count	number	False	
labels	array[ <a href="#">type_astra_label</a> ]	False	

Name	Type	Required	Description
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Retrieve an app

GET /accounts/{account\_id}/k8s/v2/apps/{app\_id}

Returns the stored App API resource in the JSON response body.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource  • example: {{.Account}}
app_id	string	path	True	ID of the app collection to list

### Response

Status: 200, Returns the stored App API resource in the JSON response body.



Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "application/astra-app"</li> </ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "2.0"</li> <li>• "2.1"</li> </ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the UUIDv4 Schema</li> </ul>
name	string	True	JSON string containing a name for the application. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> <li>• This string is internally validated to prevent XSS, Unicode, directory traversal, and SQL-injection attacks.</li> <li>• Conforms to the DNS 1123 Label Schema</li> </ul>
clusterScopedResources	array[ <a href="#">clusterScopedResources</a> ]	False	JSON array of JSON objects describing the cluster-scoped resources that are part of this app
namespaceScopedResources	array[ <a href="#">namespaceScopedResources</a> ]	True	JSON array of JSON objects describing the resources that are part of this app

Name	Type	Required	Description
lastResourceCollectionTimestamp	string	False	<p>JSON string containing the timestamp when the last resource collection was performed. This field is unset if no resource collection has been performed for this application yet.</p> <p>Defined values are:</p> <ul style="list-style-type: none"><li>• Conforms to the ISO-8601 Date Time Schema</li></ul>

Name	Type	Required	Description
state	string	True	<p>JSON string containing a value indicating the operational state of the application.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "pending" - The application is scheduled for discovery</li> <li>• "discovering" - The application is in the process of being discovered</li> <li>• "provisioning" - The application is in the process of being provisioned</li> <li>• "ready" - The application is running normally</li> <li>• "failed" - The application is in a permanent failure state</li> <li>• "restoring" - The application is being restored from backup or snapshot</li> <li>• "unavailable" - The application is not currently accessible</li> <li>• "unknown" - The application state cannot be determined</li> </ul>

Name	Type	Required	Description
stateTransitions	array[ <a href="#">type_astra_stateTransitions</a> ]	False	<p>JSON array of JSON objects, each representing the set of permitted state transitions from a given defined state.</p> <p>Each JSON object contains the fields "from" and "to", where the "from" value is the name of a state, and the "to" value is an array of permitted destination states.</p>
stateDetails	array[ <a href="#">type_astra_stateDetails</a> ]	True	<p>JSON array of JSON objects which lists additional details about the current state, including why the current state was reached.</p> <p>If no details are available, this array will be empty.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum Items: 0</li> </ul>

Name	Type	Required	Description
protectionState	string	True	<p>JSON string containing a value indicating the protection state of the application.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "protected" - The application has a protection policy defined and is in conformance with that policy</li> <li>• "partial" - The application has a protection policy defined, but is out of conformance with that policy</li> <li>• "none" - The application does not have a protection policy defined</li> <li>• "atRisk" - The default storage class on the cluster does not support snapshots, the application is at risk of gaining an unsupported volume</li> </ul>
protectionStateDetails	array[type_astra_stateDetails]	True	<p>JSON array of JSON objects which lists additional details about the current protection state, including why the current state was reached.</p> <p>If no details are available, this array will be empty.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum Items: 0</li> </ul>

Name	Type	Required	Description
appDetectedType	string	False	<p>JSON string that uniquely represents the specific type of application that is detected.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "system" - The application contains a resource that identifies it as part of the Kubernetes environment</li> <li>• "acc" - The application contains resources that identify it as an Astra Control Center instance</li> </ul>
namespaces	array[string]	True	<p>JSON array of JSON strings containing the names of the namespaces in which the application is running.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 253</li> <li>• Conforms to the DNS 1123 Label Schema</li> </ul>
namespaceMapping	array[namespaceMapping]	False	<p>JSON array of JSON objects, each mapping a source namespace to a destination namespace for a clone operation.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum Items: 0</li> </ul>
clusterName	string	False	<p>JSON string containing the name of the cluster that the application is running on.</p> <p>Not returned if the application is not currently running.</p>

Name	Type	Required	Description
clusterID	string	False	<p>JSON string containing the ID of the cluster that the application is running on.</p> <p>Not returned if the application is not currently running.</p> <p>When specified on create, clusterID indicates which cluster the application must be cloned into. If the specified cluster does not exist, or if the cluster specified does not match the clusterID specified in the request URI, the clone will fail.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
clusterType	string	False	<p>JSON string containing a value indicating the type of cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "gke" - Kubernetes hosted on Google Kubernetes Engine (GKE)</li> <li>• "aks" - Kubernetes hosted on Microsoft Azure Kubernetes Service (AKS)</li> <li>• "eks" - Kubernetes hosted on Amazon Elastic Kubernetes Service (Amazon EKS)</li> <li>• "openshift" - The cluster is of type OpenShift</li> <li>• "kubernetes" - The cluster is generic Kubernetes</li> </ul>

Name	Type	Required	Description
sourceAppID	string	False	<p>JSON string containing the ID of a source application. Only returned if the application was cloned from another application, or was restored from a backup or snapshot.</p> <p>When specified on create, the sourceAppID is used in conjunction with the sourceClusterID and indicates which running application will be cloned. If the specified application does not exist on the specified source cluster, the clone will fail.</p> <p>Only one of sourceAppID, backupID, or snapshotID can be specified when creating an application. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
sourceClusterName	string	False	<p>JSON string containing the name of the cluster the application was previously running on. Only returned if the application was cloned from another cluster.</p>



Name	Type	Required	Description
sourceClusterID	string	False	<p>JSON string containing the ID of the cluster the application was previously running on.</p> <p>Only returned if the application was cloned from another cluster.</p> <p>When specified on create, the sourceClusterID is used in conjunction with the sourceAppID and indicates the source cluster of the application to be cloned. If the specified source cluster does not exist, the clone will fail.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
backupID	string	False	<p>JSON string containing the ID of the backup that the application was restored from.</p> <p>Only returned if the application was restored from a backup.</p> <p>When specified on create, backupID indicates that an application will be cloned from an existing backup. If the specified backup does not exist, the clone will fail. Only one of sourceAppID, backupID, or snapshotID can be specified when creating an application.</p> <p>When specified on a replace, backupID indicates the application backup from which the application will be in-place restored. If the specified backup does not exist, the restore will fail. Only one of backupID or snapshotID can be specified when updating an application</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
snapshotID	string	False	<p>JSON string containing the ID of the snapshot that the application was restored from.</p> <p>Only returned if the application was restored from a snapshot.</p> <p>When specified on create, snapshotID indicates that an application will be cloned from an existing snapshot. If the specified snapshot does not exist, the clone will fail. Only one of sourceAppID, backupID, or snapshotID can be specified when creating an application.</p> <p>When specified on a replace, snapshotID indicates the application snapshot from which the application will be in-place restored. If the specified snapshot does not exist, the restore will fail. Only one of backupID or snapshotID can be specified when updating an application.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
replicationSourceAppID	string	False	<p>JSON string containing the ID of the application that is being replicated to this application.</p> <p>Only returned if the application is currently the destination in an AppMirror relationship, and the relationship is not in the failedOver state. When the relationship is in failedOver state, this field is not returned.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
metadata	type_astra_metadata_update	True	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema</li> </ul> <p>If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</p>

## Example response

```
{
  "type": "application/astra-app",
  "version": "2.1",
  "id": "9703bbe7-def0-5b08-a40b-1edef8c47f7c",
  "name": "jenkins",
  "namespaceScopedResources": [
    {
      "namespace": "production-clone",
      "labelSelectors": [
        "app = jenkins,release = production"
      ]
    }
  ],
  "namespaceMapping": [
    {
      "source": "production",
      "destination": "production-clone"
    }
  ],
  "state": "ready",
  "stateDetails": [],
  "protectionState": "none",
  "protectionStateDetails": [],
  "namespaces": [
    "production-clone"
  ],
  "snapshotID": "8d561930-0437-4647-b3e6-49b8a5362e3d",
  "clusterName": "GKE-24",
  "clusterID": "0f284377-e5dc-4dcd-bacd-3197f2b8a347",
  "clusterType": "kubernetes",
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	

Name	Type	Required	Description
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

### Definitions



## See Definitions

### GVK

JSON object containing a Kubernetes group/version/kind.

- This object is internally validated against Astra /apiResources.

Name	Type	Required	Description
group	string	True	JSON string containing a group identifier assigned by Kubernetes. <ul style="list-style-type: none"><li>• This string is internally validated against Astra /apiResources</li></ul>
kind	string	True	JSON string containing a kind identifier assigned by Kubernetes. <ul style="list-style-type: none"><li>• This string is internally validated against Astra /apiResources</li></ul>
version	string	True	JSON string containing a version identifier assigned by Kubernetes. <ul style="list-style-type: none"><li>• This string is internally validated against Astra /apiResources</li></ul>

### clusterScopedResources

Name	Type	Required	Description
GVK	<a href="#">GVK</a>	True	JSON object containing a Kubernetes group/version/kind. <ul style="list-style-type: none"><li>• This object is internally validated against Astra /apiResources.</li></ul>

Name	Type	Required	Description
labelSelectors	array[string]	False	<p>JSON array of JSON strings representing a label selector for the cluster-scoped GroupVersionKinds (GVKs) within the cluster. If this is empty, then all GVK instances on the cluster are included.</p> <p>Each element in this array is a Kubernetes label selector string and follows the same grammar for those values.</p> <p>Examples:</p> <ul style="list-style-type: none"> <li>• [ "app=mysql" ] — Select all resources that have a label whose name is app and whose value is mysql</li> </ul> <p>More examples can be found here: <a href="https://kubernetes.io/docs/concepts/overview/working-with-objects/labels/#set-based-requirement">https://kubernetes.io/docs/concepts/overview/working-with-objects/labels/#set-based-requirement</a></p>

#### namespaceScopedResources

Name	Type	Required	Description
namespace	string	True	<p>JSON string containing the name of a namespace in which the application is defined.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 253</li> <li>• Conforms to the DNS 1123 Label Schema</li> </ul>

Name	Type	Required	Description
labelSelectors	array[string]	True	<p>JSON array of JSON strings representing a label selector within the namespace. If this is empty, then all resources in the namespace are included.</p> <p>Each element in this array is a Kubernetes label selector string and follows the grammar for those values.</p> <p>Examples:</p> <ul style="list-style-type: none"> <li>• [ "app=mysql" ]— Select all resources that have a label whose name is app and whose value is mysql</li> <li>• [ "app != mysql" ]— Select all resources that have a label whose name is app and whose value is not mysql</li> <li>• [ "app in (mysql, mariadb)" ]— Select all resources that have a label whose name is app and value is mysql or mariadb</li> <li>• [ "app notin (nginx, wordpress)" ]— Select all resources that do not have a label whose name is app and whose values are nginx or wordpress</li> <li>• [ "app" ]— Select all resources that have a label named app</li> <li>• [ "!app" ]— Select all resources that do not have a label named app</li> </ul> <p>Note that multiple selection operators can be included in a single selector, separated by commas. In that</p>

### type\_astra\_stateTransitions

Name	Type	Required	Description
from	string	True	
to	array[string]	True	

### type\_astra\_stateDetails

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	

### namespaceMapping

Name	Type	Required	Description
source	string	True	<p>JSON string containing the name of the namespace on the source cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 253</li> <li>• Conforms to the DNS 1123 Label Schema</li> </ul>
destination	string	True	<p>JSON string containing the name of the namespace on the destination cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 253</li> <li>• Conforms to the DNS 1123 Label Schema</li> </ul>

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

#### type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema
  - If not specified on create, a metadata object will be created with no labels.
  - If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[type_astra_label]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

#### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Modify an app

PUT /accounts/{account\_id}/k8s/v2/apps/{app\_id}

Replaces the entire stored resource with the supplied JSON request body while preserving key values that are not user-modifiable.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"> <li>example: <code>{{.Account}}</code></li> </ul>
app_id	string	path	True	ID of the app collection to list
forceUpdate	string	header	False	<ul style="list-style-type: none"> <li>example: true</li> </ul>

### Request Body

Replaces the entire stored resource with the supplied JSON request body while preserving key values that are not user-modifiable.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"> <li>"application/astra-app"</li> </ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>"2.0"</li> <li>"2.1"</li> </ul>
id	string	False	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>Conforms to the UUIDv4 Schema</li> </ul>

Name	Type	Required	Description
name	string	False	<p>JSON string containing a name for the application. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> <li>• This string is internally validated to prevent XSS, Unicode, directory traversal, and SQL-injection attacks.</li> <li>• Conforms to the DNS 1123 Label Schema</li> </ul>
clusterScopedResources	array[ <a href="#">clusterScopedResources</a> ]	False	JSON array of JSON objects describing the cluster-scoped resources that are part of this app
namespaceScopedResources	array[ <a href="#">namespaceScopedResources</a> ]	False	JSON array of JSON objects describing the resources that are part of this app
lastResourceCollectionTimestamp	string	False	<p>JSON string containing the timestamp when the last resource collection was performed. This field is unset if no resource collection has been performed for this application yet. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>

Name	Type	Required	Description
state	string	False	<p>JSON string containing a value indicating the operational state of the application.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "pending" - The application is scheduled for discovery</li> <li>• "discovering" - The application is in the process of being discovered</li> <li>• "provisioning" - The application is in the process of being provisioned</li> <li>• "ready" - The application is running normally</li> <li>• "failed" - The application is in a permanent failure state</li> <li>• "restoring" - The application is being restored from backup or snapshot</li> <li>• "unavailable" - The application is not currently accessible</li> <li>• "unknown" - The application state cannot be determined</li> </ul>



Name	Type	Required	Description
stateTransitions	array[ <a href="#">type_astra_stateTransitions</a> ]	False	<p>JSON array of JSON objects, each representing the set of permitted state transitions from a given defined state.</p> <p>Each JSON object contains the fields "from" and "to", where the "from" value is the name of a state, and the "to" value is an array of permitted destination states.</p>
stateDetails	array[ <a href="#">type_astra_stateDetails</a> ]	False	<p>JSON array of JSON objects which lists additional details about the current state, including why the current state was reached.</p> <p>If no details are available, this array will be empty.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum Items: 0</li> </ul>

Name	Type	Required	Description
protectionState	string	False	<p>JSON string containing a value indicating the protection state of the application.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "protected" - The application has a protection policy defined and is in conformance with that policy</li> <li>• "partial" - The application has a protection policy defined, but is out of conformance with that policy</li> <li>• "none" - The application does not have a protection policy defined</li> <li>• "atRisk" - The default storage class on the cluster does not support snapshots, the application is at risk of gaining an unsupported volume</li> </ul>
protectionStateDetails	array[type_astra_stateDetails]	False	<p>JSON array of JSON objects which lists additional details about the current protection state, including why the current state was reached.</p> <p>If no details are available, this array will be empty.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum Items: 0</li> </ul>

Name	Type	Required	Description
appDetectedType	string	False	<p>JSON string that uniquely represents the specific type of application that is detected.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "system" - The application contains a resource that identifies it as part of the Kubernetes environment</li> <li>• "acc" - The application contains resources that identify it as an Astra Control Center instance</li> </ul>
namespaces	array[string]	False	<p>JSON array of JSON strings containing the names of the namespaces in which the application is running.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 253</li> <li>• Conforms to the DNS 1123 Label Schema</li> </ul>
namespaceMapping	array[ <a href="#">namespaceMapping</a> ]	False	<p>JSON array of JSON objects, each mapping a source namespace to a destination namespace for a clone operation.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum Items: 0</li> </ul>
clusterName	string	False	<p>JSON string containing the name of the cluster that the application is running on.</p> <p>Not returned if the application is not currently running.</p>

Name	Type	Required	Description
clusterID	string	False	<p>JSON string containing the ID of the cluster that the application is running on.</p> <p>Not returned if the application is not currently running.</p> <p>When specified on create, clusterID indicates which cluster the application must be cloned into. If the specified cluster does not exist, or if the cluster specified does not match the clusterID specified in the request URI, the clone will fail.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
clusterType	string	False	<p>JSON string containing a value indicating the type of cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "gke" - Kubernetes hosted on Google Kubernetes Engine (GKE)</li> <li>• "aks" - Kubernetes hosted on Microsoft Azure Kubernetes Service (AKS)</li> <li>• "eks" - Kubernetes hosted on Amazon Elastic Kubernetes Service (Amazon EKS)</li> <li>• "openshift" - The cluster is of type OpenShift</li> <li>• "kubernetes" - The cluster is generic Kubernetes</li> </ul>

Name	Type	Required	Description
sourceAppID	string	False	<p>JSON string containing the ID of a source application. Only returned if the application was cloned from another application, or was restored from a backup or snapshot.</p> <p>When specified on create, the sourceAppID is used in conjunction with the sourceClusterID and indicates which running application will be cloned. If the specified application does not exist on the specified source cluster, the clone will fail.</p> <p>Only one of sourceAppID, backupID, or snapshotID can be specified when creating an application. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
sourceClusterName	string	False	<p>JSON string containing the name of the cluster the application was previously running on. Only returned if the application was cloned from another cluster.</p>

Name	Type	Required	Description
sourceClusterID	string	False	<p>JSON string containing the ID of the cluster the application was previously running on.</p> <p>Only returned if the application was cloned from another cluster.</p> <p>When specified on create, the sourceClusterID is used in conjunction with the sourceAppID and indicates the source cluster of the application to be cloned. If the specified source cluster does not exist, the clone will fail.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
backupID	string	False	<p>JSON string containing the ID of the backup that the application was restored from.</p> <p>Only returned if the application was restored from a backup.</p> <p>When specified on create, backupID indicates that an application will be cloned from an existing backup. If the specified backup does not exist, the clone will fail. Only one of sourceAppID, backupID, or snapshotID can be specified when creating an application.</p> <p>When specified on a replace, backupID indicates the application backup from which the application will be in-place restored. If the specified backup does not exist, the restore will fail. Only one of backupID or snapshotID can be specified when updating an application</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
snapshotID	string	False	<p>JSON string containing the ID of the snapshot that the application was restored from.</p> <p>Only returned if the application was restored from a snapshot.</p> <p>When specified on create, snapshotID indicates that an application will be cloned from an existing snapshot. If the specified snapshot does not exist, the clone will fail. Only one of sourceAppID, backupID, or snapshotID can be specified when creating an application.</p> <p>When specified on a replace, snapshotID indicates the application snapshot from which the application will be in-place restored. If the specified snapshot does not exist, the restore will fail. Only one of backupID or snapshotID can be specified when updating an application.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>



Name	Type	Required	Description
replicationSourceAppID	string	False	<p>JSON string containing the ID of the application that is being replicated to this application.</p> <p>Only returned if the application is currently the destination in an AppMirror relationship, and the relationship is not in the failedOver state. When the relationship is in failedOver state, this field is not returned.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
metadata	<a href="#">type_astra_metadata_update</a>	False	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema</li> </ul> <p>If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</p>

### Example request

```
{
  "type": "application/astra-app",
  "version": "2.1",
  "name": "mysql-old"
}
```

## Response

Status: 204, Indicates if the app resource was updated.

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

## Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 409, Conflict

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

### Example response

```
{
  "type": "https://astra.netapp.io/problems/10",
  "title": "JSON resource conflict",
  "detail": "The request body JSON contains a field that conflicts with an idempotent value.",
  "status": "409"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/1",
  "title": "Resource not found",
  "detail": "The resource specified in the request URI wasn't found.",
  "status": "404"
}
```

**Definitions**

## See Definitions

### GVK

JSON object containing a Kubernetes group/version/kind.

- This object is internally validated against Astra /apiResources.

Name	Type	Required	Description
group	string	False	JSON string containing a group identifier assigned by Kubernetes. <ul style="list-style-type: none"><li>• This string is internally validated against Astra /apiResources</li></ul>
kind	string	False	JSON string containing a kind identifier assigned by Kubernetes. <ul style="list-style-type: none"><li>• This string is internally validated against Astra /apiResources</li></ul>
version	string	False	JSON string containing a version identifier assigned by Kubernetes. <ul style="list-style-type: none"><li>• This string is internally validated against Astra /apiResources</li></ul>

### clusterScopedResources

Name	Type	Required	Description
GVK	<a href="#">GVK</a>	False	JSON object containing a Kubernetes group/version/kind. <ul style="list-style-type: none"><li>• This object is internally validated against Astra /apiResources.</li></ul>

Name	Type	Required	Description
labelSelectors	array[string]	False	<p>JSON array of JSON strings representing a label selector for the cluster-scoped GroupVersionKinds (GVKs) within the cluster. If this is empty, then all GVK instances on the cluster are included.</p> <p>Each element in this array is a Kubernetes label selector string and follows the same grammar for those values.</p> <p>Examples:</p> <ul style="list-style-type: none"> <li>• [ "app=mysql" ] — Select all resources that have a label whose name is app and whose value is mysql</li> </ul> <p>More examples can be found here: <a href="https://kubernetes.io/docs/concepts/overview/working-with-objects/labels/#set-based-requirement">https://kubernetes.io/docs/concepts/overview/working-with-objects/labels/#set-based-requirement</a></p>

#### namespaceScopedResources

Name	Type	Required	Description
namespace	string	False	<p>JSON string containing the name of a namespace in which the application is defined.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 253</li> <li>• Conforms to the DNS 1123 Label Schema</li> </ul>

Name	Type	Required	Description
labelSelectors	array[string]	False	<p>JSON array of JSON strings representing a label selector within the namespace. If this is empty, then all resources in the namespace are included.</p> <p>Each element in this array is a Kubernetes label selector string and follows the grammar for those values.</p> <p>Examples:</p> <ul style="list-style-type: none"> <li>• [ "app=mysql" ] — Select all resources that have a label whose name is app and whose value is mysql</li> <li>• [ "app != mysql" ] — Select all resources that have a label whose name is app and whose value is not mysql</li> <li>• [ "app in (mysql, mariadb)" ] — Select all resources that have a label whose name is app and value is mysql or mariadb</li> <li>• [ "app notin (nginx, wordpress)" ] — Select all resources that do not have a label whose name is app and whose values are nginx or wordpress</li> <li>• [ "app" ] — Select all resources that have a label named app</li> <li>• [ "!app" ] — Select all resources that do not have a label named app</li> </ul> <p>Note that multiple selection operators can be included in a single selector, separated by commas. In that</p>



### type\_astra\_stateTransitions

Name	Type	Required	Description
from	string	True	
to	array[string]	True	

### type\_astra\_stateDetails

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	

### namespaceMapping

Name	Type	Required	Description
source	string	False	<p>JSON string containing the name of the namespace on the source cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 253</li> <li>• Conforms to the DNS 1123 Label Schema</li> </ul>
destination	string	False	<p>JSON string containing the name of the namespace on the destination cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 253</li> <li>• Conforms to the DNS 1123 Label Schema</li> </ul>

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

#### type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
 If not specified on create, a metadata object will be created with no labels.  
 If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[type_astra_label]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

#### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

#### invalidFields

Name	Type	Required	Description
name	string	True	Name of the invalid request body field
reason	string	True	Reason why the request body field is invalid

## Delete an app

DELETE /accounts/{account\_id}/k8s/v2/apps/{app\_id}

Removes the specified App API resource.

### Side Effects

- Billing stops.
- If the application is still running on a cluster, the application is no longer considered to be under management and will no longer show up under /apps, but it will still show up under /apps.
- If the application is not running on a cluster, the application is no longer known to the system and will no longer show up under /apps.
- All associated snapshots, backups, and the stored application state are removed.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource  • example: {{.Account}}
app_id	string	path	True	ID of the app collection to list

### Response

```
Status: 204, Indicates if the app resource was deleted.
```

### Response

```
Status: 401, Unauthorized
```

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	

Name	Type	Required	Description
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/1",
  "title": "Resource not found",
  "detail": "The resource specified in the request URI wasn't found.",
  "status": "404"
}
```

### Definitions

## See Definitions

invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

# AppMirror

## AppMirror overview

The AppMirror API provides CRUD (Create-Read-Update-Delete) access to appMirror resources to enable management of AppMirror relationships.

## Create a new AppMirror resource

POST /accounts/{account\_id}/k8s/v1/appMirrors

Indicates the desired values for the AppMirror API resource to be created.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"><li>example: <code>{{.Account}}</code></li></ul>

### Request Body

Indicates the desired values for the AppMirror API resource to be created.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>"application/astra-appMirror"</li></ul>

Name	Type	Required	Description
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "1.0"</li> </ul>
sourceAppID	string	True	Identifier of the source application. Only updated when swapping the sourceAppID with the destinationAppID. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
destinationClusterID	string	True	Identifier of the managed cluster to host the destination application. Must be provided at creation time because it determines the cluster on which the destination application will be created. If provided in an update, it must match the cluster ID of the destination application, so it can only change when also swapping sourceAppID with destinationAppID. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
namespaceMapping	array[ <a href="#">namespaceMapping</a> ]	False	<p>The namespace or namespaces to use when creating the destination application, corresponding to the namespaces of the source application. Each JSON object contains the fields "clusterID" and "namespaces", where the "clusterID" value is the JSON string ID of the source or destination cluster, and the "namespaces" value is a JSON array of JSON strings. There must be exactly one JSON object for each cluster, and the namespaces will be correlated by index. If not provided, the same namespace from the source cluster will be used in the destination cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 0</li> <li>• Maximum length: 2</li> </ul>



Name	Type	Required	Description
storageClasses	array[ <a href="#">storageClasses</a> ]	False	<p>The storage class to be used on the destination cluster when creating new Persistent Volume Claims (PVCs). Each JSON object contains the fields "clusterID" and "storageClassName", where the "clusterID" value is the JSON string ID of the source or destination cluster, and the "storageClassName" is the storage class to use when creating PVCs on that cluster.</p> <p>If not provided or the value is missing for a cluster, the default storage class will be used for that cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 0</li> <li>• Maximum length: 2</li> </ul>
stateDesired	string	True	<p>The desired state for the relationship.</p> <p>At creation, the only valid value is "established".</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "established" - The relationship is created.</li> <li>• "failedOver" - Failover of the application to the destination cluster has completed.</li> <li>• "deleted" - The relationship was successfully cleaned up and deleted.</li> </ul>

Name	Type	Required	Description
metadata	<a href="#">type_astra_metadata_update</a>	False	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</li> </ul>

### Example request

```
{
  "type": "application/astra-appMirror",
  "version": "1.0",
  "sourceAppID": "efd639b6-fc92-4112-8841-0c0ab7890ae0",
  "destinationClusterID": "c5d023a9-4061-4a8a-bfbf-3be11ff06226",
  "stateDesired": "established"
}
```

### Response

Status: 201, Returns the newly created appMirror resource in the JSON response body.

Name	Type	Required	Description
type	string	True	<p>Media type of the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "application/astra-appMirror"</li> </ul>

Name	Type	Required	Description
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "1.0"</li> </ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the UUIDv4 Schema</li> </ul>
sourceAppID	string	True	Identifier of the source application. Only updated when swapping the sourceAppID with the destinationAppID. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
sourceClusterID	string	True	Identifier of the managed cluster hosting the source application. This field is read-only and is determined based on the host cluster of the source application. If provided in an update, it must match the cluster ID of the source application, so it can only change when swapping the sourceAppID with destinationAppID. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
destinationAppID	string	False	<p>Identifier of the destination application. Cannot be provided at creation time because a new app ID will be generated as part of relationship initialization. Can only be updated when swapping sourceAppID with the destinationAppID. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
destinationClusterID	string	True	<p>Identifier of the managed cluster to host the destination application. Must be provided at creation time because it determines the cluster on which the destination application will be created. If provided in an update, it must match the cluster ID of the destination application, so it can only change when also swapping sourceAppID with destinationAppID. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
namespaceMapping	array[ <a href="#">namespaceMapping</a> ]	False	<p>The namespace or namespaces to use when creating the destination application, corresponding to the namespaces of the source application. Each JSON object contains the fields "clusterID" and "namespaces", where the "clusterID" value is the JSON string ID of the source or destination cluster, and the "namespaces" value is a JSON array of JSON strings. There must be exactly one JSON object for each cluster, and the namespaces will be correlated by index. If not provided, the same namespace from the source cluster will be used in the destination cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 0</li> <li>• Maximum length: 2</li> </ul>

Name	Type	Required	Description
storageClasses	array[ <a href="#">storageClasses</a> ]	False	<p>The storage class to be used on the destination cluster when creating new Persistent Volume Claims (PVCs).</p> <p>Each JSON object contains the fields "clusterID" and "storageClassName", where the "clusterID" value is the JSON string ID of the source or destination cluster, and the "storageClassName" is the storage class to use when creating PVCs on that cluster.</p> <p>If not provided or the value is missing for a cluster, the default storage class will be used for that cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 0</li> <li>• Maximum length: 2</li> </ul>

Name	Type	Required	Description
state	string	True	<p>The state of the relationship.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "establishing" - The relationship is being created.</li> <li>• "established" - The relationship is created.</li> <li>• "failingOver" - Failover of the application to the destination cluster is in progress.</li> <li>• "failedOver" - Failover of the application to the destination cluster has completed.</li> <li>• "deleting" - Resources created by the relationship are being cleaned up.</li> <li>• "deleted" - The relationship was cleaned up and deleted.</li> </ul>

Name	Type	Required	Description
stateTransitions	array[type_astra_stateTransitions]	False	<p>Permitted state transitions.</p> <p>The following state transitions are possible for this resource:</p> <ul style="list-style-type: none"> <li>• "establishing": "established", "deleting"</li> <li>• "established": "failingOver", "deleting"</li> <li>• "failingOver": "failedOver", "deleting"</li> <li>• "failedOver": "establishing", "deleting"</li> <li>• "deleting": "deleted"</li> <li>• "deleted":</li> </ul>
stateDesired	string	True	<p>The desired state for the relationship.</p> <p>At creation, the only valid value is "established".</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "established" - The relationship is created.</li> <li>• "failedOver" - Failover of the application to the destination cluster has completed.</li> <li>• "deleted" - The relationship was successfully cleaned up and deleted.</li> </ul>



Name	Type	Required	Description
stateAllowed	array[string]	False	<p>States that can be requested in a given state.</p> <p>The following states can be requested in each defined state:</p> <ul style="list-style-type: none"> <li>• "establishing": "established", "deleted"</li> <li>• "established": "failedOver", "deleted"</li> <li>• "failingOver": "failedOver", "deleted"</li> <li>• "failedOver": "established", "deleted"</li> <li>• "deleting": "deleted"</li> <li>• "deleted": "deleted"</li> </ul>
stateDetails	array[type_astra_stateDetails]	True	<p>Additional details about the current state, including why the current state was reached.</p> <p>If no details are available, this array will be empty.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum Items: 0</li> </ul>

Name	Type	Required	Description
transferState	string	False	<p>State of the current or most recent snapshot transfer.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "transferring" - A new snapshot was created and is now being replicated to the destination cluster. This state also covers the transfers that have failed on previous attempts and are being continually retried.</li> <li>• "idle" - There is currently no transfer in progress.</li> </ul>
transferStateTransitions	array[type_astra_stateTransitions]	False	<p>Permitted state transitions from a given defined state.</p> <p>The following state transitions are possible for this resource:</p> <ul style="list-style-type: none"> <li>• "transferring": "idle"</li> <li>• "idle": "transferring"</li> </ul>
transferStateDetails	array[type_astra_stateDetails]	False	<p>Additional details about the current state including why the current state was reached.</p> <p>If no details are available, this array will be empty.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum Items: 0</li> </ul>

Name	Type	Required	Description
healthState	string	True	<p>Health state of the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "indeterminate" - The health of the resource cannot be determined (for example, due to lack of connectivity)</li> <li>• "normal" - The resource has no known issues and can provide services in accordance with the interface specification</li> <li>• "warning" - The resource has known issues that do not prevent it providing services in accordance with the interface specification</li> <li>• "critical" - The resource has known issues that prevent it from providing services in accordance with the interface specification</li> </ul>

Name	Type	Required	Description
healthStateTransitions	array[type_astra_stateTransitions]	True	<p>Permitted state transitions from a given defined state.</p> <p>The following state transitions are possible for this resource:</p> <ul style="list-style-type: none"> <li>• "indeterminate": "normal", "warning", "critical"</li> <li>• "normal": "indeterminate", "warning", "critical"</li> <li>• "warning": "indeterminate", "normal", "critical"</li> <li>• "critical": "indeterminate", "normal", "warning"</li> </ul>
healthStateDetails	array[type_astra_stateDetails]	True	<p>Additional details about the current state including why the current state was reached.</p> <p>If no details are available, this array will be empty.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum Items: 0</li> </ul>
metadata	type_astra_metadata_update	True	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema</li> </ul> <p>If not specified on create, a metadata object will be created with no labels.</p> <p>If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</p>

## Example response

```
{
  "type": "application/astra-appMirror",
  "version": "1.0",
  "id": "c5fbadd4-5d9e-5942-bb7f-f5386b6b6253",
  "sourceAppID": "efd639b6-fc92-4112-8841-0c0ab7890ae0",
  "sourceClusterID": "5789e026-c2e2-41e9-ab00-9766bcfa8951",
  "destinationAppID": "cd7b6d91-fc19-4983-a754-9a7bb4d80a7b",
  "destinationClusterID": "c5d023a9-4061-4a8a-bfbf-3be11ff06226",
  "state": "establishing",
  "stateTransitions": [
    {
      "from": "establishing",
      "to": [
        "established",
        "deleting"
      ]
    },
    {
      "from": "established",
      "to": [
        "failingOver",
        "deleting"
      ]
    },
    {
      "from": "failingOver",
      "to": [
        "failedOver",
        "deleting"
      ]
    },
    {
      "from": "failedOver",
      "to": [
        "establishing",
        "deleting"
      ]
    },
    {
      "from": "deleting",
      "to": [
        "deleted"
      ]
    }
  ]
}
```

```

],
"stateDesired": "established",
"stateAllowed": [
  "deleted"
],
"stateDetails": [
  {
    "type": "https://astra.netapp.io/stateDetails/3",
    "title": "AppMirror is being established",
    "detail": "The AppMirror relationship is in the process of being
established."
  }
],
"healthState": "warning",
"healthStateTransitions": [
  {
    "from": "indeterminate",
    "to": [
      "normal",
      "warning",
      "critical"
    ]
  },
  {
    "from": "normal",
    "to": [
      "indeterminate",
      "warning",
      "critical"
    ]
  },
  {
    "from": "warning",
    "to": [
      "indeterminate",
      "normal",
      "critical"
    ]
  },
  {
    "from": "critical",
    "to": [
      "indeterminate",
      "normal",
      "warning"
    ]
  }
]

```

```

    }
  ],
  "healthStateDetails": [
    {
      "type": "https://astra.netapp.io/stateDetails/4",
      "title": "AppMirror not yet established",
      "detail": "The relationship is in the process of being
established, so it's not protecting the app data yet."
    }
  ],
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}

```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```

{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}

```

## Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

## Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

## Response

Status: 409, Conflict

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields



### Example response

```
{
  "type": "https://astra.netapp.io/problems/10",
  "title": "JSON resource conflict",
  "detail": "The request body JSON contains a field that conflicts with
an idempotent value.",
  "status": "409"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	

Name	Type	Required	Description
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

### Definitions

## See Definitions

### namespaceMapping

Name	Type	Required	Description
clusterID	string	False	Identifier of the cluster for which the namespaces are specified. Defined values are: <ul style="list-style-type: none"><li>• Conforms to the Astra Identifier Schema</li></ul>
namespaces	array[string]	False	List of namespaces to use on the cluster. Correlated with the other cluster namespace list by index. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 1</li><li>• Maximum length: 63</li><li>• Conforms to the DNS 1123 Label Schema</li></ul>

### storageClasses

Name	Type	Required	Description
clusterID	string	False	Identifier of the cluster for which the storage class is specified. Defined values are: <ul style="list-style-type: none"><li>• Conforms to the Astra Identifier Schema</li></ul>

Name	Type	Required	Description
storageClassName	string	False	Name of the storage class to use when creating PVCs on the cluster specified in "clusterID". Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>

#### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

#### type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.  
Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[ <a href="#">type_astra_label</a> ]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

#### type\_astra\_stateTransitions

Name	Type	Required	Description
from	string	True	
to	array[string]	True	

#### type\_astra\_stateDetails

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	

#### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

#### invalidFields

Name	Type	Required	Description
name	string	True	Name of the invalid request body field
reason	string	True	Reason why the request body field is invalid

## List all AppMirror resources

GET /accounts/{account\_id}/k8s/v1/appMirrors

Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"> <li>example: <code>{{.Account}}</code></li> </ul>

Name	Type	In	Required	Description
include	string	query	False	<p>Indicates which fields should be returned when listing a collection.</p> <p>URL examples:  "include=id",  "include=id,name"</p> <p>OpenAPI examples:  "id"</p>
limit	string	query	False	<p>Indicates the maximum number of resources to return when listing a collection.</p> <p>URL examples:  "limit=2"</p> <p>OpenAPI examples:  "2"</p>
filter	string	query	False	<p>Indicates which fields should be matched in order to return a resource when listing a collection.</p> <p>Supported operators are:</p> <ul style="list-style-type: none"> <li>• eq - Equality</li> <li>• lt/gt - Less than/Greater than</li> <li>• lte/gte - Less than or equals to/Greater than or equals to</li> </ul> <p>URL example:  "filter=field%20eq%20%27value%27"</p> <p>OpenAPI examples:  "field eq 'value'"</p>

## Response

Status: 200, Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

Name	Type	Required	Description
items	array[Any of: <a href="#">appMirror_1.0_get_response_body</a> , array[]]	True	
metadata	<a href="#">type_astra_metadata_list</a>	True	

## Example response

```
{
  "type": "application/astra-appMirrors",
  "version": "1.0",
  "items": [
    {
      "type": "application/astra-appMirror",
      "version": "1.0",
      "id": "f1c98c2e-6391-42d3-8b21-3e75dac048a3",
      "sourceAppID": "efd639b6-fc92-4112-8841-0c0ab7890ae0",
      "sourceClusterID": "5789e026-c2e2-41e9-ab00-9766bcfa8951",
      "destinationAppID": "cd7b6d91-fc19-4983-a754-9a7bb4d80a7b",
      "destinationClusterID": "c5d023a9-4061-4a8a-bfbf-3be11ff06226",
      "namespaceMapping": [
        {
          "clusterID": "5789e026-c2e2-41e9-ab00-9766bcfa8951",
          "namespaces": [
            "ns1-src",
            "ns2-src"
          ]
        },
        {
          "clusterID": "c5d023a9-4061-4a8a-bfbf-3be11ff06226",
          "namespaces": [
            "ns1-dest",
            "ns2-dest"
          ]
        }
      ],
      "state": "established",
      "stateTransitions": [
        {
          "from": "establishing",
          "to": [
            "established",
            "deleting"
          ]
        },
        {
          "from": "established",
          "to": [
            "failingOver",
            "deleting"
          ]
        }
      ],
    }
  ],
}
```



```

    {
      "from": "failingOver",
      "to": [
        "failedOver",
        "deleting"
      ]
    },
    {
      "from": "failedOver",
      "to": [
        "establishing",
        "deleting"
      ]
    },
    {
      "from": "deleting",
      "to": [
        "deleted"
      ]
    }
  ],
  "stateDesired": "established",
  "stateAllowed": [
    "failedOver",
    "deleted"
  ],
  "stateDetails": [
    {
      "type": "https://astra.netapp.io/stateDetails/1",
      "title": "AppMirror relationship established",
      "detail": "The AppMirror relationship has been successfully
established."
    }
  ],
  "healthState": "normal",
  "healthStateTransitions": [
    {
      "from": "indeterminate",
      "to": [
        "normal",
        "warning",
        "critical"
      ]
    }
  ],
  {
    "from": "normal",

```

```

    "to": [
      "indeterminate",
      "warning",
      "critical"
    ]
  },
  {
    "from": "warning",
    "to": [
      "indeterminate",
      "normal",
      "critical"
    ]
  },
  {
    "from": "critical",
    "to": [
      "indeterminate",
      "normal",
      "warning"
    ]
  }
],
"healthStateDetails": [
  {
    "type": "https://astra.netapp.io/stateDetails/2",
    "title": "SnapMirror syncing successfully",
    "detail": "All SnapMirror relationships are synchronizing as
expected."
  }
],
"metadata": {
  "labels": [],
  "creationTimestamp": "2020-08-06T12:24:52.256624Z",
  "modificationTimestamp": "2020-08-06T12:24:52.256624Z",
  "createdBy": "11c0cfa1-4f27-4ef7-a21c-cb452fc5c9aa"
}
],
"metadata": {
  "labels": [],
  "creationTimestamp": "2022-10-06T20:58:16.305662Z",
  "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
  "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
}
}

```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

## Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	

Name	Type	Required	Description
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

### Definitions

## See Definitions

### namespaceMapping

Name	Type	Required	Description
clusterID	string	False	Identifier of the cluster for which the namespaces are specified. Defined values are: <ul style="list-style-type: none"><li>• Conforms to the Astra Identifier Schema</li></ul>
namespaces	array[string]	False	List of namespaces to use on the cluster. Correlated with the other cluster namespace list by index. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 1</li><li>• Maximum length: 63</li><li>• Conforms to the DNS 1123 Label Schema</li></ul>

### storageClasses

Name	Type	Required	Description
clusterID	string	False	Identifier of the cluster for which the storage class is specified. Defined values are: <ul style="list-style-type: none"><li>• Conforms to the Astra Identifier Schema</li></ul>

Name	Type	Required	Description
storageClassName	string	False	Name of the storage class to use when creating PVCs on the cluster specified in "clusterID". Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>

#### type\_astra\_stateTransitions

Name	Type	Required	Description
from	string	True	
to	array[string]	True	

#### type\_astra\_stateDetails

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	

#### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

#### type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[ <a href="#">type_astra_label</a> ]	False	
creationTimestamp	string	False	

Name	Type	Required	Description
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

appMirror\_1.0\_get\_response\_body

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"> <li>"application/astra-appMirror"</li> </ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>"1.0"</li> </ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>Conforms to the UUIDv4 Schema</li> </ul>
sourceAppID	string	True	Identifier of the source application. Only updated when swapping the sourceAppID with the destinationAppID. Defined values are: <ul style="list-style-type: none"> <li>Conforms to the Astra Identifier Schema</li> </ul>



Name	Type	Required	Description
sourceClusterID	string	True	<p>Identifier of the managed cluster hosting the source application. This field is read-only and is determined based on the host cluster of the source application. If provided in an update, it must match the cluster ID of the source application, so it can only change when swapping the sourceAppID with destinationAppID. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
destinationAppID	string	False	<p>Identifier of the destination application. Cannot be provided at creation time because a new app ID will be generated as part of relationship initialization. Can only be updated when swapping sourceAppID with the destinationAppID. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
destinationClusterID	string	True	<p>Identifier of the managed cluster to host the destination application. Must be provided at creation time because it determines the cluster on which the destination application will be created.</p> <p>If provided in an update, it must match the cluster ID of the destination application, so it can only change when also swapping sourceAppID with destinationAppID. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
namespaceMapping	array[namespaceMapping]	False	<p>The namespace or namespaces to use when creating the destination application, corresponding to the namespaces of the source application. Each JSON object contains the fields "clusterID" and "namespaces", where the "clusterID" value is the JSON string ID of the source or destination cluster, and the "namespaces" value is a JSON array of JSON strings. There must be exactly one JSON object for each cluster, and the namespaces will be correlated by index. If not provided, the same namespace from the source cluster will be used in the destination cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 0</li> <li>• Maximum length: 2</li> </ul>

Name	Type	Required	Description
storageClasses	array[ <a href="#">storageClasses</a> ]	False	<p>The storage class to be used on the destination cluster when creating new Persistent Volume Claims (PVCs). Each JSON object contains the fields "clusterID" and "storageClassName", where the "clusterID" value is the JSON string ID of the source or destination cluster, and the "storageClassName" is the storage class to use when creating PVCs on that cluster.</p> <p>If not provided or the value is missing for a cluster, the default storage class will be used for that cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 0</li> <li>• Maximum length: 2</li> </ul>

Name	Type	Required	Description
state	string	True	<p>The state of the relationship.</p> <p>Defined values are:</p> <ul style="list-style-type: none"><li>• "establishing" - The relationship is being created.</li><li>• "established" - The relationship is created.</li><li>• "failingOver" - Failover of the application to the destination cluster is in progress.</li><li>• "failedOver" - Failover of the application to the destination cluster has completed.</li><li>• "deleting" - Resources created by the relationship are being cleaned up.</li><li>• "deleted" - The relationship was cleaned up and deleted.</li></ul>

Name	Type	Required	Description
stateTransitions	array[type_astra_stateTransitions]	False	<p>Permitted state transitions.</p> <p>The following state transitions are possible for this resource:</p> <ul style="list-style-type: none"> <li>• "establishing": "established", "deleting"</li> <li>• "established": "failingOver", "deleting"</li> <li>• "failingOver": "failedOver", "deleting"</li> <li>• "failedOver": "establishing", "deleting"</li> <li>• "deleting": "deleted"</li> <li>• "deleted":</li> </ul>
stateDesired	string	True	<p>The desired state for the relationship.</p> <p>At creation, the only valid value is "established".</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "established" - The relationship is created.</li> <li>• "failedOver" - Failover of the application to the destination cluster has completed.</li> <li>• "deleted" - The relationship was successfully cleaned up and deleted.</li> </ul>

Name	Type	Required	Description
stateAllowed	array[string]	False	<p>States that can be requested in a given state.</p> <p>The following states can be requested in each defined state:</p> <ul style="list-style-type: none"> <li>• "establishing": "established", "deleted"</li> <li>• "established": "failedOver", "deleted"</li> <li>• "failingOver": "failedOver", "deleted"</li> <li>• "failedOver": "established", "deleted"</li> <li>• "deleting": "deleted"</li> <li>• "deleted": "deleted"</li> </ul>
stateDetails	array[type_astra_stateDetails]	True	<p>Additional details about the current state, including why the current state was reached.</p> <p>If no details are available, this array will be empty.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum Items: 0</li> </ul>

Name	Type	Required	Description
transferState	string	False	<p>State of the current or most recent snapshot transfer.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "transferring" - A new snapshot was created and is now being replicated to the destination cluster. This state also covers the transfers that have failed on previous attempts and are being continually retried.</li> <li>• "idle" - There is currently no transfer in progress.</li> </ul>
transferStateTransitions	array[type_astra_stateTransitions]	False	<p>Permitted state transitions from a given defined state.</p> <p>The following state transitions are possible for this resource:</p> <ul style="list-style-type: none"> <li>• "transferring": "idle"</li> <li>• "idle": "transferring"</li> </ul>
transferStateDetails	array[type_astra_stateDetails]	False	<p>Additional details about the current state including why the current state was reached.</p> <p>If no details are available, this array will be empty.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum Items: 0</li> </ul>



Name	Type	Required	Description
healthState	string	True	<p>Health state of the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "indeterminate" - The health of the resource cannot be determined (for example, due to lack of connectivity)</li> <li>• "normal" - The resource has no known issues and can provide services in accordance with the interface specification</li> <li>• "warning" - The resource has known issues that do not prevent it providing services in accordance with the interface specification</li> <li>• "critical" - The resource has known issues that prevent it from providing services in accordance with the interface specification</li> </ul>

Name	Type	Required	Description
healthStateTransitions	array[ <a href="#">type_astra_stateTransitions</a> ]	True	<p>Permitted state transitions from a given defined state.</p> <p>The following state transitions are possible for this resource:</p> <ul style="list-style-type: none"> <li>• "indeterminate": "normal", "warning", "critical"</li> <li>• "normal": "indeterminate", "warning", "critical"</li> <li>• "warning": "indeterminate", "normal", "critical"</li> <li>• "critical": "indeterminate", "normal", "warning"</li> </ul>
healthStateDetails	array[ <a href="#">type_astra_stateDetails</a> ]	True	<p>Additional details about the current state including why the current state was reached.</p> <p>If no details are available, this array will be empty.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum Items: 0</li> </ul>

Name	Type	Required	Description
metadata	<a href="#">type_astra_metadata_update</a>	True	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>Conforms to the Astra Metadata Schema</li> </ul> <p>If not specified on create, a metadata object will be created with no labels.</p> <p>If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</p>

#### type\_astra\_metadata\_list

Name	Type	Required	Description
continue	string	False	
count	number	False	
labels	array[ <a href="#">type_astra_label</a> ]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

#### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Retrieve an AppMirror resource

GET /accounts/{account\_id}/k8s/v1/appMirrors/{appMirror\_id}

Returns the stored AppMirror API resource in the JSON response body.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"><li>example: {{.Account}}</li></ul>
appMirror_id	string	path	True	ID of the appMirror collection to list

### Response

Status: 200, Returns the stored AppMirror API resource in the JSON response body.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>"application/astra-appMirror"</li></ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"><li>"1.0"</li></ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"><li>Conforms to the UUIDv4 Schema</li></ul>

Name	Type	Required	Description
sourceAppID	string	True	<p>Identifier of the source application.</p> <p>Only updated when swapping the sourceAppID with the destinationAppID.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
sourceClusterID	string	True	<p>Identifier of the managed cluster hosting the source application.</p> <p>This field is read-only and is determined based on the host cluster of the source application.</p> <p>If provided in an update, it must match the cluster ID of the source application, so it can only change when swapping the sourceAppID with destinationAppID.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
destinationAppID	string	False	<p>Identifier of the destination application.</p> <p>Cannot be provided at creation time because a new app ID will be generated as part of relationship initialization.</p> <p>Can only be updated when swapping sourceAppID with the destinationAppID.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
destinationClusterID	string	True	<p>Identifier of the managed cluster to host the destination application. Must be provided at creation time because it determines the cluster on which the destination application will be created.</p> <p>If provided in an update, it must match the cluster ID of the destination application, so it can only change when also swapping sourceAppID with destinationAppID.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
namespaceMapping	array[ <a href="#">namespaceMapping</a> ]	False	<p>The namespace or namespaces to use when creating the destination application, corresponding to the namespaces of the source application. Each JSON object contains the fields "clusterID" and "namespaces", where the "clusterID" value is the JSON string ID of the source or destination cluster, and the "namespaces" value is a JSON array of JSON strings. There must be exactly one JSON object for each cluster, and the namespaces will be correlated by index.</p> <p>If not provided, the same namespace from the source cluster will be used in the destination cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 0</li> <li>• Maximum length: 2</li> </ul>

Name	Type	Required	Description
storageClasses	array[ <a href="#">storageClasses</a> ]	False	<p>The storage class to be used on the destination cluster when creating new Persistent Volume Claims (PVCs).</p> <p>Each JSON object contains the fields "clusterID" and "storageClassName", where the "clusterID" value is the JSON string ID of the source or destination cluster, and the "storageClassName" is the storage class to use when creating PVCs on that cluster.</p> <p>If not provided or the value is missing for a cluster, the default storage class will be used for that cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 0</li> <li>• Maximum length: 2</li> </ul>

Name	Type	Required	Description
state	string	True	<p>The state of the relationship.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "establishing" - The relationship is being created.</li> <li>• "established" - The relationship is created.</li> <li>• "failingOver" - Failover of the application to the destination cluster is in progress.</li> <li>• "failedOver" - Failover of the application to the destination cluster has completed.</li> <li>• "deleting" - Resources created by the relationship are being cleaned up.</li> <li>• "deleted" - The relationship was cleaned up and deleted.</li> </ul>



Name	Type	Required	Description
stateTransitions	array[type_astra_stateTransitions]	False	<p>Permitted state transitions.</p> <p>The following state transitions are possible for this resource:</p> <ul style="list-style-type: none"> <li>• "establishing": "established", "deleting"</li> <li>• "established": "failingOver", "deleting"</li> <li>• "failingOver": "failedOver", "deleting"</li> <li>• "failedOver": "establishing", "deleting"</li> <li>• "deleting": "deleted"</li> <li>• "deleted":</li> </ul>
stateDesired	string	True	<p>The desired state for the relationship.</p> <p>At creation, the only valid value is "established".</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "established" - The relationship is created.</li> <li>• "failedOver" - Failover of the application to the destination cluster has completed.</li> <li>• "deleted" - The relationship was successfully cleaned up and deleted.</li> </ul>

Name	Type	Required	Description
stateAllowed	array[string]	False	<p>States that can be requested in a given state.</p> <p>The following states can be requested in each defined state:</p> <ul style="list-style-type: none"> <li>• "establishing": "established", "deleted"</li> <li>• "established": "failedOver", "deleted"</li> <li>• "failingOver": "failedOver", "deleted"</li> <li>• "failedOver": "established", "deleted"</li> <li>• "deleting": "deleted"</li> <li>• "deleted": "deleted"</li> </ul>
stateDetails	array[type_astra_stateDetails]	True	<p>Additional details about the current state, including why the current state was reached.</p> <p>If no details are available, this array will be empty.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum Items: 0</li> </ul>

Name	Type	Required	Description
transferState	string	False	<p>State of the current or most recent snapshot transfer.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "transferring" - A new snapshot was created and is now being replicated to the destination cluster. This state also covers the transfers that have failed on previous attempts and are being continually retried.</li> <li>• "idle" - There is currently no transfer in progress.</li> </ul>
transferStateTransitions	array[type_astra_stateTransitions]	False	<p>Permitted state transitions from a given defined state.</p> <p>The following state transitions are possible for this resource:</p> <ul style="list-style-type: none"> <li>• "transferring": "idle"</li> <li>• "idle": "transferring"</li> </ul>
transferStateDetails	array[type_astra_stateDetails]	False	<p>Additional details about the current state including why the current state was reached.</p> <p>If no details are available, this array will be empty.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum Items: 0</li> </ul>

Name	Type	Required	Description
healthState	string	True	<p>Health state of the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "indeterminate" - The health of the resource cannot be determined (for example, due to lack of connectivity)</li> <li>• "normal" - The resource has no known issues and can provide services in accordance with the interface specification</li> <li>• "warning" - The resource has known issues that do not prevent it providing services in accordance with the interface specification</li> <li>• "critical" - The resource has known issues that prevent it from providing services in accordance with the interface specification</li> </ul>

Name	Type	Required	Description
healthStateTransitions	array[type_astra_stateTransitions]	True	<p>Permitted state transitions from a given defined state.</p> <p>The following state transitions are possible for this resource:</p> <ul style="list-style-type: none"> <li>• "indeterminate": "normal", "warning", "critical"</li> <li>• "normal": "indeterminate", "warning", "critical"</li> <li>• "warning": "indeterminate", "normal", "critical"</li> <li>• "critical": "indeterminate", "normal", "warning"</li> </ul>
healthStateDetails	array[type_astra_stateDetails]	True	<p>Additional details about the current state including why the current state was reached.</p> <p>If no details are available, this array will be empty.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum Items: 0</li> </ul>
metadata	type_astra_metadata_update	True	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema</li> </ul> <p>If not specified on create, a metadata object will be created with no labels.</p> <p>If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</p>

## Example response

```
{
  "type": "application/astra-appMirror",
  "version": "1.0",
  "id": "c5fbadd4-5d9e-5942-bb7f-f5386b6b6253",
  "sourceAppID": "efd639b6-fc92-4112-8841-0c0ab7890ae0",
  "sourceClusterID": "5789e026-c2e2-41e9-ab00-9766bcfa8951",
  "destinationAppID": "cd7b6d91-fc19-4983-a754-9a7bb4d80a7b",
  "destinationClusterID": "c5d023a9-4061-4a8a-bfbf-3be11ff06226",
  "namespaceMapping": [
    {
      "clusterID": "5789e026-c2e2-41e9-ab00-9766bcfa8951",
      "namespaces": [
        "ns1-src",
        "ns2-src"
      ]
    },
    {
      "clusterID": "c5d023a9-4061-4a8a-bfbf-3be11ff06226",
      "namespaces": [
        "ns1-dest",
        "ns2-dest"
      ]
    }
  ],
  "state": "established",
  "stateTransitions": [
    {
      "from": "establishing",
      "to": [
        "established",
        "deleting"
      ]
    },
    {
      "from": "established",
      "to": [
        "failingOver",
        "deleting"
      ]
    },
    {
      "from": "failingOver",
      "to": [
        "failedOver",

```

```

        "deleting"
    ]
},
{
    "from": "failedOver",
    "to": [
        "establishing",
        "deleting"
    ]
},
{
    "from": "deleting",
    "to": [
        "deleted"
    ]
}
],
"stateDesired": "established",
"stateAllowed": [
    "failedOver",
    "deleted"
],
"stateDetails": [
    {
        "type": "https://astra.netapp.io/stateDetails/1",
        "title": "AppMirror relationship established",
        "detail": "The AppMirror relationship has been successfully
established."
    }
],
"healthState": "normal",
"healthStateTransitions": [
    {
        "from": "indeterminate",
        "to": [
            "normal",
            "warning",
            "critical"
        ]
    },
    {
        "from": "normal",
        "to": [
            "indeterminate",
            "warning",
            "critical"
        ]
    }
]

```

```

    ]
  },
  {
    "from": "warning",
    "to": [
      "indeterminate",
      "normal",
      "critical"
    ]
  },
  {
    "from": "critical",
    "to": [
      "indeterminate",
      "normal",
      "warning"
    ]
  }
],
"healthStateDetails": [
  {
    "type": "https://astra.netapp.io/stateDetails/2",
    "title": "SnapMirror syncing successfully",
    "detail": "All SnapMirror relationships are synchronizing as
expected."
  }
],
"metadata": {
  "labels": [],
  "creationTimestamp": "2022-10-06T20:58:16.305662Z",
  "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
  "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
}
}

```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	



Name	Type	Required	Description
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

## Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

## Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

## Definitions

## See Definitions

### namespaceMapping

Name	Type	Required	Description
clusterID	string	False	Identifier of the cluster for which the namespaces are specified. Defined values are: <ul style="list-style-type: none"><li>• Conforms to the Astra Identifier Schema</li></ul>
namespaces	array[string]	False	List of namespaces to use on the cluster. Correlated with the other cluster namespace list by index. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 1</li><li>• Maximum length: 63</li><li>• Conforms to the DNS 1123 Label Schema</li></ul>

### storageClasses

Name	Type	Required	Description
clusterID	string	False	Identifier of the cluster for which the storage class is specified. Defined values are: <ul style="list-style-type: none"><li>• Conforms to the Astra Identifier Schema</li></ul>

Name	Type	Required	Description
storageClassName	string	False	Name of the storage class to use when creating PVCs on the cluster specified in "clusterID". Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>

#### type\_astra\_stateTransitions

Name	Type	Required	Description
from	string	True	
to	array[string]	True	

#### type\_astra\_stateDetails

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	

#### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

#### type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[ <a href="#">type_astra_label</a> ]	False	
creationTimestamp	string	False	

Name	Type	Required	Description
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Modify an AppMirror resource

PUT /accounts/{account\_id}/k8s/v1/appMirrors/{appMirror\_id}

Replaces the entire stored resource with the supplied JSON request body while preserving key values that are not user-modifiable.

### Side Effects

- Various side effects based on desiredState.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"> <li>• example: <code>{{.Account}}</code></li> </ul>
appMirror_id	string	path	True	ID of the appMirror collection to list

### Request Body

Replaces the entire stored resource with the supplied JSON request body while preserving key values that are not user-modifiable.

### Side Effects

- Various side effects based on desiredState.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"> <li>"application/astra-appMirror"</li> </ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>"1.0"</li> </ul>
id	string	False	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>Conforms to the UUIDv4 Schema</li> </ul>
sourceAppID	string	False	Identifier of the source application. Only updated when swapping the sourceAppID with the destinationAppID. Defined values are: <ul style="list-style-type: none"> <li>Conforms to the Astra Identifier Schema</li> </ul>
sourceClusterID	string	False	Identifier of the managed cluster hosting the source application. This field is read-only and is determined based on the host cluster of the source application. If provided in an update, it must match the cluster ID of the source application, so it can only change when swapping the sourceAppID with destinationAppID. Defined values are: <ul style="list-style-type: none"> <li>Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
destinationAppID	string	False	<p>Identifier of the destination application. Cannot be provided at creation time because a new app ID will be generated as part of relationship initialization. Can only be updated when swapping sourceAppID with the destinationAppID. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
destinationClusterID	string	False	<p>Identifier of the managed cluster to host the destination application. Must be provided at creation time because it determines the cluster on which the destination application will be created. If provided in an update, it must match the cluster ID of the destination application, so it can only change when also swapping sourceAppID with destinationAppID. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>



Name	Type	Required	Description
namespaceMapping	array[ <a href="#">namespaceMapping</a> ]	False	<p>The namespace or namespaces to use when creating the destination application, corresponding to the namespaces of the source application. Each JSON object contains the fields "clusterID" and "namespaces", where the "clusterID" value is the JSON string ID of the source or destination cluster, and the "namespaces" value is a JSON array of JSON strings. There must be exactly one JSON object for each cluster, and the namespaces will be correlated by index. If not provided, the same namespace from the source cluster will be used in the destination cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 0</li> <li>• Maximum length: 2</li> </ul>

Name	Type	Required	Description
storageClasses	array[ <a href="#">storageClasses</a> ]	False	<p>The storage class to be used on the destination cluster when creating new Persistent Volume Claims (PVCs).</p> <p>Each JSON object contains the fields "clusterID" and "storageClassName", where the "clusterID" value is the JSON string ID of the source or destination cluster, and the "storageClassName" is the storage class to use when creating PVCs on that cluster.</p> <p>If not provided or the value is missing for a cluster, the default storage class will be used for that cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 0</li> <li>• Maximum length: 2</li> </ul>

Name	Type	Required	Description
state	string	False	<p>The state of the relationship.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "establishing" - The relationship is being created.</li> <li>• "established" - The relationship is created.</li> <li>• "failingOver" - Failover of the application to the destination cluster is in progress.</li> <li>• "failedOver" - Failover of the application to the destination cluster has completed.</li> <li>• "deleting" - Resources created by the relationship are being cleaned up.</li> <li>• "deleted" - The relationship was cleaned up and deleted.</li> </ul>

Name	Type	Required	Description
stateTransitions	array[type_astra_stateTransitions]	False	<p>Permitted state transitions.</p> <p>The following state transitions are possible for this resource:</p> <ul style="list-style-type: none"> <li>• "establishing": "established", "deleting"</li> <li>• "established": "failingOver", "deleting"</li> <li>• "failingOver": "failedOver", "deleting"</li> <li>• "failedOver": "establishing", "deleting"</li> <li>• "deleting": "deleted"</li> <li>• "deleted":</li> </ul>
stateDesired	string	False	<p>The desired state for the relationship.</p> <p>At creation, the only valid value is "established".</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "established" - The relationship is created.</li> <li>• "failedOver" - Failover of the application to the destination cluster has completed.</li> <li>• "deleted" - The relationship was successfully cleaned up and deleted.</li> </ul>

Name	Type	Required	Description
stateAllowed	array[string]	False	<p>States that can be requested in a given state.</p> <p>The following states can be requested in each defined state:</p> <ul style="list-style-type: none"> <li>• "establishing": "established", "deleted"</li> <li>• "established": "failedOver", "deleted"</li> <li>• "failingOver": "failedOver", "deleted"</li> <li>• "failedOver": "established", "deleted"</li> <li>• "deleting": "deleted"</li> <li>• "deleted": "deleted"</li> </ul>
stateDetails	array[type_astra_stateDetails]	False	<p>Additional details about the current state, including why the current state was reached.</p> <p>If no details are available, this array will be empty.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum Items: 0</li> </ul>

Name	Type	Required	Description
transferState	string	False	<p>State of the current or most recent snapshot transfer.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "transferring" - A new snapshot was created and is now being replicated to the destination cluster. This state also covers the transfers that have failed on previous attempts and are being continually retried.</li> <li>• "idle" - There is currently no transfer in progress.</li> </ul>
transferStateTransitions	array[type_astra_stateTransitions]	False	<p>Permitted state transitions from a given defined state.</p> <p>The following state transitions are possible for this resource:</p> <ul style="list-style-type: none"> <li>• "transferring": "idle"</li> <li>• "idle": "transferring"</li> </ul>
transferStateDetails	array[type_astra_stateDetails]	False	<p>Additional details about the current state including why the current state was reached.</p> <p>If no details are available, this array will be empty.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum Items: 0</li> </ul>

Name	Type	Required	Description
healthState	string	False	<p>Health state of the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "indeterminate" - The health of the resource cannot be determined (for example, due to lack of connectivity)</li> <li>• "normal" - The resource has no known issues and can provide services in accordance with the interface specification</li> <li>• "warning" - The resource has known issues that do not prevent it providing services in accordance with the interface specification</li> <li>• "critical" - The resource has known issues that prevent it from providing services in accordance with the interface specification</li> </ul>

Name	Type	Required	Description
healthStateTransitions	array[type_astra_stateTransitions]	False	<p>Permitted state transitions from a given defined state.</p> <p>The following state transitions are possible for this resource:</p> <ul style="list-style-type: none"> <li>• "indeterminate": "normal", "warning", "critical"</li> <li>• "normal": "indeterminate", "warning", "critical"</li> <li>• "warning": "indeterminate", "normal", "critical"</li> <li>• "critical": "indeterminate", "normal", "warning"</li> </ul>
healthStateDetails	array[type_astra_stateDetails]	False	<p>Additional details about the current state including why the current state was reached.</p> <p>If no details are available, this array will be empty.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum Items: 0</li> </ul>
metadata	type_astra_metadata_update	False	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema</li> </ul> <p>If not specified on create, a metadata object will be created with no labels.</p> <p>If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</p>



### Example request

```
{
  "type": "application/astra-appMirror",
  "version": "1.0",
  "stateDesired": "failedOver"
}
```

### Response

Status: 204, Indicates if the appMirror resource was updated.

### Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 409, Conflict

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

### Example response

```
{
  "type": "https://astra.netapp.io/problems/10",
  "title": "JSON resource conflict",
  "detail": "The request body JSON contains a field that conflicts with
an idempotent value.",
  "status": "409"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	

Name	Type	Required	Description
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{  
  "type": "https://astra.netapp.io/problems/1",  
  "title": "Resource not found",  
  "detail": "The resource specified in the request URI wasn't found.",  
  "status": "404"  
}
```

### Definitions

## See Definitions

### namespaceMapping

Name	Type	Required	Description
clusterID	string	False	Identifier of the cluster for which the namespaces are specified. Defined values are: <ul style="list-style-type: none"><li>• Conforms to the Astra Identifier Schema</li></ul>
namespaces	array[string]	False	List of namespaces to use on the cluster. Correlated with the other cluster namespace list by index. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 1</li><li>• Maximum length: 63</li><li>• Conforms to the DNS 1123 Label Schema</li></ul>

### storageClasses

Name	Type	Required	Description
clusterID	string	False	Identifier of the cluster for which the storage class is specified. Defined values are: <ul style="list-style-type: none"><li>• Conforms to the Astra Identifier Schema</li></ul>

Name	Type	Required	Description
storageClassName	string	False	Name of the storage class to use when creating PVCs on the cluster specified in "clusterID". Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>

#### type\_astra\_stateTransitions

Name	Type	Required	Description
from	string	True	
to	array[string]	True	

#### type\_astra\_stateDetails

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	

#### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

#### type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[ <a href="#">type_astra_label</a> ]	False	
creationTimestamp	string	False	

Name	Type	Required	Description
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

#### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

#### invalidFields

Name	Type	Required	Description
name	string	True	Name of the invalid request body field
reason	string	True	Reason why the request body field is invalid

## Delete an AppMirror resource

DELETE /accounts/{account\_id}/k8s/v1/appMirrors/{appMirror\_id}

Removes the specified AppMirror API resource.

Starts a process to asynchronously remove the AppMirror resource, along with any resources on the source and destination clusters that were created as a result of the AppMirror relationship. The resources removed are dependent on the state of the relationship at the time of deletion.

### Side Effects

- The stateDesired field is set to "deleted".
- The state field is set to "deleting".
- If state is "established", the TridentMirrorRelationships and PersistentVolumeClaims created by the AppMirror relationship will be deleted.
- If state is "failedOver", the TridentMirrorRelationships created by the AppMirror relationship will be deleted and the PersistentVolumeClaims in the destination application will be left in place.
- When the asynchronous delete operation is completed, the appMirror API resource will be removed from both the source and destination applications.

## Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"><li>example: {{.Account}}</li></ul>
appMirror_id	string	path	True	ID of the appMirror collection to list

## Response

Status: 204, Indicates if the appMirror resource was deleted.

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

## Response

Status: 400, Bad request



Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

## Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example error response

```
{
  "type": "https://astra.netapp.io/problems/1",
  "title": "Resource not found",
  "detail": "The resource specified in the request URI wasn't found.",
  "status": "404"
}
```

## Definitions

## See Definitions

invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Create a new AppMirror resource for an app

POST /accounts/{account\_id}/k8s/v1/apps/{app\_id}/appMirrors

Indicates the desired values for the AppMirror API resource to be created.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"><li>example: {{.Account}}</li></ul>
app_id	string	path	True	ID of the containing app resource

### Request Body

Indicates the desired values for the AppMirror API resource to be created.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>"application/astra-appMirror"</li></ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"><li>"1.0"</li></ul>

Name	Type	Required	Description
sourceAppID	string	True	<p>Identifier of the source application.</p> <p>Only updated when swapping the sourceAppID with the destinationAppID.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
destinationClusterID	string	True	<p>Identifier of the managed cluster to host the destination application.</p> <p>Must be provided at creation time because it determines the cluster on which the destination application will be created.</p> <p>If provided in an update, it must match the cluster ID of the destination application, so it can only change when also swapping sourceAppID with destinationAppID.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
namespaceMapping	array[ <a href="#">namespaceMapping</a> ]	False	<p>The namespace or namespaces to use when creating the destination application, corresponding to the namespaces of the source application. Each JSON object contains the fields "clusterID" and "namespaces", where the "clusterID" value is the JSON string ID of the source or destination cluster, and the "namespaces" value is a JSON array of JSON strings. There must be exactly one JSON object for each cluster, and the namespaces will be correlated by index. If not provided, the same namespace from the source cluster will be used in the destination cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 0</li> <li>• Maximum length: 2</li> </ul>

Name	Type	Required	Description
storageClasses	array[storageClasses]	False	<p>The storage class to be used on the destination cluster when creating new Persistent Volume Claims (PVCs). Each JSON object contains the fields "clusterID" and "storageClassName", where the "clusterID" value is the JSON string ID of the source or destination cluster, and the "storageClassName" is the storage class to use when creating PVCs on that cluster.</p> <p>If not provided or the value is missing for a cluster, the default storage class will be used for that cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 0</li> <li>• Maximum length: 2</li> </ul>
stateDesired	string	True	<p>The desired state for the relationship.</p> <p>At creation, the only valid value is "established".</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "established" - The relationship is created.</li> <li>• "failedOver" - Failover of the application to the destination cluster has completed.</li> <li>• "deleted" - The relationship was successfully cleaned up and deleted.</li> </ul>

Name	Type	Required	Description
metadata	<a href="#">type_astra_metadata_update</a>	False	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</li> </ul>

### Example request

```
{
  "type": "application/astra-appMirror",
  "version": "1.0",
  "sourceAppID": "efd639b6-fc92-4112-8841-0c0ab7890ae0",
  "destinationClusterID": "c5d023a9-4061-4a8a-bfbf-3be11ff06226",
  "stateDesired": "established"
}
```

### Response

Status: 201, Returns the newly created appMirror resource in the JSON response body.

Name	Type	Required	Description
type	string	True	<p>Media type of the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "application/astra-appMirror"</li> </ul>

Name	Type	Required	Description
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "1.0"</li> </ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the UUIDv4 Schema</li> </ul>
sourceAppID	string	True	Identifier of the source application. Only updated when swapping the sourceAppID with the destinationAppID. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
sourceClusterID	string	True	Identifier of the managed cluster hosting the source application. This field is read-only and is determined based on the host cluster of the source application. If provided in an update, it must match the cluster ID of the source application, so it can only change when swapping the sourceAppID with destinationAppID. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>



Name	Type	Required	Description
destinationAppID	string	False	<p>Identifier of the destination application. Cannot be provided at creation time because a new app ID will be generated as part of relationship initialization. Can only be updated when swapping sourceAppID with the destinationAppID. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
destinationClusterID	string	True	<p>Identifier of the managed cluster to host the destination application. Must be provided at creation time because it determines the cluster on which the destination application will be created. If provided in an update, it must match the cluster ID of the destination application, so it can only change when also swapping sourceAppID with destinationAppID. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
namespaceMapping	array[ <a href="#">namespaceMapping</a> ]	False	<p>The namespace or namespaces to use when creating the destination application, corresponding to the namespaces of the source application. Each JSON object contains the fields "clusterID" and "namespaces", where the "clusterID" value is the JSON string ID of the source or destination cluster, and the "namespaces" value is a JSON array of JSON strings. There must be exactly one JSON object for each cluster, and the namespaces will be correlated by index. If not provided, the same namespace from the source cluster will be used in the destination cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 0</li> <li>• Maximum length: 2</li> </ul>

Name	Type	Required	Description
storageClasses	array[ <a href="#">storageClasses</a> ]	False	<p>The storage class to be used on the destination cluster when creating new Persistent Volume Claims (PVCs).</p> <p>Each JSON object contains the fields "clusterID" and "storageClassName", where the "clusterID" value is the JSON string ID of the source or destination cluster, and the "storageClassName" is the storage class to use when creating PVCs on that cluster.</p> <p>If not provided or the value is missing for a cluster, the default storage class will be used for that cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 0</li> <li>• Maximum length: 2</li> </ul>

Name	Type	Required	Description
state	string	True	<p>The state of the relationship.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "establishing" - The relationship is being created.</li> <li>• "established" - The relationship is created.</li> <li>• "failingOver" - Failover of the application to the destination cluster is in progress.</li> <li>• "failedOver" - Failover of the application to the destination cluster has completed.</li> <li>• "deleting" - Resources created by the relationship are being cleaned up.</li> <li>• "deleted" - The relationship was cleaned up and deleted.</li> </ul>

Name	Type	Required	Description
stateTransitions	array[type_astra_stateTransitions]	False	<p>Permitted state transitions.</p> <p>The following state transitions are possible for this resource:</p> <ul style="list-style-type: none"> <li>• "establishing": "established", "deleting"</li> <li>• "established": "failingOver", "deleting"</li> <li>• "failingOver": "failedOver", "deleting"</li> <li>• "failedOver": "establishing", "deleting"</li> <li>• "deleting": "deleted"</li> <li>• "deleted":</li> </ul>
stateDesired	string	True	<p>The desired state for the relationship.</p> <p>At creation, the only valid value is "established".</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "established" - The relationship is created.</li> <li>• "failedOver" - Failover of the application to the destination cluster has completed.</li> <li>• "deleted" - The relationship was successfully cleaned up and deleted.</li> </ul>

Name	Type	Required	Description
stateAllowed	array[string]	False	<p>States that can be requested in a given state.</p> <p>The following states can be requested in each defined state:</p> <ul style="list-style-type: none"> <li>• "establishing": "established", "deleted"</li> <li>• "established": "failedOver", "deleted"</li> <li>• "failingOver": "failedOver", "deleted"</li> <li>• "failedOver": "established", "deleted"</li> <li>• "deleting": "deleted"</li> <li>• "deleted": "deleted"</li> </ul>
stateDetails	array[type_astra_stateDetails]	True	<p>Additional details about the current state, including why the current state was reached.</p> <p>If no details are available, this array will be empty.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum Items: 0</li> </ul>

Name	Type	Required	Description
transferState	string	False	<p>State of the current or most recent snapshot transfer.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "transferring" - A new snapshot was created and is now being replicated to the destination cluster. This state also covers the transfers that have failed on previous attempts and are being continually retried.</li> <li>• "idle" - There is currently no transfer in progress.</li> </ul>
transferStateTransitions	array[type_astra_stateTransitions]	False	<p>Permitted state transitions from a given defined state.</p> <p>The following state transitions are possible for this resource:</p> <ul style="list-style-type: none"> <li>• "transferring": "idle"</li> <li>• "idle": "transferring"</li> </ul>
transferStateDetails	array[type_astra_stateDetails]	False	<p>Additional details about the current state including why the current state was reached.</p> <p>If no details are available, this array will be empty.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum Items: 0</li> </ul>

Name	Type	Required	Description
healthState	string	True	<p>Health state of the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "indeterminate" - The health of the resource cannot be determined (for example, due to lack of connectivity)</li> <li>• "normal" - The resource has no known issues and can provide services in accordance with the interface specification</li> <li>• "warning" - The resource has known issues that do not prevent it providing services in accordance with the interface specification</li> <li>• "critical" - The resource has known issues that prevent it from providing services in accordance with the interface specification</li> </ul>



Name	Type	Required	Description
healthStateTransitions	array[type_astra_stateTransitions]	True	<p>Permitted state transitions from a given defined state.</p> <p>The following state transitions are possible for this resource:</p> <ul style="list-style-type: none"> <li>• "indeterminate": "normal", "warning", "critical"</li> <li>• "normal": "indeterminate", "warning", "critical"</li> <li>• "warning": "indeterminate", "normal", "critical"</li> <li>• "critical": "indeterminate", "normal", "warning"</li> </ul>
healthStateDetails	array[type_astra_stateDetails]	True	<p>Additional details about the current state including why the current state was reached.</p> <p>If no details are available, this array will be empty.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum Items: 0</li> </ul>
metadata	type_astra_metadata_update	True	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema</li> </ul> <p>If not specified on create, a metadata object will be created with no labels.</p> <p>If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</p>

## Example response

```
{
  "type": "application/astra-appMirror",
  "version": "1.0",
  "id": "c5fbadd4-5d9e-5942-bb7f-f5386b6b6253",
  "sourceAppID": "efd639b6-fc92-4112-8841-0c0ab7890ae0",
  "sourceClusterID": "5789e026-c2e2-41e9-ab00-9766bcfa8951",
  "destinationAppID": "cd7b6d91-fc19-4983-a754-9a7bb4d80a7b",
  "destinationClusterID": "c5d023a9-4061-4a8a-bfbf-3be11ff06226",
  "state": "establishing",
  "stateTransitions": [
    {
      "from": "establishing",
      "to": [
        "established",
        "deleting"
      ]
    },
    {
      "from": "established",
      "to": [
        "failingOver",
        "deleting"
      ]
    },
    {
      "from": "failingOver",
      "to": [
        "failedOver",
        "deleting"
      ]
    },
    {
      "from": "failedOver",
      "to": [
        "establishing",
        "deleting"
      ]
    },
    {
      "from": "deleting",
      "to": [
        "deleted"
      ]
    }
  ]
}
```

```

],
"stateDesired": "established",
"stateAllowed": [
  "deleted"
],
"stateDetails": [
  {
    "type": "https://astra.netapp.io/stateDetails/3",
    "title": "AppMirror is being established",
    "detail": "The AppMirror relationship is in the process of being
established."
  }
],
"healthState": "warning",
"healthStateTransitions": [
  {
    "from": "indeterminate",
    "to": [
      "normal",
      "warning",
      "critical"
    ]
  },
  {
    "from": "normal",
    "to": [
      "indeterminate",
      "warning",
      "critical"
    ]
  },
  {
    "from": "warning",
    "to": [
      "indeterminate",
      "normal",
      "critical"
    ]
  },
  {
    "from": "critical",
    "to": [
      "indeterminate",
      "normal",
      "warning"
    ]
  }
]

```

```

    }
  ],
  "healthStateDetails": [
    {
      "type": "https://astra.netapp.io/stateDetails/4",
      "title": "AppMirror not yet established",
      "detail": "The relationship is in the process of being
established, so it's not protecting the app data yet."
    }
  ],
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}

```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```

{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}

```

## Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

## Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

## Response

Status: 409, Conflict

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

### Example response

```
{
  "type": "https://astra.netapp.io/problems/10",
  "title": "JSON resource conflict",
  "detail": "The request body JSON contains a field that conflicts with
an idempotent value.",
  "status": "409"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	

Name	Type	Required	Description
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

### Definitions

## See Definitions

### namespaceMapping

Name	Type	Required	Description
clusterID	string	False	Identifier of the cluster for which the namespaces are specified. Defined values are: <ul style="list-style-type: none"><li>• Conforms to the Astra Identifier Schema</li></ul>
namespaces	array[string]	False	List of namespaces to use on the cluster. Correlated with the other cluster namespace list by index. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 1</li><li>• Maximum length: 63</li><li>• Conforms to the DNS 1123 Label Schema</li></ul>

### storageClasses

Name	Type	Required	Description
clusterID	string	False	Identifier of the cluster for which the storage class is specified. Defined values are: <ul style="list-style-type: none"><li>• Conforms to the Astra Identifier Schema</li></ul>



Name	Type	Required	Description
storageClassName	string	False	Name of the storage class to use when creating PVCs on the cluster specified in "clusterID". Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>

#### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

#### type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.  
Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[ <a href="#">type_astra_label</a> ]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

#### type\_astra\_stateTransitions

Name	Type	Required	Description
from	string	True	
to	array[string]	True	

#### type\_astra\_stateDetails

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	

#### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

#### invalidFields

Name	Type	Required	Description
name	string	True	Name of the invalid request body field
reason	string	True	Reason why the request body field is invalid

## List the AppMirror resources for an app

GET /accounts/{account\_id}/k8s/v1/apps/{app\_id}/appMirrors

Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"> <li>example: <code>{{.Account}}</code></li> </ul>
app_id	string	path	True	ID of the containing app resource

Name	Type	In	Required	Description
include	string	query	False	<p>Indicates which fields should be returned when listing a collection.</p> <p>URL examples:  "include=id",  "include=id,name"</p> <p>OpenAPI examples:  "id"</p>
limit	string	query	False	<p>Indicates the maximum number of resources to return when listing a collection.</p> <p>URL examples:  "limit=2"</p> <p>OpenAPI examples:  "2"</p>
filter	string	query	False	<p>Indicates which fields should be matched in order to return a resource when listing a collection.</p> <p>Supported operators are:</p> <ul style="list-style-type: none"> <li>• eq - Equality</li> <li>• lt/gt - Less than/Greater than</li> <li>• lte/gte - Less than or equals to/Greater than or equals to</li> </ul> <p>URL example:  "filter=field%20eq%20%27value%27"</p> <p>OpenAPI examples:  "field eq 'value'"</p>

## Response

Status: 200, Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

Name	Type	Required	Description
items	array[Any of: <a href="#">appMirror_1.0_get_response_body</a> , array[]]	True	
metadata	<a href="#">type_astra_metadata_list</a>	True	

## Example response

```
{
  "type": "application/astra-appMirrors",
  "version": "1.0",
  "items": [
    {
      "type": "application/astra-appMirror",
      "version": "1.0",
      "id": "f1c98c2e-6391-42d3-8b21-3e75dac048a3",
      "sourceAppID": "efd639b6-fc92-4112-8841-0c0ab7890ae0",
      "sourceClusterID": "5789e026-c2e2-41e9-ab00-9766bcfa8951",
      "destinationAppID": "cd7b6d91-fc19-4983-a754-9a7bb4d80a7b",
      "destinationClusterID": "c5d023a9-4061-4a8a-bfbf-3be11ff06226",
      "namespaceMapping": [
        {
          "clusterID": "5789e026-c2e2-41e9-ab00-9766bcfa8951",
          "namespaces": [
            "ns1-src",
            "ns2-src"
          ]
        },
        {
          "clusterID": "c5d023a9-4061-4a8a-bfbf-3be11ff06226",
          "namespaces": [
            "ns1-dest",
            "ns2-dest"
          ]
        }
      ],
      "state": "established",
      "stateTransitions": [
        {
          "from": "establishing",
          "to": [
            "established",
            "deleting"
          ]
        },
        {
          "from": "established",
          "to": [
            "failingOver",
            "deleting"
          ]
        }
      ],
    }
  ],
}
```

```

    {
      "from": "failingOver",
      "to": [
        "failedOver",
        "deleting"
      ]
    },
    {
      "from": "failedOver",
      "to": [
        "establishing",
        "deleting"
      ]
    },
    {
      "from": "deleting",
      "to": [
        "deleted"
      ]
    }
  ],
  "stateDesired": "established",
  "stateAllowed": [
    "failedOver",
    "deleted"
  ],
  "stateDetails": [
    {
      "type": "https://astra.netapp.io/stateDetails/1",
      "title": "AppMirror relationship established",
      "detail": "The AppMirror relationship has been successfully
established."
    }
  ],
  "healthState": "normal",
  "healthStateTransitions": [
    {
      "from": "indeterminate",
      "to": [
        "normal",
        "warning",
        "critical"
      ]
    }
  ],
  {
    "from": "normal",

```

```

        "to": [
            "indeterminate",
            "warning",
            "critical"
        ]
    },
    {
        "from": "warning",
        "to": [
            "indeterminate",
            "normal",
            "critical"
        ]
    },
    {
        "from": "critical",
        "to": [
            "indeterminate",
            "normal",
            "warning"
        ]
    }
],
"healthStateDetails": [
    {
        "type": "https://astra.netapp.io/stateDetails/2",
        "title": "SnapMirror syncing successfully",
        "detail": "All SnapMirror relationships are synchronizing as
expected."
    }
],
"metadata": {
    "labels": [],
    "creationTimestamp": "2020-08-06T12:24:52.256624Z",
    "modificationTimestamp": "2020-08-06T12:24:52.256624Z",
    "createdBy": "11c0cfa1-4f27-4ef7-a21c-cb452fc5c9aa"
}
],
"metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
}
}

```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

## Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters



### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	

Name	Type	Required	Description
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

### Definitions

## See Definitions

### namespaceMapping

Name	Type	Required	Description
clusterID	string	False	Identifier of the cluster for which the namespaces are specified. Defined values are: <ul style="list-style-type: none"><li>• Conforms to the Astra Identifier Schema</li></ul>
namespaces	array[string]	False	List of namespaces to use on the cluster. Correlated with the other cluster namespace list by index. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 1</li><li>• Maximum length: 63</li><li>• Conforms to the DNS 1123 Label Schema</li></ul>

### storageClasses

Name	Type	Required	Description
clusterID	string	False	Identifier of the cluster for which the storage class is specified. Defined values are: <ul style="list-style-type: none"><li>• Conforms to the Astra Identifier Schema</li></ul>

Name	Type	Required	Description
storageClassName	string	False	Name of the storage class to use when creating PVCs on the cluster specified in "clusterID". Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>

#### type\_astra\_stateTransitions

Name	Type	Required	Description
from	string	True	
to	array[string]	True	

#### type\_astra\_stateDetails

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	

#### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

#### type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[ <a href="#">type_astra_label</a> ]	False	
creationTimestamp	string	False	

Name	Type	Required	Description
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

appMirror\_1.0\_get\_response\_body

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"> <li>"application/astra-appMirror"</li> </ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>"1.0"</li> </ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>Conforms to the UUIDv4 Schema</li> </ul>
sourceAppID	string	True	Identifier of the source application. Only updated when swapping the sourceAppID with the destinationAppID. Defined values are: <ul style="list-style-type: none"> <li>Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
sourceClusterID	string	True	<p>Identifier of the managed cluster hosting the source application. This field is read-only and is determined based on the host cluster of the source application. If provided in an update, it must match the cluster ID of the source application, so it can only change when swapping the sourceAppID with destinationAppID. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
destinationAppID	string	False	<p>Identifier of the destination application. Cannot be provided at creation time because a new app ID will be generated as part of relationship initialization. Can only be updated when swapping sourceAppID with the destinationAppID. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
destinationClusterID	string	True	<p>Identifier of the managed cluster to host the destination application. Must be provided at creation time because it determines the cluster on which the destination application will be created.</p> <p>If provided in an update, it must match the cluster ID of the destination application, so it can only change when also swapping sourceAppID with destinationAppID. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
namespaceMapping	array[ <a href="#">namespaceMapping</a> ]	False	<p>The namespace or namespaces to use when creating the destination application, corresponding to the namespaces of the source application. Each JSON object contains the fields "clusterID" and "namespaces", where the "clusterID" value is the JSON string ID of the source or destination cluster, and the "namespaces" value is a JSON array of JSON strings. There must be exactly one JSON object for each cluster, and the namespaces will be correlated by index. If not provided, the same namespace from the source cluster will be used in the destination cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 0</li> <li>• Maximum length: 2</li> </ul>



Name	Type	Required	Description
storageClasses	array[ <a href="#">storageClasses</a> ]	False	<p>The storage class to be used on the destination cluster when creating new Persistent Volume Claims (PVCs). Each JSON object contains the fields "clusterID" and "storageClassName", where the "clusterID" value is the JSON string ID of the source or destination cluster, and the "storageClassName" is the storage class to use when creating PVCs on that cluster.</p> <p>If not provided or the value is missing for a cluster, the default storage class will be used for that cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 0</li> <li>• Maximum length: 2</li> </ul>

Name	Type	Required	Description
state	string	True	<p>The state of the relationship.</p> <p>Defined values are:</p> <ul style="list-style-type: none"><li>• "establishing" - The relationship is being created.</li><li>• "established" - The relationship is created.</li><li>• "failingOver" - Failover of the application to the destination cluster is in progress.</li><li>• "failedOver" - Failover of the application to the destination cluster has completed.</li><li>• "deleting" - Resources created by the relationship are being cleaned up.</li><li>• "deleted" - The relationship was cleaned up and deleted.</li></ul>

Name	Type	Required	Description
stateTransitions	array[type_astra_stateTransitions]	False	<p>Permitted state transitions. The following state transitions are possible for this resource:</p> <ul style="list-style-type: none"> <li>• "establishing": "established", "deleting"</li> <li>• "established": "failingOver", "deleting"</li> <li>• "failingOver": "failedOver", "deleting"</li> <li>• "failedOver": "establishing", "deleting"</li> <li>• "deleting": "deleted"</li> <li>• "deleted":</li> </ul>
stateDesired	string	True	<p>The desired state for the relationship. At creation, the only valid value is "established". Defined values are:</p> <ul style="list-style-type: none"> <li>• "established" - The relationship is created.</li> <li>• "failedOver" - Failover of the application to the destination cluster has completed.</li> <li>• "deleted" - The relationship was successfully cleaned up and deleted.</li> </ul>

Name	Type	Required	Description
stateAllowed	array[string]	False	<p>States that can be requested in a given state.</p> <p>The following states can be requested in each defined state:</p> <ul style="list-style-type: none"> <li>• "establishing": "established", "deleted"</li> <li>• "established": "failedOver", "deleted"</li> <li>• "failingOver": "failedOver", "deleted"</li> <li>• "failedOver": "established", "deleted"</li> <li>• "deleting": "deleted"</li> <li>• "deleted": "deleted"</li> </ul>
stateDetails	array[ <a href="#">type_astra_stateDetails</a> ]	True	<p>Additional details about the current state, including why the current state was reached.</p> <p>If no details are available, this array will be empty.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum Items: 0</li> </ul>

Name	Type	Required	Description
transferState	string	False	<p>State of the current or most recent snapshot transfer.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "transferring" - A new snapshot was created and is now being replicated to the destination cluster. This state also covers the transfers that have failed on previous attempts and are being continually retried.</li> <li>• "idle" - There is currently no transfer in progress.</li> </ul>
transferStateTransitions	array[type_astra_stateTransitions]	False	<p>Permitted state transitions from a given defined state.</p> <p>The following state transitions are possible for this resource:</p> <ul style="list-style-type: none"> <li>• "transferring": "idle"</li> <li>• "idle": "transferring"</li> </ul>
transferStateDetails	array[type_astra_stateDetails]	False	<p>Additional details about the current state including why the current state was reached.</p> <p>If no details are available, this array will be empty.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum Items: 0</li> </ul>

Name	Type	Required	Description
healthState	string	True	<p>Health state of the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "indeterminate" - The health of the resource cannot be determined (for example, due to lack of connectivity)</li> <li>• "normal" - The resource has no known issues and can provide services in accordance with the interface specification</li> <li>• "warning" - The resource has known issues that do not prevent it providing services in accordance with the interface specification</li> <li>• "critical" - The resource has known issues that prevent it from providing services in accordance with the interface specification</li> </ul>

Name	Type	Required	Description
healthStateTransitions	array[ <a href="#">type_astra_stateTransitions</a> ]	True	<p>Permitted state transitions from a given defined state.</p> <p>The following state transitions are possible for this resource:</p> <ul style="list-style-type: none"> <li>• "indeterminate": "normal", "warning", "critical"</li> <li>• "normal": "indeterminate", "warning", "critical"</li> <li>• "warning": "indeterminate", "normal", "critical"</li> <li>• "critical": "indeterminate", "normal", "warning"</li> </ul>
healthStateDetails	array[ <a href="#">type_astra_stateDetails</a> ]	True	<p>Additional details about the current state including why the current state was reached.</p> <p>If no details are available, this array will be empty.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum Items: 0</li> </ul>

Name	Type	Required	Description
metadata	<a href="#">type_astra_metadata_update</a>	True	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>Conforms to the Astra Metadata Schema</li> </ul> <p>If not specified on create, a metadata object will be created with no labels.</p> <p>If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</p>

#### type\_astra\_metadata\_list

Name	Type	Required	Description
continue	string	False	
count	number	False	
labels	array[ <a href="#">type_astra_label</a> ]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

#### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid



## Retrieve an AppMirror resource for an app

GET /accounts/{account\_id}/k8s/v1/apps/{app\_id}/appMirrors/{appMirror\_id}

Returns the stored AppMirror API resource in the JSON response body.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"><li>example: <code>{{.Account}}</code></li></ul>
app_id	string	path	True	ID of the containing app resource
appMirror_id	string	path	True	ID of the appMirror collection to list

### Response

Status: 200, Returns the stored AppMirror API resource in the JSON response body.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>"application/astra-appMirror"</li></ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"><li>"1.0"</li></ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"><li>Conforms to the UUIDv4 Schema</li></ul>

Name	Type	Required	Description
sourceAppID	string	True	<p>Identifier of the source application. Only updated when swapping the sourceAppID with the destinationAppID. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
sourceClusterID	string	True	<p>Identifier of the managed cluster hosting the source application. This field is read-only and is determined based on the host cluster of the source application. If provided in an update, it must match the cluster ID of the source application, so it can only change when swapping the sourceAppID with destinationAppID. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
destinationAppID	string	False	<p>Identifier of the destination application. Cannot be provided at creation time because a new app ID will be generated as part of relationship initialization. Can only be updated when swapping sourceAppID with the destinationAppID. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
destinationClusterID	string	True	<p>Identifier of the managed cluster to host the destination application. Must be provided at creation time because it determines the cluster on which the destination application will be created.</p> <p>If provided in an update, it must match the cluster ID of the destination application, so it can only change when also swapping sourceAppID with destinationAppID.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
namespaceMapping	array[ <a href="#">namespaceMapping</a> ]	False	<p>The namespace or namespaces to use when creating the destination application, corresponding to the namespaces of the source application. Each JSON object contains the fields "clusterID" and "namespaces", where the "clusterID" value is the JSON string ID of the source or destination cluster, and the "namespaces" value is a JSON array of JSON strings. There must be exactly one JSON object for each cluster, and the namespaces will be correlated by index.</p> <p>If not provided, the same namespace from the source cluster will be used in the destination cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 0</li> <li>• Maximum length: 2</li> </ul>

Name	Type	Required	Description
storageClasses	array[ <a href="#">storageClasses</a> ]	False	<p>The storage class to be used on the destination cluster when creating new Persistent Volume Claims (PVCs). Each JSON object contains the fields "clusterID" and "storageClassName", where the "clusterID" value is the JSON string ID of the source or destination cluster, and the "storageClassName" is the storage class to use when creating PVCs on that cluster.</p> <p>If not provided or the value is missing for a cluster, the default storage class will be used for that cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 0</li> <li>• Maximum length: 2</li> </ul>

Name	Type	Required	Description
state	string	True	<p>The state of the relationship.</p> <p>Defined values are:</p> <ul style="list-style-type: none"><li>• "establishing" - The relationship is being created.</li><li>• "established" - The relationship is created.</li><li>• "failingOver" - Failover of the application to the destination cluster is in progress.</li><li>• "failedOver" - Failover of the application to the destination cluster has completed.</li><li>• "deleting" - Resources created by the relationship are being cleaned up.</li><li>• "deleted" - The relationship was cleaned up and deleted.</li></ul>

Name	Type	Required	Description
stateTransitions	array[type_astra_stateTransitions]	False	<p>Permitted state transitions. The following state transitions are possible for this resource:</p> <ul style="list-style-type: none"> <li>• "establishing": "established", "deleting"</li> <li>• "established": "failingOver", "deleting"</li> <li>• "failingOver": "failedOver", "deleting"</li> <li>• "failedOver": "establishing", "deleting"</li> <li>• "deleting": "deleted"</li> <li>• "deleted":</li> </ul>
stateDesired	string	True	<p>The desired state for the relationship. At creation, the only valid value is "established". Defined values are:</p> <ul style="list-style-type: none"> <li>• "established" - The relationship is created.</li> <li>• "failedOver" - Failover of the application to the destination cluster has completed.</li> <li>• "deleted" - The relationship was successfully cleaned up and deleted.</li> </ul>

Name	Type	Required	Description
stateAllowed	array[string]	False	<p>States that can be requested in a given state.</p> <p>The following states can be requested in each defined state:</p> <ul style="list-style-type: none"> <li>• "establishing": "established", "deleted"</li> <li>• "established": "failedOver", "deleted"</li> <li>• "failingOver": "failedOver", "deleted"</li> <li>• "failedOver": "established", "deleted"</li> <li>• "deleting": "deleted"</li> <li>• "deleted": "deleted"</li> </ul>
stateDetails	array[type_astra_stateDetails]	True	<p>Additional details about the current state, including why the current state was reached.</p> <p>If no details are available, this array will be empty.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum Items: 0</li> </ul>

Name	Type	Required	Description
transferState	string	False	<p>State of the current or most recent snapshot transfer.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "transferring" - A new snapshot was created and is now being replicated to the destination cluster. This state also covers the transfers that have failed on previous attempts and are being continually retried.</li> <li>• "idle" - There is currently no transfer in progress.</li> </ul>
transferStateTransitions	array[type_astra_stateTransitions]	False	<p>Permitted state transitions from a given defined state.</p> <p>The following state transitions are possible for this resource:</p> <ul style="list-style-type: none"> <li>• "transferring": "idle"</li> <li>• "idle": "transferring"</li> </ul>
transferStateDetails	array[type_astra_stateDetails]	False	<p>Additional details about the current state including why the current state was reached.</p> <p>If no details are available, this array will be empty.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum Items: 0</li> </ul>



Name	Type	Required	Description
healthState	string	True	<p>Health state of the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "indeterminate" - The health of the resource cannot be determined (for example, due to lack of connectivity)</li> <li>• "normal" - The resource has no known issues and can provide services in accordance with the interface specification</li> <li>• "warning" - The resource has known issues that do not prevent it providing services in accordance with the interface specification</li> <li>• "critical" - The resource has known issues that prevent it from providing services in accordance with the interface specification</li> </ul>

Name	Type	Required	Description
healthStateTransitions	array[type_astra_stateTransitions]	True	<p>Permitted state transitions from a given defined state.</p> <p>The following state transitions are possible for this resource:</p> <ul style="list-style-type: none"> <li>• "indeterminate": "normal", "warning", "critical"</li> <li>• "normal": "indeterminate", "warning", "critical"</li> <li>• "warning": "indeterminate", "normal", "critical"</li> <li>• "critical": "indeterminate", "normal", "warning"</li> </ul>
healthStateDetails	array[type_astra_stateDetails]	True	<p>Additional details about the current state including why the current state was reached.</p> <p>If no details are available, this array will be empty.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum Items: 0</li> </ul>
metadata	type_astra_metadata_update	True	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema</li> </ul> <p>If not specified on create, a metadata object will be created with no labels.</p> <p>If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</p>

## Example response

```
{
  "type": "application/astra-appMirror",
  "version": "1.0",
  "id": "c5fbadd4-5d9e-5942-bb7f-f5386b6b6253",
  "sourceAppID": "efd639b6-fc92-4112-8841-0c0ab7890ae0",
  "sourceClusterID": "5789e026-c2e2-41e9-ab00-9766bcfa8951",
  "destinationAppID": "cd7b6d91-fc19-4983-a754-9a7bb4d80a7b",
  "destinationClusterID": "c5d023a9-4061-4a8a-bfbf-3be11ff06226",
  "namespaceMapping": [
    {
      "clusterID": "5789e026-c2e2-41e9-ab00-9766bcfa8951",
      "namespaces": [
        "ns1-src",
        "ns2-src"
      ]
    },
    {
      "clusterID": "c5d023a9-4061-4a8a-bfbf-3be11ff06226",
      "namespaces": [
        "ns1-dest",
        "ns2-dest"
      ]
    }
  ],
  "state": "established",
  "stateTransitions": [
    {
      "from": "establishing",
      "to": [
        "established",
        "deleting"
      ]
    },
    {
      "from": "established",
      "to": [
        "failingOver",
        "deleting"
      ]
    },
    {
      "from": "failingOver",
      "to": [
        "failedOver",

```

```

        "deleting"
    ]
},
{
    "from": "failedOver",
    "to": [
        "establishing",
        "deleting"
    ]
},
{
    "from": "deleting",
    "to": [
        "deleted"
    ]
}
],
"stateDesired": "established",
"stateAllowed": [
    "failedOver",
    "deleted"
],
"stateDetails": [
    {
        "type": "https://astra.netapp.io/stateDetails/1",
        "title": "AppMirror relationship established",
        "detail": "The AppMirror relationship has been successfully
established."
    }
],
"healthState": "normal",
"healthStateTransitions": [
    {
        "from": "indeterminate",
        "to": [
            "normal",
            "warning",
            "critical"
        ]
    },
    {
        "from": "normal",
        "to": [
            "indeterminate",
            "warning",
            "critical"
        ]
    }
]

```

```

    ]
  },
  {
    "from": "warning",
    "to": [
      "indeterminate",
      "normal",
      "critical"
    ]
  },
  {
    "from": "critical",
    "to": [
      "indeterminate",
      "normal",
      "warning"
    ]
  }
],
"healthStateDetails": [
  {
    "type": "https://astra.netapp.io/stateDetails/2",
    "title": "SnapMirror syncing successfully",
    "detail": "All SnapMirror relationships are synchronizing as
expected."
  }
],
"metadata": {
  "labels": [],
  "creationTimestamp": "2022-10-06T20:58:16.305662Z",
  "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
  "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
}
}

```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	

Name	Type	Required	Description
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

## Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

## Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

## Definitions



## See Definitions

### namespaceMapping

Name	Type	Required	Description
clusterID	string	False	Identifier of the cluster for which the namespaces are specified. Defined values are: <ul style="list-style-type: none"><li>• Conforms to the Astra Identifier Schema</li></ul>
namespaces	array[string]	False	List of namespaces to use on the cluster. Correlated with the other cluster namespace list by index. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 1</li><li>• Maximum length: 63</li><li>• Conforms to the DNS 1123 Label Schema</li></ul>

### storageClasses

Name	Type	Required	Description
clusterID	string	False	Identifier of the cluster for which the storage class is specified. Defined values are: <ul style="list-style-type: none"><li>• Conforms to the Astra Identifier Schema</li></ul>

Name	Type	Required	Description
storageClassName	string	False	Name of the storage class to use when creating PVCs on the cluster specified in "clusterID". Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>

#### type\_astra\_stateTransitions

Name	Type	Required	Description
from	string	True	
to	array[string]	True	

#### type\_astra\_stateDetails

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	

#### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

#### type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[ <a href="#">type_astra_label</a> ]	False	
creationTimestamp	string	False	

Name	Type	Required	Description
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Modify an AppMirror resource for an app

PUT /accounts/{account\_id}/k8s/v1/apps/{app\_id}/appMirrors/{appMirror\_id}

Replaces the entire stored resource with the supplied JSON request body while preserving key values that are not user-modifiable.

### Side Effects

- Various side effects based on desiredState.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource  • example: {{.Account}}
app_id	string	path	True	ID of the containing app resource
appMirror_id	string	path	True	ID of the appMirror collection to list

### Request Body

Replaces the entire stored resource with the supplied JSON request body while preserving key values that are not user-modifiable.

### Side Effects

- Various side effects based on desiredState.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "application/astra-appMirror"</li> </ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "1.0"</li> </ul>
id	string	False	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the UUIDv4 Schema</li> </ul>
sourceAppID	string	False	Identifier of the source application. Only updated when swapping the sourceAppID with the destinationAppID. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
sourceClusterID	string	False	Identifier of the managed cluster hosting the source application. This field is read-only and is determined based on the host cluster of the source application. If provided in an update, it must match the cluster ID of the source application, so it can only change when swapping the sourceAppID with destinationAppID. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
destinationAppID	string	False	<p>Identifier of the destination application. Cannot be provided at creation time because a new app ID will be generated as part of relationship initialization. Can only be updated when swapping sourceAppID with the destinationAppID. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
destinationClusterID	string	False	<p>Identifier of the managed cluster to host the destination application. Must be provided at creation time because it determines the cluster on which the destination application will be created. If provided in an update, it must match the cluster ID of the destination application, so it can only change when also swapping sourceAppID with destinationAppID. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
namespaceMapping	array[ <a href="#">namespaceMapping</a> ]	False	<p>The namespace or namespaces to use when creating the destination application, corresponding to the namespaces of the source application. Each JSON object contains the fields "clusterID" and "namespaces", where the "clusterID" value is the JSON string ID of the source or destination cluster, and the "namespaces" value is a JSON array of JSON strings. There must be exactly one JSON object for each cluster, and the namespaces will be correlated by index. If not provided, the same namespace from the source cluster will be used in the destination cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 0</li> <li>• Maximum length: 2</li> </ul>

Name	Type	Required	Description
storageClasses	array[ <a href="#">storageClasses</a> ]	False	<p>The storage class to be used on the destination cluster when creating new Persistent Volume Claims (PVCs).</p> <p>Each JSON object contains the fields "clusterID" and "storageClassName", where the "clusterID" value is the JSON string ID of the source or destination cluster, and the "storageClassName" is the storage class to use when creating PVCs on that cluster.</p> <p>If not provided or the value is missing for a cluster, the default storage class will be used for that cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 0</li> <li>• Maximum length: 2</li> </ul>

Name	Type	Required	Description
state	string	False	<p>The state of the relationship.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "establishing" - The relationship is being created.</li> <li>• "established" - The relationship is created.</li> <li>• "failingOver" - Failover of the application to the destination cluster is in progress.</li> <li>• "failedOver" - Failover of the application to the destination cluster has completed.</li> <li>• "deleting" - Resources created by the relationship are being cleaned up.</li> <li>• "deleted" - The relationship was cleaned up and deleted.</li> </ul>



Name	Type	Required	Description
stateTransitions	array[type_astra_stateTransitions]	False	<p>Permitted state transitions.</p> <p>The following state transitions are possible for this resource:</p> <ul style="list-style-type: none"> <li>• "establishing": "established", "deleting"</li> <li>• "established": "failingOver", "deleting"</li> <li>• "failingOver": "failedOver", "deleting"</li> <li>• "failedOver": "establishing", "deleting"</li> <li>• "deleting": "deleted"</li> <li>• "deleted":</li> </ul>
stateDesired	string	False	<p>The desired state for the relationship.</p> <p>At creation, the only valid value is "established".</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "established" - The relationship is created.</li> <li>• "failedOver" - Failover of the application to the destination cluster has completed.</li> <li>• "deleted" - The relationship was successfully cleaned up and deleted.</li> </ul>

Name	Type	Required	Description
stateAllowed	array[string]	False	<p>States that can be requested in a given state.</p> <p>The following states can be requested in each defined state:</p> <ul style="list-style-type: none"> <li>• "establishing": "established", "deleted"</li> <li>• "established": "failedOver", "deleted"</li> <li>• "failingOver": "failedOver", "deleted"</li> <li>• "failedOver": "established", "deleted"</li> <li>• "deleting": "deleted"</li> <li>• "deleted": "deleted"</li> </ul>
stateDetails	array[type_astra_stateDetails]	False	<p>Additional details about the current state, including why the current state was reached.</p> <p>If no details are available, this array will be empty.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum Items: 0</li> </ul>

Name	Type	Required	Description
transferState	string	False	<p>State of the current or most recent snapshot transfer.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "transferring" - A new snapshot was created and is now being replicated to the destination cluster. This state also covers the transfers that have failed on previous attempts and are being continually retried.</li> <li>• "idle" - There is currently no transfer in progress.</li> </ul>
transferStateTransitions	array[type_astra_stateTransitions]	False	<p>Permitted state transitions from a given defined state.</p> <p>The following state transitions are possible for this resource:</p> <ul style="list-style-type: none"> <li>• "transferring": "idle"</li> <li>• "idle": "transferring"</li> </ul>
transferStateDetails	array[type_astra_stateDetails]	False	<p>Additional details about the current state including why the current state was reached.</p> <p>If no details are available, this array will be empty.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum Items: 0</li> </ul>

Name	Type	Required	Description
healthState	string	False	<p>Health state of the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "indeterminate" - The health of the resource cannot be determined (for example, due to lack of connectivity)</li> <li>• "normal" - The resource has no known issues and can provide services in accordance with the interface specification</li> <li>• "warning" - The resource has known issues that do not prevent it providing services in accordance with the interface specification</li> <li>• "critical" - The resource has known issues that prevent it from providing services in accordance with the interface specification</li> </ul>

Name	Type	Required	Description
healthStateTransitions	array[type_astra_stateTransitions]	False	<p>Permitted state transitions from a given defined state.</p> <p>The following state transitions are possible for this resource:</p> <ul style="list-style-type: none"> <li>• "indeterminate": "normal", "warning", "critical"</li> <li>• "normal": "indeterminate", "warning", "critical"</li> <li>• "warning": "indeterminate", "normal", "critical"</li> <li>• "critical": "indeterminate", "normal", "warning"</li> </ul>
healthStateDetails	array[type_astra_stateDetails]	False	<p>Additional details about the current state including why the current state was reached.</p> <p>If no details are available, this array will be empty.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum Items: 0</li> </ul>
metadata	type_astra_metadata_update	False	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</li> </ul>

### Example request

```
{
  "type": "application/astra-appMirror",
  "version": "1.0",
  "stateDesired": "failedOver"
}
```

### Response

Status: 204, Indicates if the appMirror resource was updated.

### Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 409, Conflict

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

## Example response

```
{
  "type": "https://astra.netapp.io/problems/10",
  "title": "JSON resource conflict",
  "detail": "The request body JSON contains a field that conflicts with
an idempotent value.",
  "status": "409"
}
```

## Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

## Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	



Name	Type	Required	Description
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{  
  "type": "https://astra.netapp.io/problems/1",  
  "title": "Resource not found",  
  "detail": "The resource specified in the request URI wasn't found.",  
  "status": "404"  
}
```

### Definitions

## See Definitions

### namespaceMapping

Name	Type	Required	Description
clusterID	string	False	Identifier of the cluster for which the namespaces are specified. Defined values are: <ul style="list-style-type: none"><li>• Conforms to the Astra Identifier Schema</li></ul>
namespaces	array[string]	False	List of namespaces to use on the cluster. Correlated with the other cluster namespace list by index. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 1</li><li>• Maximum length: 63</li><li>• Conforms to the DNS 1123 Label Schema</li></ul>

### storageClasses

Name	Type	Required	Description
clusterID	string	False	Identifier of the cluster for which the storage class is specified. Defined values are: <ul style="list-style-type: none"><li>• Conforms to the Astra Identifier Schema</li></ul>

Name	Type	Required	Description
storageClassName	string	False	Name of the storage class to use when creating PVCs on the cluster specified in "clusterID". Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>

#### type\_astra\_stateTransitions

Name	Type	Required	Description
from	string	True	
to	array[string]	True	

#### type\_astra\_stateDetails

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	

#### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

#### type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[ <a href="#">type_astra_label</a> ]	False	
creationTimestamp	string	False	

Name	Type	Required	Description
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

#### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

#### invalidFields

Name	Type	Required	Description
name	string	True	Name of the invalid request body field
reason	string	True	Reason why the request body field is invalid

## Delete an AppMirror resource for an app

DELETE /accounts/{account\_id}/k8s/v1/apps/{app\_id}/appMirrors/{appMirror\_id}

Removes the specified AppMirror API resource.

Starts a process to asynchronously remove the AppMirror resource, along with any resources on the source and destination clusters that were created as a result of the AppMirror relationship. The resources removed are dependent on the state of the relationship at the time of deletion.

### Side Effects

- The stateDesired field is set to "deleted".
- The state field is set to "deleting".
- If state is "established", the TridentMirrorRelationships and PersistentVolumeClaims created by the AppMirror relationship will be deleted.
- If state is "failedOver", the TridentMirrorRelationships created by the AppMirror relationship will be deleted and the PersistentVolumeClaims in the destination application will be left in place.
- When the asynchronous delete operation is completed, the appMirror API resource will be removed from both the source and destination applications.

## Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"><li>example: {{.Account}}</li></ul>
app_id	string	path	True	ID of the containing app resource
appMirror_id	string	path	True	ID of the appMirror collection to list

## Response

Status: 204, Indicates if the appMirror resource was deleted.

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

## Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

## Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

## Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

## Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example error response

```
{
  "type": "https://astra.netapp.io/problems/1",
  "title": "Resource not found",
  "detail": "The resource specified in the request URI wasn't found.",
  "status": "404"
}
```

## Definitions

## See Definitions

invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

# Application Asset

## Application Asset overview

The Application Asset API provides CRUD (Create-Read-Update-Delete) access to appAsset resources to provide access to internal collections of state used to manage applications.

## List the application assets for a managed cluster

GET

/accounts/{account\_id}/topology/v1/managedClusters/{managedCluster\_id}/apps/{app\_id}/appAssets

Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

## Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"><li>example: {{.Account}}</li></ul>
managedCluster_id	string	path	True	ID of the containing managedCluster resource
app_id	string	path	True	ID of the containing app resource



Name	Type	In	Required	Description
include	string	query	False	<p>Indicates which fields should be returned when listing a collection.</p> <p>URL examples: "include=id", "include=id,name"</p> <p>OpenAPI examples: "id"</p> <ul style="list-style-type: none"> <li>example: assetType,asset Name</li> </ul>
limit	string	query	False	<p>Indicates the maximum number of resources to return when listing a collection.</p> <p>URL examples: "limit=2"</p> <p>OpenAPI examples: "2"</p>

## Response

Status: 200, Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

Name	Type	Required	Description
items	array[Any of: <a href="#">appAsset_1.0_get_response_body</a> , array[]]	True	
metadata	<a href="#">type_astra_metadata_list</a>	True	

## Example response

```
{
  "type": "application/astra-appAssets",
  "version": "1.0",
  "items": [
    [
      "Pod",
      "mediawiki-69c6fcf864-2wx6l"
    ],
    [
      "ReplicaSet",
      "mediawiki-69c6fcf864"
    ],
    [
      "Service",
      "mediawiki"
    ],
    [
      "Deployment",
      "mediawiki"
    ]
  ],
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	

Name	Type	Required	Description
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't found.",
  "status": "404"
}
```

## Definitions

## See Definitions

GVK

JSON object containing a Kubernetes group/version/kind.

Name	Type	Required	Description
group	string	False	JSON string containing a group identifier assigned by Kubernetes. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 1</li><li>• Maximum length: 254</li></ul>
kind	string	False	JSON string containing a kind identifier assigned by Kubernetes. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 1</li><li>• Maximum length: 254</li></ul>
version	string	False	JSON string containing a version identifier assigned by Kubernetes. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 1</li><li>• Maximum length: 254</li></ul>

type\_json

JSON object containing the entire content of the Kubernetes resource definition.

labels

Name	Type	Required	Description
name	string	True	JSON string containing the label name Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> <li>• Defined regex is: <code>"^([\S.]{1,253}V)?([a-z0-9A-Z_-]){1,63}\$"</code></li> </ul>
value	string	True	JSON string containing the label value Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> <li>• Defined regex is: <code>"^[a-z0-9A-Z_-]{1,63}\$"</code></li> </ul>

#### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

#### type\_astra\_metadata

Client and service-specified metadata associated with the resource.  
Defined values are:

- Conforms to the Astra Metadata Schema

Name	Type	Required	Description
labels	array[ <a href="#">type_astra_label</a> ]	True	
creationTimestamp	string	True	
modificationTimestamp	string	True	
createdBy	string	True	
modifiedBy	string	False	

#### appAsset\_1.0\_get\_response\_body

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"> <li>"application/astra-appAsset"</li> </ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>"1.0"</li> </ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>Conforms to the UUIDv4 Schema</li> </ul>
assetType	string	True	JSON string containing a value indicating what type of asset is being described as obtained from Kubernetes. Defined values are: <ul style="list-style-type: none"> <li>Minimum length: 1</li> <li>Maximum length: 254</li> </ul>
creationTimestamp	string	True	JSON string containing a timestamp indicating when the Kubernetes metadata was created. Defined values are: <ul style="list-style-type: none"> <li>Conforms to the ISO-8601 Date Time Schema</li> </ul>
GVK	<a href="#">GVK</a>	True	JSON object containing a Kubernetes group/version/kind.
resource	<a href="#">type_json</a>	False	JSON object containing the entire content of the Kubernetes resource definition.



Name	Type	Required	Description
assetID	string	True	JSON string containing an identifier assigned by Kubernetes. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
labels	array[labels]	True	JSON array of JSON objects, each containing a Kubernetes labels associated with the asset. If no details are available, this array will be empty. <ul style="list-style-type: none"> <li>• Minimum items: 0</li> </ul>
assetName	string	True	JSON string containing a name assigned by Kubernetes. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 254</li> </ul>
namespace	string	False	JSON string containing a namespace assigned by Kubernetes. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 254</li> </ul>
metadata	type_astra_metadata	True	Client and service-specified metadata associated with the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema</li> </ul>

type\_astra\_metadata\_list

Name	Type	Required	Description
continue	string	False	
count	number	False	
labels	array[type_astra_label]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

#### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Retrieve an application asset for a managed cluster

GET

/accounts/{account\_id}/topology/v1/managedClusters/{managedCluster\_id}/apps/{app\_id}/appAssets/{appAsset\_id}

Returns the stored Application Asset API resource in the JSON response body.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"> <li>example: <code>{{.Account}}</code></li> </ul>
managedCluster_id	string	path	True	ID of the containing managedCluster resource
app_id	string	path	True	ID of the containing app resource

Name	Type	In	Required	Description
appAsset_id	string	path	True	ID of the appAsset collection to list

## Response

Status: 200, Returns the stored Application Asset API resource in the JSON response body.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"> <li>"application/astra-appAsset"</li> </ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>"1.0"</li> </ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>Conforms to the UUIDv4 Schema</li> </ul>
assetType	string	True	JSON string containing a value indicating what type of asset is being described as obtained from Kubernetes. Defined values are: <ul style="list-style-type: none"> <li>Minimum length: 1</li> <li>Maximum length: 254</li> </ul>

Name	Type	Required	Description
creationTimestamp	string	True	JSON string containing a timestamp indicating when the Kubernetes metadata was created. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>
GVK	GVK	True	JSON object containing a Kubernetes group/version/kind.
resource	type_json	False	JSON object containing the entire content of the Kubernetes resource definition.
assetID	string	True	JSON string containing an identifier assigned by Kubernetes. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
labels	array[labels]	True	JSON array of JSON objects, each containing a Kubernetes labels associated with the asset. If no details are available, this array will be empty. <ul style="list-style-type: none"> <li>• Minimum items: 0</li> </ul>
assetName	string	True	JSON string containing a name assigned by Kubernetes. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 254</li> </ul>

Name	Type	Required	Description
namespace	string	False	<p>JSON string containing a namespace assigned by Kubernetes.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 254</li> </ul>
metadata	type_astra_metadata	True	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema</li> </ul>

## Example response

```
{
  "type": "application/astra-appAsset",
  "version": "1.0",
  "id": "198f771e-c440-57d9-9f77-ec87e6bf665c",
  "assetType": "Pod",
  "creationTimestamp": "2020-08-06T12:24:52.256624Z",
  "GVK": {
    "group": "apps",
    "kind": "Pod",
    "version": "v1"
  },
  "assetID": "93ec0c61-d993-4aa1-bb08-f4dcdd5e97f6",
  "labels": [
    {
      "name": "app",
      "value": "mediawiki"
    },
    {
      "name": "pod-template-hash",
      "value": "69c6fcf864"
    }
  ],
  "assetName": "mediawiki-69c6fcf864-2wx61",
  "namespace": "wiki",
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	

Name	Type	Required	Description
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	



## Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

## Definitions

## See Definitions

GVK

JSON object containing a Kubernetes group/version/kind.

Name	Type	Required	Description
group	string	False	JSON string containing a group identifier assigned by Kubernetes. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 1</li><li>• Maximum length: 254</li></ul>
kind	string	False	JSON string containing a kind identifier assigned by Kubernetes. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 1</li><li>• Maximum length: 254</li></ul>
version	string	False	JSON string containing a version identifier assigned by Kubernetes. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 1</li><li>• Maximum length: 254</li></ul>

type\_json

JSON object containing the entire content of the Kubernetes resource definition.

labels

Name	Type	Required	Description
name	string	True	JSON string containing the label name Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> <li>• Defined regex is: <code>"^([\S.]{1,253}V)?([a-z0-9A-Z_-]){1,63}\$"</code></li> </ul>
value	string	True	JSON string containing the label value Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> <li>• Defined regex is: <code>"^{[a-z0-9A-Z_-]}{1,63}\$"</code></li> </ul>

#### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

#### type\_astra\_metadata

Client and service-specified metadata associated with the resource.  
Defined values are:

- Conforms to the Astra Metadata Schema

Name	Type	Required	Description
labels	array[ <a href="#">type_astra_label</a> ]	True	
creationTimestamp	string	True	
modificationTimestamp	string	True	
createdBy	string	True	
modifiedBy	string	False	

#### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## List the application assets for an app

GET /accounts/{account\_id}/k8s/v1/apps/{app\_id}/appAssets

Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource  • example: <code>{{.Account}}</code>
app_id	string	path	True	ID of the containing app resource
include	string	query	False	Indicates which fields should be returned when listing a collection.  URL examples: "include=id", "include=id,name"  OpenAPI examples: "id"  • example: assetType,asset Name

Name	Type	In	Required	Description
limit	string	query	False	Indicates the maximum number of resources to return when listing a collection.  URL examples: "limit=2"  OpenAPI examples: "2"

## Response

Status: 200, Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

Name	Type	Required	Description
items	array[Any of: <a href="#">appAsset_1.0_get_response_body</a> , array[]]	True	
metadata	<a href="#">type_astra_metadata_list</a>	True	

## Example response

```
{
  "type": "application/astra-appAssets",
  "version": "1.0",
  "items": [
    [
      "Pod",
      "mediawiki-69c6fcf864-2wx6l"
    ],
    [
      "ReplicaSet",
      "mediawiki-69c6fcf864"
    ],
    [
      "Service",
      "mediawiki"
    ],
    [
      "Deployment",
      "mediawiki"
    ]
  ],
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	

Name	Type	Required	Description
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't found.",
  "status": "404"
}
```



## Definitions

## See Definitions

GVK

JSON object containing a Kubernetes group/version/kind.

Name	Type	Required	Description
group	string	False	JSON string containing a group identifier assigned by Kubernetes. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 1</li><li>• Maximum length: 254</li></ul>
kind	string	False	JSON string containing a kind identifier assigned by Kubernetes. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 1</li><li>• Maximum length: 254</li></ul>
version	string	False	JSON string containing a version identifier assigned by Kubernetes. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 1</li><li>• Maximum length: 254</li></ul>

type\_json

JSON object containing the entire content of the Kubernetes resource definition.

labels

Name	Type	Required	Description
name	string	True	JSON string containing the label name Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> <li>• Defined regex is: <code>"^([\S.]{1,253}V)?([a-z0-9A-Z_-]){1,63}\$"</code></li> </ul>
value	string	True	JSON string containing the label value Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> <li>• Defined regex is: <code>"^{[a-z0-9A-Z_-]}{1,63}\$"</code></li> </ul>

#### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

#### type\_astra\_metadata

Client and service-specified metadata associated with the resource.  
Defined values are:

- Conforms to the Astra Metadata Schema

Name	Type	Required	Description
labels	array[ <a href="#">type_astra_label</a> ]	True	
creationTimestamp	string	True	
modificationTimestamp	string	True	
createdBy	string	True	
modifiedBy	string	False	

#### appAsset\_1.0\_get\_response\_body

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"> <li>"application/astra-appAsset"</li> </ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>"1.0"</li> </ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>Conforms to the UUIDv4 Schema</li> </ul>
assetType	string	True	JSON string containing a value indicating what type of asset is being described as obtained from Kubernetes. Defined values are: <ul style="list-style-type: none"> <li>Minimum length: 1</li> <li>Maximum length: 254</li> </ul>
creationTimestamp	string	True	JSON string containing a timestamp indicating when the Kubernetes metadata was created. Defined values are: <ul style="list-style-type: none"> <li>Conforms to the ISO-8601 Date Time Schema</li> </ul>
GVK	<a href="#">GVK</a>	True	JSON object containing a Kubernetes group/version/kind.
resource	<a href="#">type_json</a>	False	JSON object containing the entire content of the Kubernetes resource definition.

Name	Type	Required	Description
assetID	string	True	JSON string containing an identifier assigned by Kubernetes. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
labels	array[ <a href="#">labels</a> ]	True	JSON array of JSON objects, each containing a Kubernetes labels associated with the asset. If no details are available, this array will be empty. <ul style="list-style-type: none"> <li>• Minimum items: 0</li> </ul>
assetName	string	True	JSON string containing a name assigned by Kubernetes. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 254</li> </ul>
namespace	string	False	JSON string containing a namespace assigned by Kubernetes. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 254</li> </ul>
metadata	<a href="#">type_astra_metadata</a>	True	Client and service-specified metadata associated with the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema</li> </ul>

[type\\_astra\\_metadata\\_list](#)

Name	Type	Required	Description
continue	string	False	
count	number	False	
labels	array[type_astra_label]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

#### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Retrieve an application asset for an app

GET /accounts/{account\_id}/k8s/v1/apps/{app\_id}/appAssets/{appAsset\_id}

Returns the stored Application Asset API resource in the JSON response body.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource  • example: {{.Account}}
app_id	string	path	True	ID of the containing app resource
appAsset_id	string	path	True	ID of the appAsset collection to list

### Response

Status: 200, Returns the stored Application Asset API resource in the JSON response body.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"> <li>"application/astra-appAsset"</li> </ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>"1.0"</li> </ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>Conforms to the UUIDv4 Schema</li> </ul>
assetType	string	True	JSON string containing a value indicating what type of asset is being described as obtained from Kubernetes. Defined values are: <ul style="list-style-type: none"> <li>Minimum length: 1</li> <li>Maximum length: 254</li> </ul>
creationTimestamp	string	True	JSON string containing a timestamp indicating when the Kubernetes metadata was created. Defined values are: <ul style="list-style-type: none"> <li>Conforms to the ISO-8601 Date Time Schema</li> </ul>
GVK	<a href="#">GVK</a>	True	JSON object containing a Kubernetes group/version/kind.

Name	Type	Required	Description
resource	<a href="#">type_json</a>	False	JSON object containing the entire content of the Kubernetes resource definition.
assetID	string	True	JSON string containing an identifier assigned by Kubernetes. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
labels	array[ <a href="#">labels</a> ]	True	JSON array of JSON objects, each containing a Kubernetes labels associated with the asset. If no details are available, this array will be empty. <ul style="list-style-type: none"> <li>• Minimum items: 0</li> </ul>
assetName	string	True	JSON string containing a name assigned by Kubernetes. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 254</li> </ul>
namespace	string	False	JSON string containing a namespace assigned by Kubernetes. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 254</li> </ul>
metadata	<a href="#">type_astra_metadata</a>	True	Client and service-specified metadata associated with the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema</li> </ul>



## Example response

```
{
  "type": "application/astra-appAsset",
  "version": "1.0",
  "id": "198f771e-c440-57d9-9f77-ec87e6bf665c",
  "assetType": "Pod",
  "creationTimestamp": "2020-08-06T12:24:52.256624Z",
  "GVK": {
    "group": "apps",
    "kind": "Pod",
    "version": "v1"
  },
  "assetID": "93ec0c61-d993-4aa1-bb08-f4dcdd5e97f6",
  "labels": [
    {
      "name": "app",
      "value": "mediawiki"
    },
    {
      "name": "pod-template-hash",
      "value": "69c6fcf864"
    }
  ],
  "assetName": "mediawiki-69c6fcf864-2wx61",
  "namespace": "wiki",
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	

Name	Type	Required	Description
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

## Definitions

## See Definitions

GVK

JSON object containing a Kubernetes group/version/kind.

Name	Type	Required	Description
group	string	False	JSON string containing a group identifier assigned by Kubernetes. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 1</li><li>• Maximum length: 254</li></ul>
kind	string	False	JSON string containing a kind identifier assigned by Kubernetes. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 1</li><li>• Maximum length: 254</li></ul>
version	string	False	JSON string containing a version identifier assigned by Kubernetes. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 1</li><li>• Maximum length: 254</li></ul>

type\_json

JSON object containing the entire content of the Kubernetes resource definition.

labels

Name	Type	Required	Description
name	string	True	JSON string containing the label name Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> <li>• Defined regex is: <code>"^([\S.]{1,253}V)?([a-z0-9A-Z_-]){1,63}\$"</code></li> </ul>
value	string	True	JSON string containing the label value Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> <li>• Defined regex is: <code>"^{[a-z0-9A-Z_-]}{1,63}\$"</code></li> </ul>

#### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

#### type\_astra\_metadata

Client and service-specified metadata associated with the resource.  
Defined values are:

- Conforms to the Astra Metadata Schema

Name	Type	Required	Description
labels	array[ <a href="#">type_astra_label</a> ]	True	
creationTimestamp	string	True	
modificationTimestamp	string	True	
createdBy	string	True	
modifiedBy	string	False	

#### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Application Backup

### Application Backup overview

The Application Backup API provides CRUD (Create-Read-Update-Delete) access to appBackup resources to create and view backups of a managed application.

### List all application backups

GET /accounts/{account\_id}/topology/v1/appBackups

Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

#### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"> <li>example: <code>{{.Account}}</code></li> </ul>
include	string	query	False	Indicates which fields should be returned when listing a collection. <p>URL examples: "include=id", "include=id,name"</p> <p>OpenAPI examples: "id"</p> <ul style="list-style-type: none"> <li>example: <code>id,name,state</code></li> </ul>

Name	Type	In	Required	Description
limit	string	query	False	Indicates the maximum number of resources to return when listing a collection.  URL examples: "limit=2"  OpenAPI examples: "2"

## Response

Status: 200, Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

Name	Type	Required	Description
items	array[Any of: <a href="#">appBackup_1.1_get_response_body</a> , array[]]	True	
metadata	<a href="#">type_astra_metadata_list</a>	True	



## Example response

```
{
  "type": "application/astra-appBackups",
  "version": "1.1",
  "items": [
    [
      "5cb608f9-571b-492e-a520-5bfb900a9b9c",
      "app-name-245",
      "pending"
    ],
    [
      "f8faa690-7e09-48a4-b33c-7965712acd0c",
      "app-name-244",
      "completed"
    ]
  ],
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	

Name	Type	Required	Description
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Response

Status: 500, Internal server error

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/96",
  "title": "Backups not listed",
  "detail": "The backups didn't list because of an internal server issue.",
  "status": "500"
}
```

## Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

## Definitions

## See Definitions

### type\_astra\_stateDetails

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### type\_astra\_metadata

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.

Name	Type	Required	Description
labels	array[type_astra_label]	True	
creationTimestamp	string	True	
modificationTimestamp	string	True	
createdBy	string	True	
modifiedBy	string	False	

### appBackup\_1.1\_get\_response\_body

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>• "application/astra-appBackup"</li></ul>

Name	Type	Required	Description
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "1.0"</li> <li>• "1.1"</li> </ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the UUIDv4 Schema</li> </ul>
name	string	True	JSON string containing a user-specified name for the backup. If not specified, or when backups are initiated by a schedule, the system will assign a name for the backup. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> <li>• Conforms to the DNS 1123 Label Schema</li> </ul>
bucketID	string	True	JSON string containing an optional bucket ID that indicates where the backup will be stored on create. If not specified, a system-selected bucket is used. If no buckets are available, an error will be returned on create. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
snapshotID	string	False	<p>JSON string containing the snapshot that was used to create the backup. To create the backup, a snapshot ID associated with the application being backed up can be specified on create. If not specified, a new snapshot will be created for the backup. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
scheduleID	string	False	<p>JSON string containing an optional schedule ID that indicates that the backup was triggered by a schedule and which schedule triggered the backup. Only present for backups initiated by a schedule. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
state	string	True	<p>JSON string containing a value indicating the operational state of the backup.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "pending" - The application backup is scheduled for discovery</li> <li>• "discovering" - The application backup is in the process of being discovered</li> <li>• "running" - The application backup is running normally</li> <li>• "completed" - The application backup has completed successfully</li> <li>• "failed" - The application backup is in a permanent failure state</li> <li>• "removed" - The application backup is not currently accessible</li> <li>• "unknown" - The application backup state cannot be determined</li> </ul>
stateUnready	array[string]	True	<p>JSON array of JSON strings, each indicating a reason why an application backup is unable to transition to "running", or why it has transitioned to "failed" or "removed".</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 127</li> </ul>



Name	Type	Required	Description
hookState	string	False	<p>JSON string containing a value indicating the state of any execution hooks run as part of snapshot. Defined values are:</p> <ul style="list-style-type: none"> <li>• "failed" - One or more execution hooks have failed</li> <li>• "success" - There were zero or more applicable hooks and all were successful</li> </ul>
hookStateDetails	array[type_astra_stateDetails]	False	<p>JSON array of JSON objects which lists additional details about why "hookState" transitioned into "failed". If no details are available, this array will be empty.</p> <ul style="list-style-type: none"> <li>• Minimum items: 0</li> </ul>
backupCreationTimestamp	string	False	<p>JSON string containing a timestamp indicating when the backup was taken. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>
totalBytes	number	False	<p>JSON number containing the total number of bytes in the backup.</p>
bytesDone	number	False	<p>JSON number containing the number of bytes backed up for a running backup. When the backup is completed, it matches with the totalBytes field.</p>

Name	Type	Required	Description
percentDone	number	False	JSON number containing the percentage complete for a running backup. When the backup is completed, it is set to "100".
metadata	<a href="#">type_astra_metadata</a>	True	Client and service-specified metadata associated with the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels.</li> </ul>

#### type\_astra\_metadata\_list

Name	Type	Required	Description
continue	string	False	
count	number	False	
labels	array[ <a href="#">type_astra_label</a> ]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

#### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Retrieve an application backup

GET /accounts/{account\_id}/topology/v1/appBackups/{appBackup\_id}

Returns the stored Application Backup API resource in the JSON response body.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"><li>example: <code>{{.Account}}</code></li></ul>
appBackup_id	string	path	True	ID of the appBackup collection to list

### Response

Status: 200, Returns the stored Application Backup API resource in the JSON response body.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>"application/astra-appBackup"</li></ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"><li>"1.0"</li><li>"1.1"</li></ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"><li>Conforms to the UUIDv4 Schema</li></ul>

Name	Type	Required	Description
name	string	True	<p>JSON string containing a user-specified name for the backup. If not specified, or when backups are initiated by a schedule, the system will assign a name for the backup.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> <li>• Conforms to the DNS 1123 Label Schema</li> </ul>
bucketID	string	True	<p>JSON string containing an optional bucket ID that indicates where the backup will be stored on create. If not specified, a system-selected bucket is used. If no buckets are available, an error will be returned on create.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
snapshotID	string	False	<p>JSON string containing the snapshot that was used to create the backup. To create the backup, a snapshot ID associated with the application being backed up can be specified on create. If not specified, a new snapshot will be created for the backup.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
scheduleID	string	False	<p>JSON string containing an optional schedule ID that indicates that the backup was triggered by a schedule and which schedule triggered the backup. Only present for backups initiated by a schedule.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
state	string	True	<p>JSON string containing a value indicating the operational state of the backup.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "pending" - The application backup is scheduled for discovery</li> <li>• "discovering" - The application backup is in the process of being discovered</li> <li>• "running" - The application backup is running normally</li> <li>• "completed" - The application backup has completed successfully</li> <li>• "failed" - The application backup is in a permanent failure state</li> <li>• "removed" - The application backup is not currently accessible</li> <li>• "unknown" - The application backup state cannot be determined</li> </ul>

Name	Type	Required	Description
stateUnready	array[string]	True	<p>JSON array of JSON strings, each indicating a reason why an application backup is unable to transition to "running", or why it has transitioned to "failed" or "removed".</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 127</li> </ul>
hookState	string	False	<p>JSON string containing a value indicating the state of any execution hooks run as part of snapshot.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "failed" - One or more execution hooks have failed</li> <li>• "success" - There were zero or more applicable hooks and all were successful</li> </ul>
hookStateDetails	array[ <a href="#">type_astra_stateDetails</a> ]	False	<p>JSON array of JSON objects which lists additional details about why "hookState" transitioned into "failed". If no details are available, this array will be empty.</p> <ul style="list-style-type: none"> <li>• Minimum items: 0</li> </ul>
backupCreationTimestamp	string	False	<p>JSON string containing a timestamp indicating when the backup was taken.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>
totalBytes	number	False	<p>JSON number containing the total number of bytes in the backup.</p>

Name	Type	Required	Description
bytesDone	number	False	JSON number containing the number of bytes backed up for a running backup. When the backup is completed, it matches with the totalBytes field.
percentDone	number	False	JSON number containing the percentage complete for a running backup. When the backup is completed, it is set to "100".
metadata	<a href="#">type_astra_metadata</a>	True	Client and service-specified metadata associated with the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels.</li> </ul>

## Example response

```
{
  "type": "application/astra-appBackup",
  "version": "1.1",
  "id": "54fe651d-3d3b-5fa8-b85c-5db757885ff3",
  "name": "app-name-245",
  "bucketID": "0afbe357-a717-4c7a-8b3d-d0368959c8de",
  "scheduleID": "1fe83650-9b3c-41ef-bb25-a2910c19c33e",
  "state": "pending",
  "stateUnready": [],
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```



## Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

## Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

## Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Response

Status: 500, Internal server error

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/95",
  "title": "Backup not retrieved",
  "detail": "The backup wasn't retrieved because of an internal server issue.",
  "status": "500"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	

Name	Type	Required	Description
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

### Definitions

## See Definitions

### type\_astra\_stateDetails

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### type\_astra\_metadata

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.

Name	Type	Required	Description
labels	array[type_astra_label]	True	
creationTimestamp	string	True	
modificationTimestamp	string	True	
createdBy	string	True	
modifiedBy	string	False	

### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Delete an application backup

DELETE /accounts/{account\_id}/topology/v1/appBackups/{appBackup\_id}

Removes the specified Application Backup API resource. Backups in progress will be canceled, and then deleted.

### Side Effects

- If a backup is complete, the backup data is deleted.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"><li>• example: <code>{{.Account}}</code></li></ul>
appBackup_id	string	path	True	ID of the appBackup collection to list

### Response

Status: 204, Indicates if the appBackup resource was deleted.

### Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	

Name	Type	Required	Description
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Response

Status: 500, Internal server error

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/97",
  "title": "Backup not deleted",
  "detail": "The backup wasn't deleted because of an internal server issue.",
  "status": "500"
}
```

## Response

Status: 409, Conflict

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/128",
  "title": "Backup cancellation not allowed",
  "detail": "A pending backup can't be canceled.",
  "status": "409"
}
```

## Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	



## Example error response

```
{
  "type": "https://astra.netapp.io/problems/1",
  "title": "Resource not found",
  "detail": "The resource specified in the request URI wasn't found.",
  "status": "404"
}
```

## Definitions

### See Definitions

invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Create a new application backup for an app

POST /accounts/{account\_id}/k8s/v1/apps/{app\_id}/appBackups

Indicates the desired values for the Application Backup API resource to be created.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"><li>example: {{.Account}}</li></ul>
app_id	string	path	True	ID of the containing app resource

### Request Body

Indicates the desired values for the Application Backup API resource to be created.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "application/astra-appBackup"</li> </ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "1.0"</li> <li>• "1.1"</li> </ul>
name	string	False	JSON string containing a user-specified name for the backup. If not specified, or when backups are initiated by a schedule, the system will assign a name for the backup. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> <li>• Conforms to the DNS 1123 Label Schema</li> </ul>
bucketID	string	False	JSON string containing an optional bucket ID that indicates where the backup will be stored on create. If not specified, a system-selected bucket is used. If no buckets are available, an error will be returned on create. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
snapshotID	string	False	<p>JSON string containing the snapshot that was used to create the backup. To create the backup, a snapshot ID associated with the application being backed up can be specified on create. If not specified, a new snapshot will be created for the backup. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
metadata	<a href="#">type_astra_metadata</a>	False	<p>Client and service-specified metadata associated with the resource. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels.</li> </ul>

### Example request

```
{
  "type": "application/astra-appBackup",
  "version": "1.1",
  "name": "app-name-245"
}
```

### Response

Status: 201, Returns the newly created appBackup resource in the JSON response body.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "application/astra-appBackup"</li> </ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "1.0"</li> <li>• "1.1"</li> </ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the UUIDv4 Schema</li> </ul>
name	string	True	JSON string containing a user-specified name for the backup. If not specified, or when backups are initiated by a schedule, the system will assign a name for the backup. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> <li>• Conforms to the DNS 1123 Label Schema</li> </ul>
bucketID	string	True	JSON string containing an optional bucket ID that indicates where the backup will be stored on create. If not specified, a system-selected bucket is used. If no buckets are available, an error will be returned on create. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
snapshotID	string	False	<p>JSON string containing the snapshot that was used to create the backup. To create the backup, a snapshot ID associated with the application being backed up can be specified on create. If not specified, a new snapshot will be created for the backup. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
scheduleID	string	False	<p>JSON string containing an optional schedule ID that indicates that the backup was triggered by a schedule and which schedule triggered the backup. Only present for backups initiated by a schedule. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
state	string	True	<p>JSON string containing a value indicating the operational state of the backup.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "pending" - The application backup is scheduled for discovery</li> <li>• "discovering" - The application backup is in the process of being discovered</li> <li>• "running" - The application backup is running normally</li> <li>• "completed" - The application backup has completed successfully</li> <li>• "failed" - The application backup is in a permanent failure state</li> <li>• "removed" - The application backup is not currently accessible</li> <li>• "unknown" - The application backup state cannot be determined</li> </ul>
stateUnready	array[string]	True	<p>JSON array of JSON strings, each indicating a reason why an application backup is unable to transition to "running", or why it has transitioned to "failed" or "removed".</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 127</li> </ul>

Name	Type	Required	Description
hookState	string	False	<p>JSON string containing a value indicating the state of any execution hooks run as part of snapshot. Defined values are:</p> <ul style="list-style-type: none"> <li>• "failed" - One or more execution hooks have failed</li> <li>• "success" - There were zero or more applicable hooks and all were successful</li> </ul>
hookStateDetails	array[type_astra_stateDetails]	False	<p>JSON array of JSON objects which lists additional details about why "hookState" transitioned into "failed". If no details are available, this array will be empty.</p> <ul style="list-style-type: none"> <li>• Minimum items: 0</li> </ul>
backupCreationTimestamp	string	False	<p>JSON string containing a timestamp indicating when the backup was taken. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>
totalBytes	number	False	<p>JSON number containing the total number of bytes in the backup.</p>
bytesDone	number	False	<p>JSON number containing the number of bytes backed up for a running backup. When the backup is completed, it matches with the totalBytes field.</p>

Name	Type	Required	Description
percentDone	number	False	JSON number containing the percentage complete for a running backup. When the backup is completed, it is set to "100".
metadata	<a href="#">type_astra_metadata</a>	True	Client and service-specified metadata associated with the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels.</li> </ul>

### Example response

```
{
  "type": "application/astra-appBackup",
  "version": "1.1",
  "id": "54fe651d-3d3b-5fa8-b85c-5db757885ff3",
  "name": "app-name-245",
  "bucketID": "0afbe357-a717-4c7a-8b3d-d0368959c8de",
  "scheduleID": "1fe83650-9b3c-41ef-bb25-a2910c19c33e",
  "state": "pending",
  "stateUnready": [],
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

### Response

```
Status: 401, Unauthorized
```



Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 409, Conflict

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/10",
  "title": "JSON resource conflict",
  "detail": "The request body JSON contains a field that conflicts with an idempotent value.",
  "status": "409"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	

Name	Type	Required	Description
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Response

Status: 500, Internal server error

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/94",
  "title": "Backup not created",
  "detail": "The backup wasn't created because of an internal server issue.",
  "status": "500"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

### Definitions

## See Definitions

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### type\_astra\_metadata

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.

Name	Type	Required	Description
labels	array[type_astra_label]	True	
creationTimestamp	string	True	
modificationTimestamp	string	True	
createdBy	string	True	
modifiedBy	string	False	

### type\_astra\_stateDetails

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	

### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

### invalidFields

Name	Type	Required	Description
name	string	True	Name of the invalid request body field
reason	string	True	Reason why the request body field is invalid

## List the application backups for an app

GET /accounts/{account\_id}/k8s/v1/apps/{app\_id}/appBackups

Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"> <li>example: <code>{{.Account}}</code></li> </ul>
app_id	string	path	True	ID of the containing app resource
include	string	query	False	Indicates which fields should be returned when listing a collection. <p>URL examples: "include=id", "include=id,name"</p> <p>OpenAPI examples: "id"</p> <ul style="list-style-type: none"> <li>example: <code>id,name,state</code></li> </ul>

Name	Type	In	Required	Description
limit	string	query	False	Indicates the maximum number of resources to return when listing a collection.  URL examples: "limit=2"  OpenAPI examples: "2"

## Response

Status: 200, Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

Name	Type	Required	Description
items	array[Any of: <a href="#">appBackup_1.1_get_response_body</a> , array[]]	True	
metadata	<a href="#">type_astra_metadata_list</a>	True	

## Example response

```
{
  "type": "application/astra-appBackups",
  "version": "1.1",
  "items": [
    [
      "5cb608f9-571b-492e-a520-5bfb900a9b9c",
      "app-name-245",
      "pending"
    ],
    [
      "f8faa690-7e09-48a4-b33c-7965712acd0c",
      "app-name-244",
      "completed"
    ]
  ],
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	



### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	

Name	Type	Required	Description
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Response

Status: 500, Internal server error

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/96",
  "title": "Backups not listed",
  "detail": "The backups didn't list because of an internal server issue.",
  "status": "500"
}
```

## Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

## Definitions

## See Definitions

### type\_astra\_stateDetails

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### type\_astra\_metadata

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.

Name	Type	Required	Description
labels	array[type_astra_label]	True	
creationTimestamp	string	True	
modificationTimestamp	string	True	
createdBy	string	True	
modifiedBy	string	False	

### appBackup\_1.1\_get\_response\_body

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>• "application/astra-appBackup"</li></ul>

Name	Type	Required	Description
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "1.0"</li> <li>• "1.1"</li> </ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the UUIDv4 Schema</li> </ul>
name	string	True	JSON string containing a user-specified name for the backup. If not specified, or when backups are initiated by a schedule, the system will assign a name for the backup. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> <li>• Conforms to the DNS 1123 Label Schema</li> </ul>
bucketID	string	True	JSON string containing an optional bucket ID that indicates where the backup will be stored on create. If not specified, a system-selected bucket is used. If no buckets are available, an error will be returned on create. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
snapshotID	string	False	<p>JSON string containing the snapshot that was used to create the backup. To create the backup, a snapshot ID associated with the application being backed up can be specified on create. If not specified, a new snapshot will be created for the backup. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
scheduleID	string	False	<p>JSON string containing an optional schedule ID that indicates that the backup was triggered by a schedule and which schedule triggered the backup. Only present for backups initiated by a schedule. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
state	string	True	<p>JSON string containing a value indicating the operational state of the backup.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "pending" - The application backup is scheduled for discovery</li> <li>• "discovering" - The application backup is in the process of being discovered</li> <li>• "running" - The application backup is running normally</li> <li>• "completed" - The application backup has completed successfully</li> <li>• "failed" - The application backup is in a permanent failure state</li> <li>• "removed" - The application backup is not currently accessible</li> <li>• "unknown" - The application backup state cannot be determined</li> </ul>
stateUnready	array[string]	True	<p>JSON array of JSON strings, each indicating a reason why an application backup is unable to transition to "running", or why it has transitioned to "failed" or "removed".</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 127</li> </ul>

Name	Type	Required	Description
hookState	string	False	<p>JSON string containing a value indicating the state of any execution hooks run as part of snapshot. Defined values are:</p> <ul style="list-style-type: none"> <li>• "failed" - One or more execution hooks have failed</li> <li>• "success" - There were zero or more applicable hooks and all were successful</li> </ul>
hookStateDetails	array[type_astra_stateDetails]	False	<p>JSON array of JSON objects which lists additional details about why "hookState" transitioned into "failed". If no details are available, this array will be empty.</p> <ul style="list-style-type: none"> <li>• Minimum items: 0</li> </ul>
backupCreationTimestamp	string	False	<p>JSON string containing a timestamp indicating when the backup was taken. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>
totalBytes	number	False	<p>JSON number containing the total number of bytes in the backup.</p>
bytesDone	number	False	<p>JSON number containing the number of bytes backed up for a running backup. When the backup is completed, it matches with the totalBytes field.</p>



Name	Type	Required	Description
percentDone	number	False	JSON number containing the percentage complete for a running backup. When the backup is completed, it is set to "100".
metadata	<a href="#">type_astra_metadata</a>	True	Client and service-specified metadata associated with the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels.</li> </ul>

#### type\_astra\_metadata\_list

Name	Type	Required	Description
continue	string	False	
count	number	False	
labels	array[ <a href="#">type_astra_label</a> ]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

#### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Retrieve an application backup for an app

GET /accounts/{account\_id}/k8s/v1/apps/{app\_id}/appBackups/{appBackup\_id}

Returns the stored Application Backup API resource in the JSON response body.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"><li>example: <code>{{.Account}}</code></li></ul>
app_id	string	path	True	ID of the containing app resource
appBackup_id	string	path	True	ID of the appBackup collection to list

### Response

Status: 200, Returns the stored Application Backup API resource in the JSON response body.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>"application/astra-appBackup"</li></ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"><li>"1.0"</li><li>"1.1"</li></ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"><li>Conforms to the UUIDv4 Schema</li></ul>

Name	Type	Required	Description
name	string	True	<p>JSON string containing a user-specified name for the backup. If not specified, or when backups are initiated by a schedule, the system will assign a name for the backup.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> <li>• Conforms to the DNS 1123 Label Schema</li> </ul>
bucketID	string	True	<p>JSON string containing an optional bucket ID that indicates where the backup will be stored on create. If not specified, a system-selected bucket is used. If no buckets are available, an error will be returned on create.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
snapshotID	string	False	<p>JSON string containing the snapshot that was used to create the backup. To create the backup, a snapshot ID associated with the application being backed up can be specified on create. If not specified, a new snapshot will be created for the backup.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
scheduleID	string	False	<p>JSON string containing an optional schedule ID that indicates that the backup was triggered by a schedule and which schedule triggered the backup. Only present for backups initiated by a schedule.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
state	string	True	<p>JSON string containing a value indicating the operational state of the backup.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "pending" - The application backup is scheduled for discovery</li> <li>• "discovering" - The application backup is in the process of being discovered</li> <li>• "running" - The application backup is running normally</li> <li>• "completed" - The application backup has completed successfully</li> <li>• "failed" - The application backup is in a permanent failure state</li> <li>• "removed" - The application backup is not currently accessible</li> <li>• "unknown" - The application backup state cannot be determined</li> </ul>

Name	Type	Required	Description
stateUnready	array[string]	True	<p>JSON array of JSON strings, each indicating a reason why an application backup is unable to transition to "running", or why it has transitioned to "failed" or "removed".</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 127</li> </ul>
hookState	string	False	<p>JSON string containing a value indicating the state of any execution hooks run as part of snapshot.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "failed" - One or more execution hooks have failed</li> <li>• "success" - There were zero or more applicable hooks and all were successful</li> </ul>
hookStateDetails	array[ <a href="#">type_astra_stateDetails</a> ]	False	<p>JSON array of JSON objects which lists additional details about why "hookState" transitioned into "failed". If no details are available, this array will be empty.</p> <ul style="list-style-type: none"> <li>• Minimum items: 0</li> </ul>
backupCreationTimestamp	string	False	<p>JSON string containing a timestamp indicating when the backup was taken.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>
totalBytes	number	False	<p>JSON number containing the total number of bytes in the backup.</p>

Name	Type	Required	Description
bytesDone	number	False	<p>JSON number containing the number of bytes backed up for a running backup.</p> <p>When the backup is completed, it matches with the totalBytes field.</p>
percentDone	number	False	<p>JSON number containing the percentage complete for a running backup.</p> <p>When the backup is completed, it is set to "100".</p>
metadata	<a href="#">type_astra_metadata</a>	True	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels.</li> </ul>

## Example response

```
{
  "type": "application/astra-appBackup",
  "version": "1.1",
  "id": "54fe651d-3d3b-5fa8-b85c-5db757885ff3",
  "name": "app-name-245",
  "bucketID": "0afbe357-a717-4c7a-8b3d-d0368959c8de",
  "scheduleID": "1fe83650-9b3c-41ef-bb25-a2910c19c33e",
  "state": "pending",
  "stateUnready": [],
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

## Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

## Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

## Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	



### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Response

Status: 500, Internal server error

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/95",
  "title": "Backup not retrieved",
  "detail": "The backup wasn't retrieved because of an internal server issue.",
  "status": "500"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	

Name	Type	Required	Description
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

### Definitions

## See Definitions

### type\_astra\_stateDetails

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### type\_astra\_metadata

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.

Name	Type	Required	Description
labels	array[type_astra_label]	True	
creationTimestamp	string	True	
modificationTimestamp	string	True	
createdBy	string	True	
modifiedBy	string	False	

### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Delete an application backup for an app

```
DELETE /accounts/{account_id}/k8s/v1/apps/{app_id}/appBackups/{appBackup_id}
```

Removes the specified Application Backup API resource. Backups in progress will be canceled, and then deleted.

### Side Effects

- If a backup is complete, the backup data is deleted.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"><li>• example: <code>{{.Account}}</code></li></ul>
app_id	string	path	True	ID of the containing app resource
appBackup_id	string	path	True	ID of the appBackup collection to list

### Response

Status: 204, Indicates if the appBackup resource was deleted.

### Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	

Name	Type	Required	Description
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Response

Status: 500, Internal server error

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/97",
  "title": "Backup not deleted",
  "detail": "The backup wasn't deleted because of an internal server issue.",
  "status": "500"
}
```

## Response

Status: 409, Conflict

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/128",
  "title": "Backup cancellation not allowed",
  "detail": "A pending backup can't be canceled.",
  "status": "409"
}
```

## Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example error response

```
{
  "type": "https://astra.netapp.io/problems/1",
  "title": "Resource not found",
  "detail": "The resource specified in the request URI wasn't found.",
  "status": "404"
}
```

## Definitions

### See Definitions

invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

# Application Snapshot

## Application Snapshot overview

The Application Snapshot API provides CRUD (Create-Read-Update-Delete) access to appSnap resources to create and view snapshots of a managed application.

## Create a new application snapshot for an app

POST /accounts/{account\_id}/k8s/v1/apps/{app\_id}/appSnaps

Indicates the desired values for the Application Snapshot API resource to be created.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"><li>example: <code>{{.Account}}</code></li></ul>



Name	Type	In	Required	Description
app_id	string	path	True	ID of the containing app resource

### Request Body

Indicates the desired values for the Application Snapshot API resource to be created.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "application/astra-appSnap"</li> </ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "1.0"</li> <li>• "1.1"</li> </ul>
name	string	False	JSON string containing a user-specified name for the snapshot. If not specified, or when snapshots are initiated by a schedule, the system will assign a name for the snapshot. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> <li>• Conforms to the DNS 1123 Label Schema</li> </ul>

Name	Type	Required	Description
metadata	<a href="#">type_astra_metadata</a>	False	<p>Client and service-specified metadata associated with the resource. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels.</li> </ul>

### Example request

```
{
  "type": "application/astra-appSnap",
  "version": "1.1",
  "name": "app-name-245"
}
```

### Response

Status: 201, Returns the newly created appSnap resource in the JSON response body.

Name	Type	Required	Description
type	string	True	<p>Media type of the resource. Defined values are:</p> <ul style="list-style-type: none"> <li>• "application/astra-appSnap"</li> </ul>
version	string	True	<p>Version of the resource. Defined values are:</p> <ul style="list-style-type: none"> <li>• "1.0"</li> <li>• "1.1"</li> </ul>

Name	Type	Required	Description
id	string	True	<p>Globally unique identifier of the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the UUIDv4 Schema</li> </ul>
name	string	True	<p>JSON string containing a user-specified name for the snapshot. If not specified, or when snapshots are initiated by a schedule, the system will assign a name for the snapshot.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> <li>• Conforms to the DNS 1123 Label Schema</li> </ul>
scheduleID	string	False	<p>JSON string containing an optional schedule ID that indicates that the snapshot was triggered by a schedule and which schedule triggered the snapshot. Only present for snapshots initiated by a schedule.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
snapshotAppAsset	string	False	<p>JSON string containing the ID of the application asset corresponding to the snapshot. This field will be returned when the state of the application snapshot is "completed".</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
state	string	True	<p>JSON string containing a value indicating the operational state of the snapshot.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "pending" - The application snapshot is scheduled for discovery</li> <li>• "discovering" - The application snapshot is in the process of being discovered</li> <li>• "running" - The application snapshot is running normally</li> <li>• "completed" - The application snapshot has completed</li> <li>• "failed" - The application snapshot is in a permanent failure state</li> <li>• "removed" - The application snapshot is not currently accessible</li> <li>• "unknown" - The application snapshot state cannot be determined</li> </ul>
stateUnready	array[string]	True	<p>JSON array of JSON strings, each indicating a reason why an application snapshot is unable to transition to "running", or why it has transitioned to "failed".</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 127</li> </ul>

Name	Type	Required	Description
hookState	string	False	<p>JSON string containing a value indicating the state of any execution hook or hooks running as a part of a snapshot.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "failed" - One or more execution hooks have failed</li> <li>• "success" - There were zero or more applicable hooks and all were successful</li> </ul>
hookStateDetails	array[type_astra_stateDetails]	False	<p>JSON array of JSON objects which lists additional details about why "hookState" transitioned into "failed". If no details are available, this array will be empty.</p> <ul style="list-style-type: none"> <li>• Minimum items: 0</li> </ul>
metadata	type_astra_metadata	True	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels.</li> </ul>

## Example response

```
{
  "type": "application/astra-appSnap",
  "version": "1.1",
  "id": "ab41abde-ae1b-5361-ae00-d82deac97bf3",
  "name": "app-name-245",
  "scheduleID": "1fe83650-9b3c-41ef-bb25-a2910c19c33e",
  "state": "pending",
  "stateUnready": [],
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

## Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

## Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

## Response

Status: 409, Conflict

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

## Example response

```
{
  "type": "https://astra.netapp.io/problems/10",
  "title": "JSON resource conflict",
  "detail": "The request body JSON contains a field that conflicts with
an idempotent value.",
  "status": "409"
}
```

## Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

## Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	



Name	Type	Required	Description
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

### Definitions

## See Definitions

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### type\_astra\_metadata

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.

Name	Type	Required	Description
labels	array[ <a href="#">type_astra_label</a> ]	True	
creationTimestamp	string	True	
modificationTimestamp	string	True	
createdBy	string	True	
modifiedBy	string	False	

### type\_astra\_stateDetails

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	

### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

### invalidFields

Name	Type	Required	Description
name	string	True	Name of the invalid request body field
reason	string	True	Reason why the request body field is invalid

## List the application snapshots for an app

GET /accounts/{account\_id}/k8s/v1/apps/{app\_id}/appSnaps

Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"> <li>example: <code>{{.Account}}</code></li> </ul>
app_id	string	path	True	ID of the containing app resource
include	string	query	False	Indicates which fields should be returned when listing a collection. <p>URL examples: "include=id", "include=id,name"</p> <p>OpenAPI examples: "id"</p> <ul style="list-style-type: none"> <li>example: <code>id,name,state</code></li> </ul>

Name	Type	In	Required	Description
limit	string	query	False	Indicates the maximum number of resources to return when listing a collection.  URL examples: "limit=2"  OpenAPI examples: "2"

## Response

Status: 200, Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

Name	Type	Required	Description
items	array[Any of: <a href="#">appSnap_1.1_get_response_body</a> , array[]]	True	
metadata	<a href="#">type_astra_metadata_list</a>	True	

## Example response

```
{
  "type": "application/astra-appSnaps",
  "version": "1.1",
  "items": [
    [
      "2b6dafc3-2172-4431-a482-6306b2703130",
      "app-name-245",
      "pending"
    ],
    [
      "6fd9b31a-3924-4c9a-878b-175fa9538b8c",
      "app-name-244",
      "completed"
    ]
  ],
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

## Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

## Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

## Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	

Name	Type	Required	Description
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't found.",
  "status": "404"
}
```

**Definitions**



## See Definitions

### type\_astra\_stateDetails

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### type\_astra\_metadata

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.

Name	Type	Required	Description
labels	array[type_astra_label]	True	
creationTimestamp	string	True	
modificationTimestamp	string	True	
createdBy	string	True	
modifiedBy	string	False	

### appSnap\_1.1\_get\_response\_body

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>• "application/astra-appSnap"</li></ul>

Name	Type	Required	Description
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "1.0"</li> <li>• "1.1"</li> </ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the UUIDv4 Schema</li> </ul>
name	string	True	JSON string containing a user-specified name for the snapshot. If not specified, or when snapshots are initiated by a schedule, the system will assign a name for the snapshot. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> <li>• Conforms to the DNS 1123 Label Schema</li> </ul>
scheduleID	string	False	JSON string containing an optional schedule ID that indicates that the snapshot was triggered by a schedule and which schedule triggered the snapshot. Only present for snapshots initiated by a schedule. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
snapshotAppAsset	string	False	<p>JSON string containing the ID of the application asset corresponding to the snapshot. This field will be returned when the state of the application snapshot is "completed". Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
state	string	True	<p>JSON string containing a value indicating the operational state of the snapshot. Defined values are:</p> <ul style="list-style-type: none"> <li>• "pending" - The application snapshot is scheduled for discovery</li> <li>• "discovering" - The application snapshot is in the process of being discovered</li> <li>• "running" - The application snapshot is running normally</li> <li>• "completed" - The application snapshot has completed</li> <li>• "failed" - The application snapshot is in a permanent failure state</li> <li>• "removed" - The application snapshot is not currently accessible</li> <li>• "unknown" - The application snapshot state cannot be determined</li> </ul>

Name	Type	Required	Description
stateUnready	array[string]	True	<p>JSON array of JSON strings, each indicating a reason why an application snapshot is unable to transition to "running", or why it has transitioned to "failed".</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 127</li> </ul>
hookState	string	False	<p>JSON string containing a value indicating the state of any execution hook or hooks running as a part of a snapshot.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "failed" - One or more execution hooks have failed</li> <li>• "success" - There were zero or more applicable hooks and all were successful</li> </ul>
hookStateDetails	array[type_astra_stateDetails]	False	<p>JSON array of JSON objects which lists additional details about why "hookState" transitioned into "failed". If no details are available, this array will be empty.</p> <ul style="list-style-type: none"> <li>• Minimum items: 0</li> </ul>

Name	Type	Required	Description
metadata	<a href="#">type_astra_metadata</a>	True	Client and service-specified metadata associated with the resource. Defined values are: <ul style="list-style-type: none"> <li>Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels.</li> </ul>

#### type\_astra\_metadata\_list

Name	Type	Required	Description
continue	string	False	
count	number	False	
labels	array[ <a href="#">type_astra_label</a> ]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

#### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Retrieve an application snapshot

GET /accounts/{account\_id}/k8s/v1/apps/{app\_id}/appSnaps/{appSnap\_id}

Returns the stored Application Snapshot API resource in the JSON response body.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource  • example: {{.Account}}
app_id	string	path	True	ID of the containing app resource
appSnap_id	string	path	True	ID of the appSnap collection to list

## Response

Status: 200, Returns the stored Application Snapshot API resource in the JSON response body.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are:  • "application/astra-appSnap"
version	string	True	Version of the resource. Defined values are:  • "1.0" • "1.1"
id	string	True	Globally unique identifier of the resource. Defined values are:  • Conforms to the UUIDv4 Schema

Name	Type	Required	Description
name	string	True	<p>JSON string containing a user-specified name for the snapshot. If not specified, or when snapshots are initiated by a schedule, the system will assign a name for the snapshot.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> <li>• Conforms to the DNS 1123 Label Schema</li> </ul>
scheduleID	string	False	<p>JSON string containing an optional schedule ID that indicates that the snapshot was triggered by a schedule and which schedule triggered the snapshot. Only present for snapshots initiated by a schedule.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
snapshotAppAsset	string	False	<p>JSON string containing the ID of the application asset corresponding to the snapshot. This field will be returned when the state of the application snapshot is "completed".</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
state	string	True	<p>JSON string containing a value indicating the operational state of the snapshot.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "pending" - The application snapshot is scheduled for discovery</li> <li>• "discovering" - The application snapshot is in the process of being discovered</li> <li>• "running" - The application snapshot is running normally</li> <li>• "completed" - The application snapshot has completed</li> <li>• "failed" - The application snapshot is in a permanent failure state</li> <li>• "removed" - The application snapshot is not currently accessible</li> <li>• "unknown" - The application snapshot state cannot be determined</li> </ul>
stateUnready	array[string]	True	<p>JSON array of JSON strings, each indicating a reason why an application snapshot is unable to transition to "running", or why it has transitioned to "failed".</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 127</li> </ul>



Name	Type	Required	Description
hookState	string	False	<p>JSON string containing a value indicating the state of any execution hook or hooks running as a part of a snapshot.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "failed" - One or more execution hooks have failed</li> <li>• "success" - There were zero or more applicable hooks and all were successful</li> </ul>
hookStateDetails	array[type_astra_stateDetails]	False	<p>JSON array of JSON objects which lists additional details about why "hookState" transitioned into "failed". If no details are available, this array will be empty.</p> <ul style="list-style-type: none"> <li>• Minimum items: 0</li> </ul>
metadata	type_astra_metadata	True	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels.</li> </ul>

## Example response

```
{
  "type": "application/astra-appSnap",
  "version": "1.1",
  "id": "ab41abde-ae1b-5361-ae00-d82deac97bf3",
  "name": "app-name-245",
  "scheduleID": "1fe83650-9b3c-41ef-bb25-a2910c19c33e",
  "state": "pending",
  "stateUnready": [],
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

## Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

## Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

## Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

## Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

## Definitions

## See Definitions

### type\_astra\_stateDetails

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### type\_astra\_metadata

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.

Name	Type	Required	Description
labels	array[type_astra_label]	True	
creationTimestamp	string	True	
modificationTimestamp	string	True	
createdBy	string	True	
modifiedBy	string	False	

### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Delete an application snapshot

DELETE /accounts/{account\_id}/k8s/v1/apps/{app\_id}/appSnaps/{appSnap\_id}

Removes the specified Application Snapshot API resource.

### Side Effects

- If a snapshot is in progress, the snapshot is cancelled.
- If a snapshot is complete, the snapshot data is deleted.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"><li>• example: <code>{{.Account}}</code></li></ul>
app_id	string	path	True	ID of the containing app resource
appSnap_id	string	path	True	ID of the appSnap collection to list

### Response

Status: 204, Indicates if the appSnap resource was deleted.

### Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	

Name	Type	Required	Description
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Response

Status: 409, Conflict

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/144",
  "title": "Backup in progress",
  "detail": "The snapshot wasn't deleted because it is currently being
  used by a backup.",
  "status": "409"
}
```



## Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/1",
  "title": "Resource not found",
  "detail": "The resource specified in the request URI wasn't found.",
  "status": "404"
}
```

## Definitions

### See Definitions

invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Bucket

### Bucket overview

The Bucket API provides CRUD (Create-Read-Update-Delete) access to buckets used to store application backups in Astra.

## Create a new bucket

POST /accounts/{account\_id}/topology/v1/buckets

Indicates the desired values for the Bucket API resource to be created.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"><li>example: {{.Account}}</li></ul>

### Request Body

Indicates the desired values for the Bucket API resource to be created.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>"application/astra-bucket"</li></ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"><li>"1.0"</li><li>"1.1"</li><li>"1.2"</li></ul>
name	string	False	JSON string containing a user-assigned name for the bucket. Defined values are: <ul style="list-style-type: none"><li>Minimum length: 1</li><li>Maximum length: 256</li></ul>

Name	Type	Required	Description
credentialID	string	True	<p>JSON string containing the identifier of the credentials used to access the bucket. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
provider	string	True	<p>JSON string indicating the bucket protocol that can be used to access the bucket. Defined values are:</p> <ul style="list-style-type: none"> <li>• "ontap-s3"</li> <li>• "storagegrid-s3"</li> <li>• "generic-s3"</li> <li>• "gcp"</li> <li>• "azure"</li> <li>• "aws"</li> </ul>
bucketParameters	<a href="#">bucketParameters</a>	True	<p>JSON object that provides bucket provider-specific information required to access the bucket. The specific values in this bucket differ per provider.</p>
metadata	<a href="#">type_astra_metadata_update</a>	False	<p>Client and service-specified metadata associated with the resource. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema</li> </ul> <p>If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</p>

## Example request

```
{
  "type": "application/astra-bucket",
  "version": "1.2",
  "name": "Test Bucket",
  "credentialID": "d5b3854c-38de-42c6-9269-b5c052aba76f",
  "provider": "gcp",
  "bucketParameters": {
    "gcp": {
      "bucketName": "bucketName"
    }
  }
}
```

## Response

Status: 201, Returns the newly created bucket resource in the JSON response body.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>"application/astra-bucket"</li></ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"><li>"1.0"</li><li>"1.1"</li><li>"1.2"</li></ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"><li>Conforms to the UUIDv4 Schema</li></ul>

Name	Type	Required	Description
name	string	True	<p>JSON string containing a user-assigned name for the bucket.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 256</li> </ul>
credentialID	string	True	<p>JSON string containing the identifier of the credentials used to access the bucket.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
state	string	True	<p>JSON string containing a value indicating the operational state of the bucket.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "pending" - The bucket is scheduled for discovery</li> <li>• "available" - The bucket is available for use</li> <li>• "failed" - The bucket is in a permanent failure state</li> <li>• "removed" - The bucket is not currently accessible</li> <li>• "unknown" - The bucket state cannot be determined</li> </ul>
stateDetails	array[type_astra_stateDetails]	True	<p>JSON array of JSON objects that lists additional details about why "state" transitioned to "removed" or "failed".</p> <p>If no details are available, this array will be empty.</p> <ul style="list-style-type: none"> <li>• Minimum items: 0</li> </ul>

Name	Type	Required	Description
provider	string	True	<p>JSON string indicating the bucket protocol that can be used to access the bucket.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "ontap-s3"</li> <li>• "storagegrid-s3"</li> <li>• "generic-s3"</li> <li>• "gcp"</li> <li>• "azure"</li> <li>• "aws"</li> </ul>
bucketParameters	<a href="#">bucketParameters</a>	True	<p>JSON object that provides bucket provider-specific information required to access the bucket. The specific values in this bucket differ per provider.</p>
metadata	<a href="#">type_astra_metadata_update</a>	True	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</li> </ul>

## Example response

```
{
  "type": "application/astra-bucket",
  "version": "1.2",
  "id": "9b296ce0-c545-5022-acfa-1980c5aeea97",
  "name": "Test Bucket",
  "credentialID": "8f039324-7795-40bf-a5ca-4442580f7ab0",
  "state": "available",
  "stateDetails": [],
  "provider": "gcp",
  "bucketParameters": {
    "gcp": {
      "bucketName": "bucketName"
    }
  },
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 409, Conflict

Name	Type	Required	Description
type	string	True	



Name	Type	Required	Description
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

### Example response

```
{
  "type": "https://astra.netapp.io/problems/10",
  "title": "JSON resource conflict",
  "detail": "The request body JSON contains a field that conflicts with an idempotent value.",
  "status": "409"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

## Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

## Definitions

## See Definitions

### s3

JSON object that provides Simple Storage Service (S3) protocol parameters. (Use this object for all S3 type providers).

Name	Type	Required	Description
serverURL	string	True	JSON string containing a URL to the base path for the bucket. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 0</li><li>• Maximum length: 1023</li></ul>
bucketName	string	True	JSON string containing the name of the S3 bucket. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 0</li><li>• Maximum length: 63</li></ul>

### gcp

JSON object that provides Google Cloud protocol parameters.

Name	Type	Required	Description
bucketName	string	True	JSON string containing the name of the backing Google Cloud bucket name. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 0</li><li>• Maximum length: 63</li></ul>

### azure

JSON object that provides Azure protocol parameters.

Name	Type	Required	Description
storageAccount	string	True	JSON string containing the Azure storage account name. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 0</li> <li>• Maximum length: 63</li> </ul>
bucketName	string	True	JSON string containing the name of the backing Azure blob name. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 0</li> <li>• Maximum length: 63</li> </ul>

#### bucketParameters

JSON object that provides bucket provider-specific information required to access the bucket. The specific values in this bucket differ per provider.

Name	Type	Required	Description
s3	s3	False	JSON object that provides Simple Storage Service (S3) protocol parameters. (Use this object for all S3 type providers).
gcp	gcp	False	JSON object that provides Google Cloud protocol parameters.
azure	azure	False	JSON object that provides Azure protocol parameters.

#### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

#### type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema

If not specified on create, a metadata object will be created with no labels.

If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[type_astra_label]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

type\_astra\_stateDetails

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	

invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

invalidFields

Name	Type	Required	Description
name	string	True	Name of the invalid request body field
reason	string	True	Reason why the request body field is invalid

## List all buckets

GET /accounts/{account\_id}/topology/v1/buckets

Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource  • example: {{.Account}}

### Response

Status: 200, Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

Name	Type	Required	Description
items	array[Any of: <a href="#">bucket_1.2_get_response_body</a> , array[]]	True	
metadata	<a href="#">type_astra_metadata_list</a>	True	

## Example response

```
{
  "type": "application/astra-buckets",
  "version": "1.2",
  "items": [
    [
      "4c753e39-25e9-4b36-a8de-69f168aa59cd",
      "Test Bucket",
      "gcp"
    ],
    [
      "d8fd585d-6429-4c08-a308-af193a88eac7",
      "Local",
      "ontap-s3"
    ]
  ],
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	



Name	Type	Required	Description
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't found.",
  "status": "404"
}
```

**Definitions**

## See Definitions

### type\_astra\_stateDetails

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	

### s3

JSON object that provides Simple Storage Service (S3) protocol parameters. (Use this object for all S3 type providers).

Name	Type	Required	Description
serverURL	string	True	JSON string containing a URL to the base path for the bucket. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 0</li><li>• Maximum length: 1023</li></ul>
bucketName	string	True	JSON string containing the name of the S3 bucket. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 0</li><li>• Maximum length: 63</li></ul>

### gcp

JSON object that provides Google Cloud protocol parameters.

Name	Type	Required	Description
bucketName	string	True	JSON string containing the name of the backing Google Cloud bucket name. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 0</li><li>• Maximum length: 63</li></ul>

### azure

JSON object that provides Azure protocol parameters.

Name	Type	Required	Description
storageAccount	string	True	JSON string containing the Azure storage account name. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 0</li><li>• Maximum length: 63</li></ul>
bucketName	string	True	JSON string containing the name of the backing Azure blob name. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 0</li><li>• Maximum length: 63</li></ul>

#### bucketParameters

JSON object that provides bucket provider-specific information required to access the bucket. The specific values in this bucket differ per provider.

Name	Type	Required	Description
s3	s3	False	JSON object that provides Simple Storage Service (S3) protocol parameters. (Use this object for all S3 type providers).
gcp	gcp	False	JSON object that provides Google Cloud protocol parameters.
azure	azure	False	JSON object that provides Azure protocol parameters.

#### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

#### type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[type_astra_label]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

bucket\_1.2\_get\_response\_body

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>• "application/astra-bucket"</li></ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"><li>• "1.0"</li><li>• "1.1"</li><li>• "1.2"</li></ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"><li>• Conforms to the UUIDv4 Schema</li></ul>

Name	Type	Required	Description
name	string	True	JSON string containing a user-assigned name for the bucket. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 256</li> </ul>
credentialID	string	True	JSON string containing the identifier of the credentials used to access the bucket. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
state	string	True	JSON string containing a value indicating the operational state of the bucket. Defined values are: <ul style="list-style-type: none"> <li>• "pending" - The bucket is scheduled for discovery</li> <li>• "available" - The bucket is available for use</li> <li>• "failed" - The bucket is in a permanent failure state</li> <li>• "removed" - The bucket is not currently accessible</li> <li>• "unknown" - The bucket state cannot be determined</li> </ul>

Name	Type	Required	Description
stateDetails	array[ <a href="#">type_astra_stateDetails</a> ]	True	<p>JSON array of JSON objects that lists additional details about why "state" transitioned to "removed" or "failed". If no details are available, this array will be empty.</p> <ul style="list-style-type: none"> <li>• Minimum items: 0</li> </ul>
provider	string	True	<p>JSON string indicating the bucket protocol that can be used to access the bucket. Defined values are:</p> <ul style="list-style-type: none"> <li>• "ontap-s3"</li> <li>• "storagegrid-s3"</li> <li>• "generic-s3"</li> <li>• "gcp"</li> <li>• "azure"</li> <li>• "aws"</li> </ul>
bucketParameters	<a href="#">bucketParameters</a>	True	<p>JSON object that provides bucket provider-specific information required to access the bucket. The specific values in this bucket differ per provider.</p>

Name	Type	Required	Description
metadata	<a href="#">type_astra_metadata_update</a>	True	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>Conforms to the Astra Metadata Schema</li> </ul> <p>If not specified on create, a metadata object will be created with no labels.</p> <p>If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</p>

#### type\_astra\_metadata\_list

Name	Type	Required	Description
continue	string	False	
count	number	False	
labels	array[ <a href="#">type_astra_label</a> ]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

#### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid



## Retrieve a bucket

GET /accounts/{account\_id}/topology/v1/buckets/{bucket\_id}

Returns the stored Bucket API resource in the JSON response body.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"><li>example: {{.Account}}</li></ul>
bucket_id	string	path	True	ID of the bucket collection to list

### Response

Status: 200, Returns the stored Bucket API resource in the JSON response body.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>"application/astra-bucket"</li></ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"><li>"1.0"</li><li>"1.1"</li><li>"1.2"</li></ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"><li>Conforms to the UUIDv4 Schema</li></ul>

Name	Type	Required	Description
name	string	True	<p>JSON string containing a user-assigned name for the bucket.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 256</li> </ul>
credentialID	string	True	<p>JSON string containing the identifier of the credentials used to access the bucket.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
state	string	True	<p>JSON string containing a value indicating the operational state of the bucket.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "pending" - The bucket is scheduled for discovery</li> <li>• "available" - The bucket is available for use</li> <li>• "failed" - The bucket is in a permanent failure state</li> <li>• "removed" - The bucket is not currently accessible</li> <li>• "unknown" - The bucket state cannot be determined</li> </ul>
stateDetails	array[type_astra_stateDetails]	True	<p>JSON array of JSON objects that lists additional details about why "state" transitioned to "removed" or "failed".</p> <p>If no details are available, this array will be empty.</p> <ul style="list-style-type: none"> <li>• Minimum items: 0</li> </ul>

Name	Type	Required	Description
provider	string	True	<p>JSON string indicating the bucket protocol that can be used to access the bucket.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "ontap-s3"</li> <li>• "storagegrid-s3"</li> <li>• "generic-s3"</li> <li>• "gcp"</li> <li>• "azure"</li> <li>• "aws"</li> </ul>
bucketParameters	<a href="#">bucketParameters</a>	True	<p>JSON object that provides bucket provider-specific information required to access the bucket. The specific values in this bucket differ per provider.</p>
metadata	<a href="#">type_astra_metadata_update</a>	True	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</li> </ul>

## Example response

```
{
  "type": "application/astra-bucket",
  "version": "1.2",
  "id": "9b296ce0-c545-5022-acfa-1980c5aeea97",
  "name": "Test Bucket",
  "credentialID": "8f039324-7795-40bf-a5ca-4442580f7ab0",
  "state": "available",
  "stateDetails": [],
  "provider": "gcp",
  "bucketParameters": {
    "gcp": {
      "bucketName": "bucketName"
    }
  },
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	

Name	Type	Required	Description
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't found.",
  "status": "404"
}
```

**Definitions**

## See Definitions

### type\_astra\_stateDetails

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	

### s3

JSON object that provides Simple Storage Service (S3) protocol parameters. (Use this object for all S3 type providers).

Name	Type	Required	Description
serverURL	string	True	JSON string containing a URL to the base path for the bucket. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 0</li><li>• Maximum length: 1023</li></ul>
bucketName	string	True	JSON string containing the name of the S3 bucket. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 0</li><li>• Maximum length: 63</li></ul>

### gcp

JSON object that provides Google Cloud protocol parameters.

Name	Type	Required	Description
bucketName	string	True	JSON string containing the name of the backing Google Cloud bucket name. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 0</li><li>• Maximum length: 63</li></ul>

### azure



JSON object that provides Azure protocol parameters.

Name	Type	Required	Description
storageAccount	string	True	JSON string containing the Azure storage account name. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 0</li><li>• Maximum length: 63</li></ul>
bucketName	string	True	JSON string containing the name of the backing Azure blob name. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 0</li><li>• Maximum length: 63</li></ul>

bucketParameters

JSON object that provides bucket provider-specific information required to access the bucket. The specific values in this bucket differ per provider.

Name	Type	Required	Description
s3	s3	False	JSON object that provides Simple Storage Service (S3) protocol parameters. (Use this object for all S3 type providers).
gcp	gcp	False	JSON object that provides Google Cloud protocol parameters.
azure	azure	False	JSON object that provides Azure protocol parameters.

type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema
  - If not specified on create, a metadata object will be created with no labels.
  - If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[type_astra_label]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Modify a bucket

PUT /accounts/{account\_id}/topology/v1/buckets/{bucket\_id}

Replaces the entire stored resource with the supplied JSON request body while preserving key values that are not user-modifiable.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"><li>• example: <code>{{.Account}}</code></li></ul>
bucket_id	string	path	True	ID of the bucket collection to list

## Request Body

Replaces the entire stored resource with the supplied JSON request body while preserving key values that are not user-modifiable.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>• "application/astra-bucket"</li></ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"><li>• "1.0"</li><li>• "1.1"</li><li>• "1.2"</li></ul>
id	string	False	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"><li>• Conforms to the UUIDv4 Schema</li></ul>
name	string	False	JSON string containing a user-assigned name for the bucket. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 1</li><li>• Maximum length: 256</li></ul>
credentialID	string	False	JSON string containing the identifier of the credentials used to access the bucket. Defined values are: <ul style="list-style-type: none"><li>• Conforms to the Astra Identifier Schema</li></ul>

Name	Type	Required	Description
state	string	False	<p>JSON string containing a value indicating the operational state of the bucket.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "pending" - The bucket is scheduled for discovery</li> <li>• "available" - The bucket is available for use</li> <li>• "failed" - The bucket is in a permanent failure state</li> <li>• "removed" - The bucket is not currently accessible</li> <li>• "unknown" - The bucket state cannot be determined</li> </ul>
stateDetails	array[type_astra_stateDetails]	False	<p>JSON array of JSON objects that lists additional details about why "state" transitioned to "removed" or "failed".</p> <p>If no details are available, this array will be empty.</p> <ul style="list-style-type: none"> <li>• Minimum items: 0</li> </ul>
provider	string	False	<p>JSON string indicating the bucket protocol that can be used to access the bucket.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "ontap-s3"</li> <li>• "storagegrid-s3"</li> <li>• "generic-s3"</li> <li>• "gcp"</li> <li>• "azure"</li> <li>• "aws"</li> </ul>

Name	Type	Required	Description
bucketParameters	<a href="#">bucketParameters</a>	False	JSON object that provides bucket provider-specific information required to access the bucket. The specific values in this bucket differ per provider.
metadata	<a href="#">type_astra_metadata_update</a>	False	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</li> </ul>

### Example request

```
{
  "type": "application/astra-bucket",
  "version": "1.2",
  "name": "New Bucket Name"
}
```

### Response

Status: 204, Indicates if the bucket resource was updated.

### Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 409, Conflict

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

### Example response

```
{
  "type": "https://astra.netapp.io/problems/10",
  "title": "JSON resource conflict",
  "detail": "The request body JSON contains a field that conflicts with an idempotent value.",
  "status": "409"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/1",
  "title": "Resource not found",
  "detail": "The resource specified in the request URI wasn't found.",
  "status": "404"
}
```



**Definitions**

## See Definitions

### type\_astra\_stateDetails

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	

### s3

JSON object that provides Simple Storage Service (S3) protocol parameters. (Use this object for all S3 type providers).

Name	Type	Required	Description
serverURL	string	False	JSON string containing a URL to the base path for the bucket. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 0</li><li>• Maximum length: 1023</li></ul>
bucketName	string	False	JSON string containing the name of the S3 bucket. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 0</li><li>• Maximum length: 63</li></ul>

### gcp

JSON object that provides Google Cloud protocol parameters.

Name	Type	Required	Description
bucketName	string	False	JSON string containing the name of the backing Google Cloud bucket name. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 0</li><li>• Maximum length: 63</li></ul>

### azure

JSON object that provides Azure protocol parameters.

Name	Type	Required	Description
storageAccount	string	False	JSON string containing the Azure storage account name. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 0</li><li>• Maximum length: 63</li></ul>
bucketName	string	False	JSON string containing the name of the backing Azure blob name. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 0</li><li>• Maximum length: 63</li></ul>

bucketParameters

JSON object that provides bucket provider-specific information required to access the bucket. The specific values in this bucket differ per provider.

Name	Type	Required	Description
s3	s3	False	JSON object that provides Simple Storage Service (S3) protocol parameters. (Use this object for all S3 type providers).
gcp	gcp	False	JSON object that provides Google Cloud protocol parameters.
azure	azure	False	JSON object that provides Azure protocol parameters.

type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[type_astra_label]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

invalidFields

Name	Type	Required	Description
name	string	True	Name of the invalid request body field
reason	string	True	Reason why the request body field is invalid

## Delete a bucket

DELETE /accounts/{account\_id}/topology/v1/buckets/{bucket\_id}

Removes the specified Bucket API resource.

### Side Effects

- Internal data structures are cleaned up.

## Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"><li>example: {{.Account}}</li></ul>
bucket_id	string	path	True	ID of the bucket collection to list

## Response

Status: 204, Indicates if the bucket resource was deleted.

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

## Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

## Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example error response

```
{
  "type": "https://astra.netapp.io/problems/1",
  "title": "Resource not found",
  "detail": "The resource specified in the request URI wasn't found.",
  "status": "404"
}
```

## Definitions

## See Definitions

invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

# Certificate

## Certificate overview

The Certificate App API provides CRUD (Create-Read-Update-Delete) access to certificate resources in order to represent admin-trusted certificates that are used for establishing outgoing connections.

## Create a new certificate

POST /accounts/{account\_id}/core/v1/certificates

Indicates the desired values for the Certificate API resource to be created.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"><li>example: <code>{{.Account}}</code></li></ul>

### Request Body

Indicates the desired values for the Certificate API resource to be created.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>"application/astra-certificate"</li></ul>



Name	Type	Required	Description
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "1.0"</li> </ul>
certUse	string	False	JSON string indicating the use of the certificate. If not specified, defaults to "rootCA". Defined values are: <ul style="list-style-type: none"> <li>• "rootCA" - The certificate is a certificate authority (CA) certificate used to trust any certificate signed by that CA.</li> <li>• "intermediateCA" - The certificate is an intermediate CA certificate issued by a root CA.</li> </ul>
cert	string	True	JSON string containing a Base64 encoded PKCS-11 formatted certificate (PEM). Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the base64 Encoded Data Schema</li> </ul>

Name	Type	Required	Description
isSelfSigned	string	False	<p>JSON string indicating whether the certificate is self-signed.</p> <p>If not provided on create, the value defaults to "false".</p> <p>On update:</p> <ul style="list-style-type: none"> <li>• If the value is provided, that value will be used.</li> <li>• If the value is not provided and the "cert" field is included in the update, the value will be set to "false".</li> <li>• If the value is not provided and the "cert" field is not included in the update, the existing value will be retained. Defined values are: <ul style="list-style-type: none"> <li>• "true" - The certificate is self-signed.</li> <li>• "false" - The certificate is not self-signed.</li> </ul> </li> </ul>
trustStateDesired	string	False	<p>JSON string containing a value indicating whether the certificate is trusted.</p> <p>If not specified on create, the default value is "trusted".</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "untrusted" - The certificate is not trusted.</li> <li>• "trusted" - The certificate is marked as trusted.</li> </ul>

Name	Type	Required	Description
metadata	<a href="#">type_astra_metadata_update</a>	False	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</li> </ul>

### Example request

```
{
  "type": "application/astra-certificate",
  "version": "1.0",
  "certUse": "rootCA",
  "cert":
  "LS0tLS1CRUdJTiBDRVJUSUZJQ0FURSB0tLS0tCk1JSUZyVENDQTVXZ0F3MVJHbnFGbUJSSW
  RyV1kwPQotLS0tLUVORCBDRVJUSUZJQ0FURSB0tLS0t"
}
```

### Response

Status: 201, Returns the newly created certificate resource in the JSON response body.

Name	Type	Required	Description
type	string	True	<p>Media type of the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>"application/astra-certificate"</li> </ul>

Name	Type	Required	Description
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>"1.0"</li> </ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>Conforms to the UUIDv4 Schema</li> </ul>
certUse	string	True	JSON string indicating the use of the certificate. If not specified, defaults to "rootCA". Defined values are: <ul style="list-style-type: none"> <li>"rootCA" - The certificate is a certificate authority (CA) certificate used to trust any certificate signed by that CA.</li> <li>"intermediateCA" - The certificate is an intermediate CA certificate issued by a root CA.</li> </ul>
cert	string	True	JSON string containing a Base64 encoded PKCS-11 formatted certificate (PEM). Defined values are: <ul style="list-style-type: none"> <li>Conforms to the base64 Encoded Data Schema</li> </ul>
cn	string	True	JSON string containing a common name extracted from the certificate. Defined values are: <ul style="list-style-type: none"> <li>Minimum length: 1</li> <li>Maximum length: 511</li> </ul>

Name	Type	Required	Description
expiryTimestamp	string	True	<p>JSON string containing a timestamp indicating when the certificate expires.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>
isSelfSigned	string	True	<p>JSON string indicating whether the certificate is self-signed.</p> <p>If not provided on create, the value defaults to "false".</p> <p>On update:</p> <ul style="list-style-type: none"> <li>• If the value is provided, that value will be used.</li> <li>• If the value is not provided and the "cert" field is included in the update, the value will be set to "false".</li> <li>• If the value is not provided and the "cert" field is not included in the update, the existing value will be retained.</li> </ul> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - The certificate is self-signed.</li> <li>• "false" - The certificate is not self-signed.</li> </ul>

Name	Type	Required	Description
trustState	string	True	<p>JSON string containing one of a set of enumerated values indicating whether the certificate is trusted. Defined values are:</p> <ul style="list-style-type: none"> <li>• "untrusted" - The certificate is not trusted.</li> <li>• "trusted" - The certificate is marked as trusted.</li> <li>• "expired" - The certificate is expired, so is neither trusted or not trusted.</li> </ul>
trustStateTransitions	array[type_astra_stateTransitions]	True	<p>JSON array of JSON objects, each representing the set of permitted state transitions from a given defined state. Each JSON object contains the fields "from" and "to", where the "from" value is the name of a state, and the "to" value is an array of permitted destination states.</p>
trustStateDesired	string	False	<p>JSON string containing a value indicating whether the certificate is trusted. If not specified on create, the default value is "trusted". Defined values are:</p> <ul style="list-style-type: none"> <li>• "untrusted" - The certificate is not trusted.</li> <li>• "trusted" - The certificate is marked as trusted.</li> </ul>

Name	Type	Required	Description
trustStateDetails	array[type_astra_stateDetails]	True	<p>JSON array of JSON objects that lists additional details about the trust state of the certificate. If no details are available, this array will be empty.</p> <ul style="list-style-type: none"> <li>• Minimum Items: 0</li> </ul>
metadata	type_astra_metadata_update	True	<p>Client and service-specified metadata associated with the resource. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</li> </ul>

## Example response

```
{
  "type": "application/astra-certificate",
  "version": "1.0",
  "id": "eb12225e-aded-584e-9da1-03881ce4cf7a",
  "certUse": "rootCA",
  "cert":
  "LS0tLS1CRUdJTtBDRVJUSUZJQ0FURS0tLS0tCk1JSUZyVENDQTVXZ0F3MVJHbnFGbUJSSW
  RyV1kwPQotLS0tLUVORCBDRVJUSUZJQ0FURS0tLS0t",
  "cn": "vcenter.example.com",
  "isSelfSigned": "false",
  "expiryTimestamp": "2022-03-23T16:48:38.5233461Z",
  "trustState": "trusted",
  "trustStateTransitions": [
    {
      "from": "untrusted",
      "to": [
        "trusted"
      ]
    },
    {
      "from": "trusted",
      "to": [
        "untrusted"
      ]
    }
  ],
  "trustStateDesired": "trusted",
  "trustStateDetails": [],
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

## Response

Status: 400, Bad request



Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

### Example response

```
{
  "type": "https://astra.netapp.io/problems/7",
  "title": "Invalid JSON payload",
  "detail": "The request body is not valid JSON.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

## Response

Status: 500, Internal server error

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/34",
  "title": "Internal server error",
  "detail": "The server was unable to process this request.",
  "status": "500"
}
```

## Error

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	

Name	Type	Required	Description
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Definitions

## See Definitions

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[type_astra_label]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

### type\_astra\_stateTransitions

Name	Type	Required	Description
from	string	True	
to	array[string]	True	

### type\_astra\_stateDetails

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	

### invalidFields

Name	Type	Required	Description
name	string	True	Name of the invalid request body field

Name	Type	Required	Description
reason	string	True	Reason why the request body field is invalid

## List all certificates

GET /accounts/{account\_id}/core/v1/certificates

Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"> <li>example: <code>{{.Account}}</code></li> </ul>
continue		query	False	Indicates the token to resume listing from. <p>URL examples:</p> <pre>"continue=&lt;continue token="" from="" collection="" metadata=""&gt;"&lt;/continue&gt;</pre> <p>OpenAPI examples:</p> <pre>"&lt;continue token="" from="" collection="" metadata=""&gt;"&lt;/continue&gt;&amp;lt;/continue&amp;gt;</pre>

Name	Type	In	Required	Description
filter	string	query	False	<p>Indicates which fields should be matched in order to return a resource when listing a collection.</p> <p>Supported operators are:</p> <ul style="list-style-type: none"> <li>• eq - Equality</li> <li>• lt/gt - Less than/Greater than</li> <li>• lte/gte - Less than or equals to/Greater than or equals to</li> </ul> <p>URL example: "filter=field%20eq%20%27value%27"</p> <p>OpenAPI examples: "field eq 'value'"</p> <ul style="list-style-type: none"> <li>• example: certUse%20eq%20'rootCA'</li> </ul>
include	string	query	False	<p>Indicates which fields should be returned when listing a collection.</p> <p>URL examples: "include=id", "include=id,name"</p> <p>OpenAPI examples: "id"</p> <ul style="list-style-type: none"> <li>• example: id,cn,isSelfSigned</li> </ul>

Name	Type	In	Required	Description
limit	string	query	False	Indicates the maximum number of resources to return when listing a collection.  URL examples: "limit=2"  OpenAPI examples: "2"
orderBy	string	query	False	Indicates the sort order of resource when listing a collection.  URL examples: "orderBy=name", "orderBy=name%20desc"  OpenAPI examples: "name desc"

## Response

Status: 200, Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

Name	Type	Required	Description
items	array[Any of: <a href="#">certificate_1.0_get_response_body</a> , array[]]	True	
metadata	<a href="#">type_astra_metadata_list</a>	True	

## Example response

```
{
  "type": "application/astra-certificates",
  "version": "1.0",
  "items": [
    [
      "f97f3441-075e-4f9b-9d1e-47f9f62a3fc4",
      "prod.region-1.example.com",
      "true"
    ],
    [
      "5e365b4d-034f-4f13-95ef-d3a7fbc0df3d",
      "prod.region-2.example.com",
      "false"
    ],
    [
      "11ceb350-1999-4b79-80a6-46a980a27856",
      "prod.example.com",
      "false"
    ]
  ],
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	



### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	

Name	Type	Required	Description
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

### Definitions

## See Definitions

### type\_astra\_stateTransitions

Name	Type	Required	Description
from	string	True	
to	array[string]	True	

### type\_astra\_stateDetails

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.  
Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[type_astra_label]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

### certificate\_1.0\_get\_response\_body

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"> <li>"application/astra-certificate"</li> </ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>"1.0"</li> </ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>Conforms to the UUIDv4 Schema</li> </ul>
certUse	string	True	JSON string indicating the use of the certificate. If not specified, defaults to "rootCA". Defined values are: <ul style="list-style-type: none"> <li>"rootCA" - The certificate is a certificate authority (CA) certificate used to trust any certificate signed by that CA.</li> <li>"intermediateCA" - The certificate is an intermediate CA certificate issued by a root CA.</li> </ul>
cert	string	True	JSON string containing a Base64 encoded PKCS-11 formatted certificate (PEM). Defined values are: <ul style="list-style-type: none"> <li>Conforms to the base64 Encoded Data Schema</li> </ul>

Name	Type	Required	Description
cn	string	True	JSON string containing a common name extracted from the certificate. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 1</li><li>• Maximum length: 511</li></ul>
expiryTimestamp	string	True	JSON string containing a timestamp indicating when the certificate expires. Defined values are: <ul style="list-style-type: none"><li>• Conforms to the ISO-8601 Date Time Schema</li></ul>

Name	Type	Required	Description
isSelfSigned	string	True	<p>JSON string indicating whether the certificate is self-signed.</p> <p>If not provided on create, the value defaults to "false".</p> <p>On update:</p> <ul style="list-style-type: none"><li>• If the value is provided, that value will be used.</li><li>• If the value is not provided and the "cert" field is included in the update, the value will be set to "false".</li><li>• If the value is not provided and the "cert" field is not included in the update, the existing value will be retained.</li></ul> <p>Defined values are:</p> <ul style="list-style-type: none"><li>• "true" - The certificate is self-signed.</li><li>• "false" - The certificate is not self-signed.</li></ul>

Name	Type	Required	Description
trustState	string	True	<p>JSON string containing one of a set of enumerated values indicating whether the certificate is trusted. Defined values are:</p> <ul style="list-style-type: none"> <li>• "untrusted" - The certificate is not trusted.</li> <li>• "trusted" - The certificate is marked as trusted.</li> <li>• "expired" - The certificate is expired, so is neither trusted or not trusted.</li> </ul>
trustStateTransitions	array[type_astra_stateTransitions]	True	<p>JSON array of JSON objects, each representing the set of permitted state transitions from a given defined state. Each JSON object contains the fields "from" and "to", where the "from" value is the name of a state, and the "to" value is an array of permitted destination states.</p>
trustStateDesired	string	False	<p>JSON string containing a value indicating whether the certificate is trusted. If not specified on create, the default value is "trusted". Defined values are:</p> <ul style="list-style-type: none"> <li>• "untrusted" - The certificate is not trusted.</li> <li>• "trusted" - The certificate is marked as trusted.</li> </ul>

Name	Type	Required	Description
trustStateDetails	array[type_astra_stateDetails]	True	<p>JSON array of JSON objects that lists additional details about the trust state of the certificate.</p> <p>If no details are available, this array will be empty.</p> <ul style="list-style-type: none"> <li>• Minimum Items: 0</li> </ul>
metadata	type_astra_metadata_update	True	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema</li> </ul> <p>If not specified on create, a metadata object will be created with no labels.</p> <p>If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</p>

#### type\_astra\_metadata\_list

Name	Type	Required	Description
continue	string	False	
count	number	False	
labels	array[type_astra_label]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

#### invalidParams



Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Retrieve a certificate

GET /accounts/{account\_id}/core/v1/certificates/{certificate\_id}

Returns the stored Certificate API resource in the JSON response body.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"> <li>example: <code>{{.Account}}</code></li> </ul>
certificate_id	string	path	True	ID of the certificate collection to list

### Response

Status: 200, Returns the stored Certificate API resource in the JSON response body.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"> <li>"application/astra-certificate"</li> </ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>"1.0"</li> </ul>

Name	Type	Required	Description
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the UUIDv4 Schema</li> </ul>
certUse	string	True	JSON string indicating the use of the certificate. If not specified, defaults to "rootCA". Defined values are: <ul style="list-style-type: none"> <li>• "rootCA" - The certificate is a certificate authority (CA) certificate used to trust any certificate signed by that CA.</li> <li>• "intermediateCA" - The certificate is an intermediate CA certificate issued by a root CA.</li> </ul>
cert	string	True	JSON string containing a Base64 encoded PKCS-11 formatted certificate (PEM). Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the base64 Encoded Data Schema</li> </ul>
cn	string	True	JSON string containing a common name extracted from the certificate. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 511</li> </ul>

Name	Type	Required	Description
expiryTimestamp	string	True	<p>JSON string containing a timestamp indicating when the certificate expires.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>
isSelfSigned	string	True	<p>JSON string indicating whether the certificate is self-signed.</p> <p>If not provided on create, the value defaults to "false".</p> <p>On update:</p> <ul style="list-style-type: none"> <li>• If the value is provided, that value will be used.</li> <li>• If the value is not provided and the "cert" field is included in the update, the value will be set to "false".</li> <li>• If the value is not provided and the "cert" field is not included in the update, the existing value will be retained.</li> </ul> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - The certificate is self-signed.</li> <li>• "false" - The certificate is not self-signed.</li> </ul>

Name	Type	Required	Description
trustState	string	True	<p>JSON string containing one of a set of enumerated values indicating whether the certificate is trusted. Defined values are:</p> <ul style="list-style-type: none"> <li>• "untrusted" - The certificate is not trusted.</li> <li>• "trusted" - The certificate is marked as trusted.</li> <li>• "expired" - The certificate is expired, so is neither trusted or not trusted.</li> </ul>
trustStateTransitions	array[type_astra_stateTransitions]	True	<p>JSON array of JSON objects, each representing the set of permitted state transitions from a given defined state. Each JSON object contains the fields "from" and "to", where the "from" value is the name of a state, and the "to" value is an array of permitted destination states.</p>
trustStateDesired	string	False	<p>JSON string containing a value indicating whether the certificate is trusted. If not specified on create, the default value is "trusted". Defined values are:</p> <ul style="list-style-type: none"> <li>• "untrusted" - The certificate is not trusted.</li> <li>• "trusted" - The certificate is marked as trusted.</li> </ul>

Name	Type	Required	Description
trustStateDetails	array[type_astra_stateDetails]	True	<p>JSON array of JSON objects that lists additional details about the trust state of the certificate. If no details are available, this array will be empty.</p> <ul style="list-style-type: none"> <li>• Minimum Items: 0</li> </ul>
metadata	type_astra_metadata_update	True	<p>Client and service-specified metadata associated with the resource. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</li> </ul>

## Example response

```
{
  "type": "application/astra-certificate",
  "version": "1.0",
  "id": "eb12225e-aded-584e-9da1-03881ce4cf7a",
  "certUse": "rootCA",
  "cert":
  "LS0tLS1CRUdJTtiBDRVJUSUZJQ0FURSOtLS0tCk1JSUZyVENDQTVXZ0F3MVJHbnFGbUJSSW
  RyV1kwPQotLS0tLUVORCBDRVJUSUZJQ0FURSOtLS0t",
  "cn": "vcenter.example.com",
  "expiryTimestamp": "2022-03-23T16:48:38.5233461Z",
  "isSelfSigned": "true",
  "trustState": "untrusted",
  "trustStateTransitions": [
    {
      "from": "untrusted",
      "to": [
        "trusted"
      ]
    },
    {
      "from": "trusted",
      "to": [
        "untrusted"
      ]
    }
  ],
  "trustStateDetails": [],
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	



Name	Type	Required	Description
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

### Definitions

## See Definitions

### type\_astra\_stateTransitions

Name	Type	Required	Description
from	string	True	
to	array[string]	True	

### type\_astra\_stateDetails

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.  
Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[type_astra_label]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter

Name	Type	Required	Description
reason	string	True	Reason why the query parameter is invalid

## Modify a certificate

PUT /accounts/{account\_id}/core/v1/certificates/{certificate\_id}

Replaces the entire stored resource with the supplied JSON request body.

### Side Effects

- An updated CA certificate will be updated in the trust store.
- If an existing trusted CA certificate becomes untrusted, it will be removed from the trust store.
- If a certificate body is updated ("cert" field), the "isSelfSigned" indicator must be included to indicate the state of the new certificate. If the "isSelfSigned" indicator is not included in this case, the value will be set to "false".
- If an update does not modify the certificate body ("cert" field), the "isSelfSigned" indicator is optional and the existing value will be retained if not provided.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource  • example: {{.Account}}
certificate_id	string	path	True	ID of the certificate collection to list

### Request Body

Replaces the entire stored resource with the supplied JSON request body.

### Side Effects

- An updated CA certificate will be updated in the trust store.
- If an existing trusted CA certificate becomes untrusted, it will be removed from the trust store.
- If a certificate body is updated ("cert" field), the "isSelfSigned" indicator must be included to indicate the state of the new certificate. If the "isSelfSigned" indicator is not included in this case, the value will be set to "false".
- If an update does not modify the certificate body ("cert" field), the "isSelfSigned" indicator is optional and the existing value will be retained if not provided.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"> <li>"application/astra-certificate"</li> </ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>"1.0"</li> </ul>
id	string	False	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>Conforms to the UUIDv4 Schema</li> </ul>
certUse	string	False	JSON string indicating the use of the certificate. If not specified, defaults to "rootCA". Defined values are: <ul style="list-style-type: none"> <li>"rootCA" - The certificate is a certificate authority (CA) certificate used to trust any certificate signed by that CA.</li> <li>"intermediateCA" - The certificate is an intermediate CA certificate issued by a root CA.</li> </ul>
cert	string	False	JSON string containing a Base64 encoded PKCS-11 formatted certificate (PEM). Defined values are: <ul style="list-style-type: none"> <li>Conforms to the base64 Encoded Data Schema</li> </ul>

Name	Type	Required	Description
cn	string	False	<p>JSON string containing a common name extracted from the certificate.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 511</li> </ul>
expiryTimestamp	string	False	<p>JSON string containing a timestamp indicating when the certificate expires.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>
isSelfSigned	string	False	<p>JSON string indicating whether the certificate is self-signed.</p> <p>If not provided on create, the value defaults to "false".</p> <p>On update:</p> <ul style="list-style-type: none"> <li>• If the value is provided, that value will be used.</li> <li>• If the value is not provided and the "cert" field is included in the update, the value will be set to "false".</li> <li>• If the value is not provided and the "cert" field is not included in the update, the existing value will be retained.</li> </ul> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - The certificate is self-signed.</li> <li>• "false" - The certificate is not self-signed.</li> </ul>

Name	Type	Required	Description
trustState	string	False	<p>JSON string containing one of a set of enumerated values indicating whether the certificate is trusted. Defined values are:</p> <ul style="list-style-type: none"> <li>• "untrusted" - The certificate is not trusted.</li> <li>• "trusted" - The certificate is marked as trusted.</li> <li>• "expired" - The certificate is expired, so is neither trusted or not trusted.</li> </ul>
trustStateTransitions	array[type_astra_stateTransitions]	False	<p>JSON array of JSON objects, each representing the set of permitted state transitions from a given defined state. Each JSON object contains the fields "from" and "to", where the "from" value is the name of a state, and the "to" value is an array of permitted destination states.</p>
trustStateDesired	string	False	<p>JSON string containing a value indicating whether the certificate is trusted. If not specified on create, the default value is "trusted". Defined values are:</p> <ul style="list-style-type: none"> <li>• "untrusted" - The certificate is not trusted.</li> <li>• "trusted" - The certificate is marked as trusted.</li> </ul>

Name	Type	Required	Description
trustStateDetails	array[type_astra_stateDetails]	False	<p>JSON array of JSON objects that lists additional details about the trust state of the certificate. If no details are available, this array will be empty.</p> <ul style="list-style-type: none"> <li>• Minimum Items: 0</li> </ul>
metadata	type_astra_metadata_update	False	<p>Client and service-specified metadata associated with the resource. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</li> </ul>

### Example request

```
{
  "type": "application/astra-certificate",
  "version": "1.0",
  "trustStateDesired": "trusted"
}
```

### Response

Status: 204, Indicates if the certificate resource was updated.

### Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields



### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 409, Conflict

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

### Example response

```
{
  "type": "https://astra.netapp.io/problems/10",
  "title": "JSON resource conflict",
  "detail": "The request body JSON contains a field that conflicts with an idempotent value.",
  "status": "409"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

**Definitions**

## See Definitions

### type\_astra\_stateTransitions

Name	Type	Required	Description
from	string	True	
to	array[string]	True	

### type\_astra\_stateDetails

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.  
Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[type_astra_label]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter

Name	Type	Required	Description
reason	string	True	Reason why the query parameter is invalid

invalidFields

Name	Type	Required	Description
name	string	True	Name of the invalid request body field
reason	string	True	Reason why the request body field is invalid

## Delete a certificate

DELETE /accounts/{account\_id}/core/v1/certificates/{certificate\_id}

Removes the specified Certificate API resource.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"> <li>example: <code>{{.Account}}</code></li> </ul>
certificate_id	string	path	True	ID of the certificate collection to list

### Response

Status: 204, Indicates if the certificate resource was deleted.

### Error

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	

Name	Type	Required	Description
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

## Cloud

### Cloud overview

The Cloud API provides CRUD (Create-Read-Update-Delete) access to cloud resources to allow clients to connect to specific clouds to manage clusters and applications.

### Create a new cloud

POST /accounts/{account\_id}/topology/v1/clouds

Indicates the desired values for the Cloud API resource to be created.

#### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"> <li>example: <code>{{.Account}}</code></li> </ul>

#### Request Body

Indicates the desired values for the Cloud API resource to be created.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "application/astra-cloud"</li> </ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "1.0"</li> <li>• "1.1"</li> </ul>
name	string	True	JSON string containing the name of the cloud. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> <li>• This string is internally validated to prevent XSS, Unicode, directory traversal, and SQL-injection attacks</li> </ul>
cloudType	string	True	JSON string containing a value indicating the type of cloud. Defined values are: <ul style="list-style-type: none"> <li>• "gcp" - The cloud is provided by Google</li> <li>• "azure" - The cloud is provided by Microsoft</li> <li>• "aws" - The cloud is provided by Amazon</li> <li>• "private" - The cloud is customer managed</li> </ul>

Name	Type	Required	Description
credentialID	string	False	<p>JSON string containing a value indicating the ID of the credential that contains the service account for the cloud. This is required for cloudType "gcp", "azure" and "aws".</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
defaultBucketID	string	False	<p>JSON string containing the ID of a bucket that is to be used by default when creating backups for applications within the cloud. This is required when cloning applications across clusters and is used as a default if a bucket is not specified when creating backups and schedules.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
metadata	type_astra_metadata_update	False	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema</li> </ul> <p>If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</p>



## Example request

```
{
  "type": "application/astra-cloud",
  "version": "1.1",
  "name": "GKE",
  "cloudType": "gcp",
  "credentialID": "6fa2f917-f730-41b8-9c15-17f531843b31"
}
```

## Response

Status: 201, Returns the newly created cloud resource in the JSON response body.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>"application/astra-cloud"</li></ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"><li>"1.0"</li><li>"1.1"</li></ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"><li>Conforms to the UUIDv4 Schema</li></ul>

Name	Type	Required	Description
name	string	True	<p>JSON string containing the name of the cloud. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> <li>• This string is internally validated to prevent XSS, Unicode, directory traversal, and SQL-injection attacks</li> </ul>
state	string	True	<p>JSON string containing a value indicating the operational state of the cloud. Defined values are:</p> <ul style="list-style-type: none"> <li>• "pending" - The cloud is scheduled for discovery</li> <li>• "discovering" - The cloud is in the process of being discovered</li> <li>• "provisioning" - The cloud is in the process of being provisioned</li> <li>• "running" - The cloud is running normally</li> <li>• "failed" - The cloud is in a permanent failure state</li> <li>• "removed" - The cloud is not currently accessible</li> <li>• "unknown" - The cloud state cannot be determined</li> </ul>

Name	Type	Required	Description
stateUnready	array[string]	True	<p>JSON array of JSON strings, each indicating a reason why a cloud is unable to transition to "running" or why it has transitioned to "failed". Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 127</li> </ul>
cloudType	string	True	<p>JSON string containing a value indicating the type of cloud. Defined values are:</p> <ul style="list-style-type: none"> <li>• "gcp" - The cloud is provided by Google</li> <li>• "azure" - The cloud is provided by Microsoft</li> <li>• "aws" - The cloud is provided by Amazon</li> <li>• "private" - The cloud is customer managed</li> </ul>
credentialID	string	False	<p>JSON string containing a value indicating the ID of the credential that contains the service account for the cloud. This is required for cloudType "gcp", "azure" and "aws". Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
defaultBucketID	string	False	<p>JSON string containing the ID of a bucket that is to be used by default when creating backups for applications within the cloud. This is required when cloning applications across clusters and is used as a default if a bucket is not specified when creating backups and schedules.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
metadata	<a href="#">type_astra_metadata_update</a>	True	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</li> </ul>

## Example response

```
{
  "type": "application/astra-cloud",
  "version": "1.1",
  "id": "1c9512c3-ec62-5ed8-8013-02fc090b9d03",
  "name": "GKE",
  "state": "discovering",
  "stateUnready": [
    "Cloud discovery in progress"
  ],
  "cloudType": "gcp",
  "credentialID": "6fa2f917-f730-41b8-9c15-17f531843b31",
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 409, Conflict

Name	Type	Required	Description
type	string	True	

Name	Type	Required	Description
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/10",
  "title": "JSON resource conflict",
  "detail": "The request body JSON contains a field that conflicts with an idempotent value.",
  "status": "409"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

## Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

## Definitions



## See Definitions

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[type_astra_label]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

### invalidFields

Name	Type	Required	Description
name	string	True	Name of the invalid request body field
reason	string	True	Reason why the request body field is invalid

## List all clouds

GET /accounts/{account\_id}/topology/v1/clouds

Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"><li>example: {{.Account}}</li></ul>
include	string	query	False	Indicates which fields should be returned when listing a collection.  URL examples: "include=id", "include=id,name"  OpenAPI examples: "id" <ul style="list-style-type: none"><li>example: id,name,State</li></ul>
limit	string	query	False	Indicates the maximum number of resources to return when listing a collection.  URL examples: "limit=2"  OpenAPI examples: "2"

Name	Type	In	Required	Description
filter	string	query	False	<p>Indicates which fields should be matched in order to return a resource when listing a collection.</p> <p>Supported operators are:</p> <ul style="list-style-type: none"> <li>• eq - Equality</li> <li>• lt/gt - Less than/Greater than</li> <li>• lte/gte - Less than or equals to/Greater than or equals to</li> </ul> <p>URL example: "filter=field%20eq%20%27value%27"</p> <p>OpenAPI examples: "field eq 'value'"</p>

## Response

Status: 200, Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

Name	Type	Required	Description
items	array[Any of: <a href="#">cloud_1.1_get_response_body</a> , array[]]	True	
metadata	<a href="#">type_astra_metadata_list</a>	True	

## Example response

```
{
  "type": "application/astra-clouds",
  "version": "1.1",
  "items": [
    [
      "2f9e63fa-8ba8-414a-a57c-0f3042b80682",
      "gcp",
      "discovering"
    ],
    [
      "f723febe-b167-44dd-b07d-c075a8bbe4f3",
      "aws",
      "failed"
    ]
  ],
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	

Name	Type	Required	Description
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't found.",
  "status": "404"
}
```

## Definitions

## See Definitions

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[type_astra_label]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

### cloud\_1.1\_get\_response\_body

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>• "application/astra-cloud"</li></ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"><li>• "1.0"</li><li>• "1.1"</li></ul>



Name	Type	Required	Description
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"><li>• Conforms to the UUIDv4 Schema</li></ul>
name	string	True	JSON string containing the name of the cloud. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 1</li><li>• Maximum length: 63</li><li>• This string is internally validated to prevent XSS, Unicode, directory traversal, and SQL-injection attacks</li></ul>

Name	Type	Required	Description
state	string	True	<p>JSON string containing a value indicating the operational state of the cloud.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "pending" - The cloud is scheduled for discovery</li> <li>• "discovering" - The cloud is in the process of being discovered</li> <li>• "provisioning" - The cloud is in the process of being provisioned</li> <li>• "running" - The cloud is running normally</li> <li>• "failed" - The cloud is in a permanent failure state</li> <li>• "removed" - The cloud is not currently accessible</li> <li>• "unknown" - The cloud state cannot be determined</li> </ul>
stateUnready	array[string]	True	<p>JSON array of JSON strings, each indicating a reason why a cloud is unable to transition to "running" or why it has transitioned to "failed".</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 127</li> </ul>

Name	Type	Required	Description
cloudType	string	True	<p>JSON string containing a value indicating the type of cloud.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "gcp" - The cloud is provided by Google</li> <li>• "azure" - The cloud is provided by Microsoft</li> <li>• "aws" - The cloud is provided by Amazon</li> <li>• "private" - The cloud is customer managed</li> </ul>
credentialID	string	False	<p>JSON string containing a value indicating the ID of the credential that contains the service account for the cloud. This is required for cloudType "gcp", "azure" and "aws".</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
defaultBucketID	string	False	<p>JSON string containing the ID of a bucket that is to be used by default when creating backups for applications within the cloud. This is required when cloning applications across clusters and is used as a default if a bucket is not specified when creating backups and schedules.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
metadata	<a href="#">type_astra_metadata_update</a>	True	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>Conforms to the Astra Metadata Schema</li> </ul> <p>If not specified on create, a metadata object will be created with no labels.</p> <p>If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</p>

#### type\_astra\_metadata\_list

Name	Type	Required	Description
continue	string	False	
count	number	False	
labels	array[ <a href="#">type_astra_label</a> ]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

#### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Retrieve a cloud

GET /accounts/{account\_id}/topology/v1/clouds/{cloud\_id}

Returns the stored Cloud API resource in the JSON response body.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"><li>example: <code>{{.Account}}</code></li></ul>
cloud_id	string	path	True	ID of the cloud collection to list

### Response

Status: 200, Returns the stored Cloud API resource in the JSON response body.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>"application/astra-cloud"</li></ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"><li>"1.0"</li><li>"1.1"</li></ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"><li>Conforms to the UUIDv4 Schema</li></ul>

Name	Type	Required	Description
name	string	True	<p>JSON string containing the name of the cloud. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> <li>• This string is internally validated to prevent XSS, Unicode, directory traversal, and SQL-injection attacks</li> </ul>
state	string	True	<p>JSON string containing a value indicating the operational state of the cloud. Defined values are:</p> <ul style="list-style-type: none"> <li>• "pending" - The cloud is scheduled for discovery</li> <li>• "discovering" - The cloud is in the process of being discovered</li> <li>• "provisioning" - The cloud is in the process of being provisioned</li> <li>• "running" - The cloud is running normally</li> <li>• "failed" - The cloud is in a permanent failure state</li> <li>• "removed" - The cloud is not currently accessible</li> <li>• "unknown" - The cloud state cannot be determined</li> </ul>

Name	Type	Required	Description
stateUnready	array[string]	True	<p>JSON array of JSON strings, each indicating a reason why a cloud is unable to transition to "running" or why it has transitioned to "failed". Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 127</li> </ul>
cloudType	string	True	<p>JSON string containing a value indicating the type of cloud. Defined values are:</p> <ul style="list-style-type: none"> <li>• "gcp" - The cloud is provided by Google</li> <li>• "azure" - The cloud is provided by Microsoft</li> <li>• "aws" - The cloud is provided by Amazon</li> <li>• "private" - The cloud is customer managed</li> </ul>
credentialID	string	False	<p>JSON string containing a value indicating the ID of the credential that contains the service account for the cloud. This is required for cloudType "gcp", "azure" and "aws". Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
defaultBucketID	string	False	<p>JSON string containing the ID of a bucket that is to be used by default when creating backups for applications within the cloud. This is required when cloning applications across clusters and is used as a default if a bucket is not specified when creating backups and schedules.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
metadata	type_astra_metadata_update	True	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</li> </ul>



## Example response

```
{
  "type": "application/astra-cloud",
  "version": "1.1",
  "id": "1c9512c3-ec62-5ed8-8013-02fc090b9d03",
  "name": "GKE",
  "state": "discovering",
  "stateUnready": [
    "Cloud discovery in progress"
  ],
  "cloudType": "gcp",
  "credentialID": "6fa2f917-f730-41b8-9c15-17f531843b31",
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	

Name	Type	Required	Description
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't found.",
  "status": "404"
}
```

## Definitions

### See Definitions

type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[type_astra_label]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Modify a cloud

PUT /accounts/{account\_id}/topology/v1/clouds/{cloud\_id}

Replaces the entire stored resource with the supplied JSON request body while preserving key values that are not user-modifiable.

### Side Effects

- An update will trigger a rediscovery of SAs and clusters.

## Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"><li>example: {{.Account}}</li></ul>
cloud_id	string	path	True	ID of the cloud collection to list

## Request Body

Replaces the entire stored resource with the supplied JSON request body while preserving key values that are not user-modifiable.

## Side Effects

- An update will trigger a rediscovery of SAs and clusters.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>"application/astra-cloud"</li></ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"><li>"1.0"</li><li>"1.1"</li></ul>
id	string	False	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"><li>Conforms to the UUIDv4 Schema</li></ul>

Name	Type	Required	Description
name	string	False	<p>JSON string containing the name of the cloud. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> <li>• This string is internally validated to prevent XSS, Unicode, directory traversal, and SQL-injection attacks</li> </ul>
state	string	False	<p>JSON string containing a value indicating the operational state of the cloud. Defined values are:</p> <ul style="list-style-type: none"> <li>• "pending" - The cloud is scheduled for discovery</li> <li>• "discovering" - The cloud is in the process of being discovered</li> <li>• "provisioning" - The cloud is in the process of being provisioned</li> <li>• "running" - The cloud is running normally</li> <li>• "failed" - The cloud is in a permanent failure state</li> <li>• "removed" - The cloud is not currently accessible</li> <li>• "unknown" - The cloud state cannot be determined</li> </ul>

Name	Type	Required	Description
stateUnready	array[string]	False	<p>JSON array of JSON strings, each indicating a reason why a cloud is unable to transition to "running" or why it has transitioned to "failed". Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 127</li> </ul>
cloudType	string	False	<p>JSON string containing a value indicating the type of cloud. Defined values are:</p> <ul style="list-style-type: none"> <li>• "gcp" - The cloud is provided by Google</li> <li>• "azure" - The cloud is provided by Microsoft</li> <li>• "aws" - The cloud is provided by Amazon</li> <li>• "private" - The cloud is customer managed</li> </ul>
credentialID	string	False	<p>JSON string containing a value indicating the ID of the credential that contains the service account for the cloud. This is required for cloudType "gcp", "azure" and "aws". Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
defaultBucketID	string	False	<p>JSON string containing the ID of a bucket that is to be used by default when creating backups for applications within the cloud. This is required when cloning applications across clusters and is used as a default if a bucket is not specified when creating backups and schedules.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
metadata	<a href="#">type_astra_metadata_update</a>	False	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</li> </ul>

### Example request

```
{
  "type": "application/astra-cloud",
  "version": "1.1"
}
```

### Response



Status: 204, Indicates if the cloud resource was updated.

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

## Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 409, Conflict

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/10",
  "title": "JSON resource conflict",
  "detail": "The request body JSON contains a field that conflicts with an idempotent value.",
  "status": "409"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	

Name	Type	Required	Description
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/1",
  "title": "Resource not found",
  "detail": "The resource specified in the request URI wasn't found.",
  "status": "404"
}
```

### Definitions

## See Definitions

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[type_astra_label]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

### invalidFields

Name	Type	Required	Description
name	string	True	Name of the invalid request body field
reason	string	True	Reason why the request body field is invalid

## Delete a cloud

DELETE /accounts/{account\_id}/topology/v1/clouds/{cloud\_id}

Deletes the requested cloud instance and any non-managed clusters and volumes associated with that specific cloud.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"><li>example: {{.Account}}</li></ul>
cloud_id	string	path	True	ID of the cloud collection to list

### Response

```
Status: 204, Indicates if the cloud resource was deleted.
```

### Response

```
Status: 401, Unauthorized
```

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	

Name	Type	Required	Description
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Response

Status: 409, Conflict

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/141",
  "title": "Action blocked: Delete cloud instance",
  "detail": "The cloud instance wasn't deleted because there are managed clusters associated with this cloud instance.",
  "status": "409"
}
```

## Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example error response

```
{
  "type": "https://astra.netapp.io/problems/1",
  "title": "Resource not found",
  "detail": "The resource specified in the request URI wasn't found.",
  "status": "404"
}
```

## Definitions



## See Definitions

### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

### invalidFields

Name	Type	Required	Description
name	string	True	Name of the invalid request body field
reason	string	True	Reason why the request body field is invalid

# Cluster

## Cluster overview

The Cluster API provides CRUD (Create-Read-Update-Delete) access to cluster resources in order to represent unmanaged Kubernetes clusters.

## Create a new cluster for a cloud

POST /accounts/{account\_id}/topology/v1/clouds/{cloud\_id}/clusters

Indicates the desired values for the Cluster API resource to be created.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"><li>example: <code>{{.Account}}</code></li></ul>
cloud_id	string	path	True	ID of the containing cloud resource

## Request Body

Indicates the desired values for the Cluster API resource to be created.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>• "application/astra-cluster"</li></ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"><li>• "1.0"</li><li>• "1.1"</li><li>• "1.2"</li><li>• "1.3"</li></ul>
name	string	False	JSON string containing a name for the cluster. If not specified, the Kubernetes name of the cluster will be used. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 1</li><li>• Maximum length: 63</li><li>• This string is internally validated to prevent XSS, Unicode, directory traversal, and SQL-injection attacks</li></ul>
accHost	string	False	JSON string that indicates that this cluster hosts the instance of Astra Control Center that is currently being accessed. Defined values are: <ul style="list-style-type: none"><li>• "true" - This cluster is hosting the instance of Astra Control Center that is currently being accessed.</li></ul>

Name	Type	Required	Description
credentialID	string	True	<p>JSON string containing a value indicating the ID of the credential that contains the kubeconfig file for the cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
metadata	<a href="#">type_astra_metadata_update</a>	False	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema</li> </ul> <p>If not specified on create, a metadata object will be created with no labels.</p> <p>If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</p>

### Example request

```
{
  "type": "application/astra-cluster",
  "version": "1.3",
  "name": "GKE-22",
  "credentialID": "6fa2f917-f730-41b8-9c15-17f531843b31"
}
```

### Response

Status: 201, Returns the newly created cluster resource in the JSON response body.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "application/astra-cluster"</li> </ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "1.0"</li> <li>• "1.1"</li> <li>• "1.2"</li> <li>• "1.3"</li> </ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the UUIDv4 Schema</li> </ul>
name	string	True	JSON string containing a name for the cluster. If not specified, the Kubernetes name of the cluster will be used. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> <li>• This string is internally validated to prevent XSS, Unicode, directory traversal, and SQL-injection attacks</li> </ul>

Name	Type	Required	Description
state	string	True	<p>JSON string containing a value indicating the operational state of the cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "pending" - The cluster is scheduled for discovery</li> <li>• "discovering" - The cluster is in the process of being discovered</li> <li>• "provisioning" - The cluster is in the process of being provisioned</li> <li>• "running" - The cluster is running normally</li> <li>• "failed" - The cluster is in a permanent failure state</li> <li>• "removed" - The cluster is not currently accessible</li> <li>• "unknown" - The cluster state cannot be determined</li> </ul>
stateUnready	array[string]	True	<p>JSON array of JSON strings, each indicating a reason why the cluster is unable to transition to "running" state, when there are issues while in "running" state, or why it has transitioned to "failed" or "removed" state.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 127</li> </ul>

Name	Type	Required	Description
managedState	string	True	<p>JSON string containing a value indicating the management state of the cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "pending" - The cluster is scheduled to be discovered or added</li> <li>• "ineligible" - The cluster is in "running" state, is not under management, and is not eligible for management. The reasons for this ineligibility are provided in the unready key value</li> <li>• "unmanaged" - The cluster is in "running" or "failed" state, is not under management, and is eligible for management</li> <li>• "managing" - The cluster is in "running" state and is in the process of being managed</li> <li>• "managed" - The cluster is in "running", "failed", or "removed" state, and is under management</li> </ul>

Name	Type	Required	Description
protectionState	string	True	<p>JSON string containing a value indicating the protection state of the cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "full" - The clusters default storage class supports snapshots</li> <li>• "partial" - The cluster has only storageClasses that do not support snapshots</li> <li>• "atRisk" - The default storage class of the cluster does not support snapshots</li> </ul>
protectionStateDetails	array[type_astra_stateDetails]	True	<p>JSON array of JSON objects which lists additional details about the current protection state, including why the current state was reached.</p> <p>If no details are available, this array will be empty.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum Items: 0</li> </ul>
restoreTargetSupported	string	False	<p>JSON string containing a value indicating the ability of the cluster to be a <i>target</i> of application data management operations.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - Cluster is an eligible target for app data management operations.</li> <li>• "false" - Cluster is <i>not</i> an eligible target for app data management operations.</li> </ul>

Name	Type	Required	Description
snapshotSupported	string	False	<p>JSON string containing a value indicating the ability of the cluster to perform application data management backup-like operations.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - Cluster is eligible to perform app data management operations.</li> <li>• "false" - Cluster is <i>not</i> eligible to perform app data management operations.</li> </ul>
managedStateUnready	array[string]	True	<p>JSON array of JSON strings, each indicating a reason why the cluster is ineligible to be managed, or that the cluster is managed but non-fatal errors were encountered while managing the cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 127</li> </ul>
managedTimestamp	string	False	<p>JSON string containing the timestamp indicating when the cluster was brought under management.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul> <p>This key is only returned when a cluster has a managedState of "managed".</p>



Name	Type	Required	Description
tridentVersion	string	False	<p>JSON string containing the version of Trident installed on the cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Software Version Schema</li> </ul>
tridentManagedState	string	False	<p>JSON string containing one of a set of enumerated values indicating the management state of Trident on this cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• "managed" - Trident instance on the cluster is managed by Astra</li> <li>• "unmanaged" - Trident instance on the cluster is not managed by Astra</li> </ul>
tridentManagedStateDesired	string	False	<p>JSON string containing a value indicating the desired management state for Trident. Defined values are:</p> <ul style="list-style-type: none"> <li>• "managed" - Manage Trident on this cluster</li> <li>• "unmanaged" - Do not manage Trident on this cluster</li> </ul>
tridentManagedStateDetails	array[type_astra_stateDetails]	False	<p>JSON array of JSON objects that lists additional details about why the state transitioned to "managed" or "unmanaged". If no details are available, this array will be empty.</p> <ul style="list-style-type: none"> <li>• Minimum items: 0</li> </ul>

Name	Type	Required	Description
tridentManagedStateAllowed	array[string]	False	<p>States that can be requested in a given tridentManagedState. The following states can be requested in each defined state:</p> <ul style="list-style-type: none"> <li>• "managed": "managed"</li> <li>• "unmanaged": "unmanaged"</li> </ul>
inUse	string	True	<p>JSON string containing a value indicating if the cluster has any managed applications and therefore cannot be deleted. Defined values are:</p> <ul style="list-style-type: none"> <li>• "false" - The cluster is not managed or is managed but has no managed applications associated with it</li> <li>• "true" - The cluster is managed and has managed applications associated with it</li> </ul>
accHost	string	False	<p>JSON string that indicates that this cluster hosts the instance of Astra Control Center that is currently being accessed. Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - This cluster is hosting the instance of Astra Control Center that is currently being accessed.</li> </ul>

Name	Type	Required	Description
clusterType	string	True	<p>JSON string containing a value indicating the type of cluster.            Defined values are:</p> <ul style="list-style-type: none"> <li>• "gke" - Kubernetes hosted on Google Kubernetes Engine</li> <li>• "aks" - Kubernetes hosted on Microsoft Azure Kubernetes Service</li> <li>• "eks" - Kubernetes hosted on Amazon Elastic Kubernetes Service</li> <li>• "rke" - The cluster is of type Rancher</li> <li>• "tanzu" -The cluster is of type Tanzu Kubernetes Grid</li> <li>• "openshift" - The cluster is of type OpenShift</li> <li>• "kubernetes" - The cluster is generic Kubernetes</li> </ul>
clusterVersion	string	False	<p>JSON string containing a value indicating the semantic versioning representation of the cluster environment.            For Kubernetes clusters, this is the Kubernetes version.            Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 31</li> </ul>

Name	Type	Required	Description
clusterVersionString	string	False	<p>JSON string containing a value indicating the extended versioning information for the cluster environment.</p> <p>For Kubernetes clusters, this is the full Kubernetes version.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 31</li> </ul>
clusterCreationTimestamp	string	False	<p>JSON string containing the timestamp indicating when the cluster was originally created.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>
namespaces	array[string]	False	<p>JSON array of JSON strings, each indicating a namespace within the cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 253</li> </ul>
defaultStorageClass	string	False	<p>JSON string containing a storageClass ID that corresponds to the default storage class set in Kubernetes.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
cloudID	string	True	<p>JSON string containing a value indicating the ID of the cloud the cluster is running on.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
credentialID	string	False	<p>JSON string containing a value indicating the ID of the credential that contains the kubeconfig file for the cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
location	string	False	<p>JSON string containing a value provided by the cloud that the cluster is running on, indicating the cloud-specific location of the cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>
isMultizonal	string	False	<p>JSON string containing a value provided by the cloud the cluster is running on, indicating whether the cluster spans two or more availability zones.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - The cluster spans two or more availability zones</li> <li>• "false" - The cluster is wholly located within a single availability zone</li> </ul>

Name	Type	Required	Description
privateRouteID	string	False	<p>JSON string containing the location ID for private clusters.</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>
apiServiceID	string	False	<p>JSON string containing the UUID from the Kubernetes (k8s) API service object. Used to uniquely identify a cluster.</p>
metadata	type_astra_metadata_update	True	<p>Client and service-specified metadata associated with the resource. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</li> </ul>

## Example response

```
{
  "type": "application/astra-cluster",
  "version": "1.3",
  "id": "01eaddc3-75b9-5606-97ae-0aa468b59492",
  "name": "GKE-22",
  "state": "running",
  "stateUnready": [],
  "managedState": "unmanaged",
  "managedStateUnready": [],
  "protectionState": "full",
  "protectionStateDetails": [],
  "tridentVersion": "21.07.2",
  "tridentManagedState": "managed",
  "tridentManagedStateDetails": [],
  "inUse": "false",
  "clusterType": "kubernetes",
  "clusterVersion": "1.91.1",
  "clusterVersionString": "1.19.1",
  "clusterCreationTimestamp": "2020-08-06T12:24:52.256624Z",
  "namespaces": [
    "kube-system",
    "kube-public",
    "my-app-1"
  ],
  "defaultStorageClass": "31c95aba-99d9-4987-b1bb-000dfce5952c",
  "cloudID": "548bdc1f-f00e-4a23-a062-83265d224d46",
  "credentialID": "6fa2f917-f730-41b8-9c15-17f531843b31",
  "location": "europe-west4",
  "isMultizonal": "false",
  "apiServiceID": "6bf33af2-872a-4553-a891-26b510c3edbe",
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```



## Response

Status: 409, Conflict

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

## Example response

```
{
  "type": "https://astra.netapp.io/problems/10",
  "title": "JSON resource conflict",
  "detail": "The request body JSON contains a field that conflicts with an idempotent value.",
  "status": "409"
}
```

## Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

## Response

Status: 500, Internal server error

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/64",
  "title": "Storage classes not found",
  "detail": "Storage classes from Trident weren't found.",
  "status": "500"
}
```

## Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	

Name	Type	Required	Description
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

### Definitions

## See Definitions

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[type_astra_label]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

### type\_astra\_stateDetails

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	

### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

### invalidFields

Name	Type	Required	Description
name	string	True	Name of the invalid request body field
reason	string	True	Reason why the request body field is invalid

## List the clusters for a cloud

GET /accounts/{account\_id}/topology/v1/clouds/{cloud\_id}/clusters

Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource  • example: {{.Account}}
cloud_id	string	path	True	ID of the containing cloud resource
include	string	query	False	Indicates which fields should be returned when listing a collection.  URL examples: "include=id", "include=id,name"  OpenAPI examples: "id"  • example: id,name,managedState

Name	Type	In	Required	Description
limit	string	query	False	<p>Indicates the maximum number of resources to return when listing a collection.</p> <p>URL examples: "limit=2"</p> <p>OpenAPI examples: "2"</p>
filter	string	query	False	<p>Indicates which fields should be matched in order to return a resource when listing a collection.</p> <p>Supported operators are:</p> <ul style="list-style-type: none"> <li>• eq - Equality</li> <li>• lt/gt - Less than/Greater than</li> <li>• lte/gte - Less than or equals to/Greater than or equals to</li> </ul> <p>URL example: "filter=field%20eq%20%27value%27"</p> <p>OpenAPI examples: "field eq 'value'"</p>

## Response

Status: 200, Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

Name	Type	Required	Description
items	array[Any of: <a href="#">cluster_1.3_get_response_body</a> , array[]]	True	
metadata	<a href="#">type_astra_metadata_list</a>	True	

### Example response

```
{
  "type": "application/astra-clusters",
  "version": "1.3",
  "items": [
    [
      "0f284377-e5dc-4dcd-bacd-3197f2b8a347",
      "GKE-21",
      "managed"
    ],
    [
      "04dc80fa-d1d8-4850-a49f-3b70d0ec1369",
      "GKE-22",
      "unmanaged"
    ]
  ],
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

### Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	



Name	Type	Required	Description
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't found.",
  "status": "404"
}
```

## Definitions

## See Definitions

### type\_astra\_stateDetails

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[ <a href="#">type_astra_label</a> ]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

### cluster\_1.3\_get\_response\_body

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>• "application/astra-cluster"</li></ul>

Name	Type	Required	Description
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "1.0"</li> <li>• "1.1"</li> <li>• "1.2"</li> <li>• "1.3"</li> </ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the UUIDv4 Schema</li> </ul>
name	string	True	JSON string containing a name for the cluster. If not specified, the Kubernetes name of the cluster will be used. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> <li>• This string is internally validated to prevent XSS, Unicode, directory traversal, and SQL-injection attacks</li> </ul>

Name	Type	Required	Description
state	string	True	<p>JSON string containing a value indicating the operational state of the cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "pending" - The cluster is scheduled for discovery</li> <li>• "discovering" - The cluster is in the process of being discovered</li> <li>• "provisioning" - The cluster is in the process of being provisioned</li> <li>• "running" - The cluster is running normally</li> <li>• "failed" - The cluster is in a permanent failure state</li> <li>• "removed" - The cluster is not currently accessible</li> <li>• "unknown" - The cluster state cannot be determined</li> </ul>
stateUnready	array[string]	True	<p>JSON array of JSON strings, each indicating a reason why the cluster is unable to transition to "running" state, when there are issues while in "running" state, or why it has transitioned to "failed" or "removed" state.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 127</li> </ul>

Name	Type	Required	Description
managedState	string	True	<p>JSON string containing a value indicating the management state of the cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "pending" - The cluster is scheduled to be discovered or added</li> <li>• "ineligible" - The cluster is in "running" state, is not under management, and is not eligible for management. The reasons for this ineligibility are provided in the unready key value</li> <li>• "unmanaged" - The cluster is in "running" or "failed" state, is not under management, and is eligible for management</li> <li>• "managing" - The cluster is in "running" state and is in the process of being managed</li> <li>• "managed" - The cluster is in "running", "failed", or "removed" state, and is under management</li> </ul>

Name	Type	Required	Description
protectionState	string	True	<p>JSON string containing a value indicating the protection state of the cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "full" - The clusters default storage class supports snapshots</li> <li>• "partial" - The cluster has only storageClasses that do not support snapshots</li> <li>• "atRisk" - The default storage class of the cluster does not support snapshots</li> </ul>
protectionStateDetails	array[type_astra_stateDe tails]	True	<p>JSON array of JSON objects which lists additional details about the current protection state, including why the current state was reached.</p> <p>If no details are available, this array will be empty.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum Items: 0</li> </ul>

Name	Type	Required	Description
restoreTargetSupported	string	False	<p>JSON string containing a value indicating the ability of the cluster to be a <i>target</i> of application data management operations.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - Cluster is an eligible target for app data management operations.</li> <li>• "false" - Cluster is <i>not</i> an eligible target for app data management operations.</li> </ul>
snapshotSupported	string	False	<p>JSON string containing a value indicating the ability of the cluster to perform application data management backup-like operations.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - Cluster is eligible to perform app data management operations.</li> <li>• "false" - Cluster is <i>not</i> eligible to perform app data management operations.</li> </ul>



Name	Type	Required	Description
managedStateUnready	array[string]	True	<p>JSON array of JSON strings, each indicating a reason why the cluster is ineligible to be managed, or that the cluster is managed but non-fatal errors were encountered while managing the cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 127</li> </ul>
managedTimestamp	string	False	<p>JSON string containing the timestamp indicating when the cluster was brought under management.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul> <p>This key is only returned when a cluster has a managedState of "managed".</p>
tridentVersion	string	False	<p>JSON string containing the version of Trident installed on the cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Software Version Schema</li> </ul>

Name	Type	Required	Description
tridentManagedState	string	False	<p>JSON string containing one of a set of enumerated values indicating the management state of Trident on this cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>"managed" - Trident instance on the cluster is managed by Astra</li> <li>"unmanaged" - Trident instance on the cluster is not managed by Astra</li> </ul>
tridentManagedStateDesired	string	False	<p>JSON string containing a value indicating the desired management state for Trident. Defined values are:</p> <ul style="list-style-type: none"> <li>"managed" - Manage Trident on this cluster</li> <li>"unmanaged" - Do not manage Trident on this cluster</li> </ul>
tridentManagedStateDetails	array[type_astra_stateDetails]	False	<p>JSON array of JSON objects that lists additional details about why the state transitioned to "managed" or "unmanaged". If no details are available, this array will be empty.</p> <ul style="list-style-type: none"> <li>Minimum items: 0</li> </ul>

Name	Type	Required	Description
tridentManagedStateAllowed	array[string]	False	<p>States that can be requested in a given tridentManagedState. The following states can be requested in each defined state:</p> <ul style="list-style-type: none"> <li>• "managed": "managed"</li> <li>• "unmanaged": "unmanaged"</li> </ul>
inUse	string	True	<p>JSON string containing a value indicating if the cluster has any managed applications and therefore cannot be deleted. Defined values are:</p> <ul style="list-style-type: none"> <li>• "false" - The cluster is not managed or is managed but has no managed applications associated with it</li> <li>• "true" - The cluster is managed and has managed applications associated with it</li> </ul>
accHost	string	False	<p>JSON string that indicates that this cluster hosts the instance of Astra Control Center that is currently being accessed. Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - This cluster is hosting the instance of Astra Control Center that is currently being accessed.</li> </ul>

Name	Type	Required	Description
clusterType	string	True	<p>JSON string containing a value indicating the type of cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "gke" - Kubernetes hosted on Google Kubernetes Engine</li> <li>• "aks" - Kubernetes hosted on Microsoft Azure Kubernetes Service</li> <li>• "eks" - Kubernetes hosted on Amazon Elastic Kubernetes Service</li> <li>• "rke" - The cluster is of type Rancher</li> <li>• "tanzu" -The cluster is of type Tanzu Kubernetes Grid</li> <li>• "openshift" - The cluster is of type OpenShift</li> <li>• "kubernetes" - The cluster is generic Kubernetes</li> </ul>
clusterVersion	string	False	<p>JSON string containing a value indicating the semantic versioning representation of the cluster environment.</p> <p>For Kubernetes clusters, this is the Kubernetes version.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 31</li> </ul>

Name	Type	Required	Description
clusterVersionString	string	False	<p>JSON string containing a value indicating the extended versioning information for the cluster environment. For Kubernetes clusters, this is the full Kubernetes version. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 31</li> </ul>
clusterCreationTimestamp	string	False	<p>JSON string containing the timestamp indicating when the cluster was originally created. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>
namespaces	array[string]	False	<p>JSON array of JSON strings, each indicating a namespace within the cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 253</li> </ul>
defaultStorageClass	string	False	<p>JSON string containing a storageClass ID that corresponds to the default storage class set in Kubernetes. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
cloudID	string	True	<p>JSON string containing a value indicating the ID of the cloud the cluster is running on.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
credentialID	string	False	<p>JSON string containing a value indicating the ID of the credential that contains the kubeconfig file for the cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
location	string	False	<p>JSON string containing a value provided by the cloud that the cluster is running on, indicating the cloud-specific location of the cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>
isMultizonal	string	False	<p>JSON string containing a value provided by the cloud the cluster is running on, indicating whether the cluster spans two or more availability zones.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - The cluster spans two or more availability zones</li> <li>• "false" - The cluster is wholly located within a single availability zone</li> </ul>

Name	Type	Required	Description
privateRouteID	string	False	JSON string containing the location ID for private clusters. <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>
apiServiceID	string	False	JSON string containing the UUID from the Kubernetes (k8s) API service object. Used to uniquely identify a cluster.
metadata	<a href="#">type_astra_metadata_update</a>	True	Client and service-specified metadata associated with the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</li> </ul>

#### type\_astra\_metadata\_list

Name	Type	Required	Description
continue	string	False	
count	number	False	
labels	array[ <a href="#">type_astra_label</a> ]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	

Name	Type	Required	Description
modifiedBy	string	False	

invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Retrieve a cluster for a cloud

GET /accounts/{account\_id}/topology/v1/clouds/{cloud\_id}/clusters/{cluster\_id}

Returns the stored Cluster API resource in the JSON response body.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource  • example: {{.Account}}
cloud_id	string	path	True	ID of the containing cloud resource
cluster_id	string	path	True	ID of the cluster collection to list

### Response

Status: 200, Returns the stored Cluster API resource in the JSON response body.



Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "application/astra-cluster"</li> </ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "1.0"</li> <li>• "1.1"</li> <li>• "1.2"</li> <li>• "1.3"</li> </ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the UUIDv4 Schema</li> </ul>
name	string	True	JSON string containing a name for the cluster. If not specified, the Kubernetes name of the cluster will be used. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> <li>• This string is internally validated to prevent XSS, Unicode, directory traversal, and SQL-injection attacks</li> </ul>

Name	Type	Required	Description
state	string	True	<p>JSON string containing a value indicating the operational state of the cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "pending" - The cluster is scheduled for discovery</li> <li>• "discovering" - The cluster is in the process of being discovered</li> <li>• "provisioning" - The cluster is in the process of being provisioned</li> <li>• "running" - The cluster is running normally</li> <li>• "failed" - The cluster is in a permanent failure state</li> <li>• "removed" - The cluster is not currently accessible</li> <li>• "unknown" - The cluster state cannot be determined</li> </ul>
stateUnready	array[string]	True	<p>JSON array of JSON strings, each indicating a reason why the cluster is unable to transition to "running" state, when there are issues while in "running" state, or why it has transitioned to "failed" or "removed" state.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 127</li> </ul>

Name	Type	Required	Description
managedState	string	True	<p>JSON string containing a value indicating the management state of the cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "pending" - The cluster is scheduled to be discovered or added</li> <li>• "ineligible" - The cluster is in "running" state, is not under management, and is not eligible for management. The reasons for this ineligibility are provided in the unready key value</li> <li>• "unmanaged" - The cluster is in "running" or "failed" state, is not under management, and is eligible for management</li> <li>• "managing" - The cluster is in "running" state and is in the process of being managed</li> <li>• "managed" - The cluster is in "running", "failed", or "removed" state, and is under management</li> </ul>

Name	Type	Required	Description
protectionState	string	True	<p>JSON string containing a value indicating the protection state of the cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "full" - The clusters default storage class supports snapshots</li> <li>• "partial" - The cluster has only storageClasses that do not support snapshots</li> <li>• "atRisk" - The default storage class of the cluster does not support snapshots</li> </ul>
protectionStateDetails	array[type_astra_stateDetails]	True	<p>JSON array of JSON objects which lists additional details about the current protection state, including why the current state was reached.</p> <p>If no details are available, this array will be empty.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum Items: 0</li> </ul>
restoreTargetSupported	string	False	<p>JSON string containing a value indicating the ability of the cluster to be a <i>target</i> of application data management operations.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - Cluster is an eligible target for app data management operations.</li> <li>• "false" - Cluster is <i>not</i> an eligible target for app data management operations.</li> </ul>

Name	Type	Required	Description
snapshotSupported	string	False	<p>JSON string containing a value indicating the ability of the cluster to perform application data management backup-like operations.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - Cluster is eligible to perform app data management operations.</li> <li>• "false" - Cluster is <i>not</i> eligible to perform app data management operations.</li> </ul>
managedStateUnready	array[string]	True	<p>JSON array of JSON strings, each indicating a reason why the cluster is ineligible to be managed, or that the cluster is managed but non-fatal errors were encountered while managing the cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 127</li> </ul>
managedTimestamp	string	False	<p>JSON string containing the timestamp indicating when the cluster was brought under management.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul> <p>This key is only returned when a cluster has a managedState of "managed".</p>

Name	Type	Required	Description
tridentVersion	string	False	<p>JSON string containing the version of Trident installed on the cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Software Version Schema</li> </ul>
tridentManagedState	string	False	<p>JSON string containing one of a set of enumerated values indicating the management state of Trident on this cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• "managed" - Trident instance on the cluster is managed by Astra</li> <li>• "unmanaged" - Trident instance on the cluster is not managed by Astra</li> </ul>
tridentManagedStateDesired	string	False	<p>JSON string containing a value indicating the desired management state for Trident. Defined values are:</p> <ul style="list-style-type: none"> <li>• "managed" - Manage Trident on this cluster</li> <li>• "unmanaged" - Do not manage Trident on this cluster</li> </ul>
tridentManagedStateDetails	array[type_astra_stateDetails]	False	<p>JSON array of JSON objects that lists additional details about why the state transitioned to "managed" or "unmanaged". If no details are available, this array will be empty.</p> <ul style="list-style-type: none"> <li>• Minimum items: 0</li> </ul>

Name	Type	Required	Description
tridentManagedStateAllowed	array[string]	False	<p>States that can be requested in a given tridentManagedState. The following states can be requested in each defined state:</p> <ul style="list-style-type: none"> <li>• "managed": "managed"</li> <li>• "unmanaged": "unmanaged"</li> </ul>
inUse	string	True	<p>JSON string containing a value indicating if the cluster has any managed applications and therefore cannot be deleted. Defined values are:</p> <ul style="list-style-type: none"> <li>• "false" - The cluster is not managed or is managed but has no managed applications associated with it</li> <li>• "true" - The cluster is managed and has managed applications associated with it</li> </ul>
accHost	string	False	<p>JSON string that indicates that this cluster hosts the instance of Astra Control Center that is currently being accessed. Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - This cluster is hosting the instance of Astra Control Center that is currently being accessed.</li> </ul>

Name	Type	Required	Description
clusterType	string	True	<p>JSON string containing a value indicating the type of cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• "gke" - Kubernetes hosted on Google Kubernetes Engine</li> <li>• "aks" - Kubernetes hosted on Microsoft Azure Kubernetes Service</li> <li>• "eks" - Kubernetes hosted on Amazon Elastic Kubernetes Service</li> <li>• "rke" - The cluster is of type Rancher</li> <li>• "tanzu" -The cluster is of type Tanzu Kubernetes Grid</li> <li>• "openshift" - The cluster is of type OpenShift</li> <li>• "kubernetes" - The cluster is generic Kubernetes</li> </ul>
clusterVersion	string	False	<p>JSON string containing a value indicating the semantic versioning representation of the cluster environment. For Kubernetes clusters, this is the Kubernetes version. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 31</li> </ul>



Name	Type	Required	Description
clusterVersionString	string	False	<p>JSON string containing a value indicating the extended versioning information for the cluster environment.</p> <p>For Kubernetes clusters, this is the full Kubernetes version.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 31</li> </ul>
clusterCreationTimestamp	string	False	<p>JSON string containing the timestamp indicating when the cluster was originally created.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>
namespaces	array[string]	False	<p>JSON array of JSON strings, each indicating a namespace within the cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 253</li> </ul>
defaultStorageClass	string	False	<p>JSON string containing a storageClass ID that corresponds to the default storage class set in Kubernetes.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
cloudID	string	True	<p>JSON string containing a value indicating the ID of the cloud the cluster is running on.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
credentialID	string	False	<p>JSON string containing a value indicating the ID of the credential that contains the kubeconfig file for the cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
location	string	False	<p>JSON string containing a value provided by the cloud that the cluster is running on, indicating the cloud-specific location of the cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>
isMultizonal	string	False	<p>JSON string containing a value provided by the cloud the cluster is running on, indicating whether the cluster spans two or more availability zones.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - The cluster spans two or more availability zones</li> <li>• "false" - The cluster is wholly located within a single availability zone</li> </ul>

Name	Type	Required	Description
privateRouteID	string	False	<p>JSON string containing the location ID for private clusters.</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>
apiServiceID	string	False	<p>JSON string containing the UUID from the Kubernetes (k8s) API service object. Used to uniquely identify a cluster.</p>
metadata	type_astra_metadata_update	True	<p>Client and service-specified metadata associated with the resource. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</li> </ul>

## Example response

```
{
  "type": "application/astra-cluster",
  "version": "1.3",
  "id": "01eaddc3-75b9-5606-97ae-0aa468b59492",
  "name": "GKE-22",
  "state": "running",
  "stateUnready": [],
  "managedState": "unmanaged",
  "managedStateUnready": [],
  "protectionState": "full",
  "protectionStateDetails": [],
  "tridentVersion": "21.07.2",
  "tridentManagedState": "managed",
  "tridentManagedStateDetails": [],
  "inUse": "false",
  "clusterType": "kubernetes",
  "clusterVersion": "1.91.1",
  "clusterVersionString": "1.19.1",
  "clusterCreationTimestamp": "2020-08-06T12:24:52.256624Z",
  "namespaces": [
    "kube-system",
    "kube-public",
    "my-app-1"
  ],
  "defaultStorageClass": "31c95aba-99d9-4987-b1bb-000dfce5952c",
  "cloudID": "548bdc1f-f00e-4a23-a062-83265d224d46",
  "credentialID": "6fa2f917-f730-41b8-9c15-17f531843b31",
  "location": "europe-west4",
  "isMultizonal": "false",
  "apiServiceID": "6bf33af2-872a-4553-a891-26b510c3edbe",
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Response

Status: 500, Internal server error

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	

Name	Type	Required	Description
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/65",
  "title": "Cluster GET not performed",
  "detail": "The cluster GET call didn't perform the lookup operation
on the cluster.",
  "status": "500"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

### Definitions

## See Definitions

### type\_astra\_stateDetails

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[ <a href="#">type_astra_label</a> ]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid



## Modify a cluster for a cloud

PUT /accounts/{account\_id}/topology/v1/clouds/{cloud\_id}/clusters/{cluster\_id}

Replaces the entire stored resource with the supplied JSON request body while preserving key values that are not user-modifiable.

### Side Effects

- If the cluster is in a managed state, an update to credentialID will eventually trigger another attempt to collect the cluster.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"><li>• example: {{.Account}}</li></ul>
cloud_id	string	path	True	ID of the containing cloud resource
cluster_id	string	path	True	ID of the cluster collection to list

### Request Body

Replaces the entire stored resource with the supplied JSON request body while preserving key values that are not user-modifiable.

### Side Effects

- If the cluster is in a managed state, an update to credentialID will eventually trigger another attempt to collect the cluster.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>• "application/astra-cluster"</li></ul>

Name	Type	Required	Description
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "1.0"</li> <li>• "1.1"</li> <li>• "1.2"</li> <li>• "1.3"</li> </ul>
id	string	False	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the UUIDv4 Schema</li> </ul>
name	string	False	JSON string containing a name for the cluster. If not specified, the Kubernetes name of the cluster will be used. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> <li>• This string is internally validated to prevent XSS, Unicode, directory traversal, and SQL-injection attacks</li> </ul>

Name	Type	Required	Description
state	string	False	<p>JSON string containing a value indicating the operational state of the cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "pending" - The cluster is scheduled for discovery</li> <li>• "discovering" - The cluster is in the process of being discovered</li> <li>• "provisioning" - The cluster is in the process of being provisioned</li> <li>• "running" - The cluster is running normally</li> <li>• "failed" - The cluster is in a permanent failure state</li> <li>• "removed" - The cluster is not currently accessible</li> <li>• "unknown" - The cluster state cannot be determined</li> </ul>
stateUnready	array[string]	False	<p>JSON array of JSON strings, each indicating a reason why the cluster is unable to transition to "running" state, when there are issues while in "running" state, or why it has transitioned to "failed" or "removed" state.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 127</li> </ul>

Name	Type	Required	Description
managedState	string	False	<p>JSON string containing a value indicating the management state of the cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "pending" - The cluster is scheduled to be discovered or added</li> <li>• "ineligible" - The cluster is in "running" state, is not under management, and is not eligible for management. The reasons for this ineligibility are provided in the unready key value</li> <li>• "unmanaged" - The cluster is in "running" or "failed" state, is not under management, and is eligible for management</li> <li>• "managing" - The cluster is in "running" state and is in the process of being managed</li> <li>• "managed" - The cluster is in "running", "failed", or "removed" state, and is under management</li> </ul>

Name	Type	Required	Description
protectionState	string	False	<p>JSON string containing a value indicating the protection state of the cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "full" - The clusters default storage class supports snapshots</li> <li>• "partial" - The cluster has only storageClasses that do not support snapshots</li> <li>• "atRisk" - The default storage class of the cluster does not support snapshots</li> </ul>
protectionStateDetails	array[type_astra_stateDetails]	False	<p>JSON array of JSON objects which lists additional details about the current protection state, including why the current state was reached.</p> <p>If no details are available, this array will be empty.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum Items: 0</li> </ul>
restoreTargetSupported	string	False	<p>JSON string containing a value indicating the ability of the cluster to be a <i>target</i> of application data management operations.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - Cluster is an eligible target for app data management operations.</li> <li>• "false" - Cluster is <i>not</i> an eligible target for app data management operations.</li> </ul>

Name	Type	Required	Description
snapshotSupported	string	False	<p>JSON string containing a value indicating the ability of the cluster to perform application data management backup-like operations.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - Cluster is eligible to perform app data management operations.</li> <li>• "false" - Cluster is <i>not</i> eligible to perform app data management operations.</li> </ul>
managedStateUnready	array[string]	False	<p>JSON array of JSON strings, each indicating a reason why the cluster is ineligible to be managed, or that the cluster is managed but non-fatal errors were encountered while managing the cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 127</li> </ul>
managedTimestamp	string	False	<p>JSON string containing the timestamp indicating when the cluster was brought under management.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul> <p>This key is only returned when a cluster has a managedState of "managed".</p>

Name	Type	Required	Description
tridentVersion	string	False	<p>JSON string containing the version of Trident installed on the cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Software Version Schema</li> </ul>
tridentManagedState	string	False	<p>JSON string containing one of a set of enumerated values indicating the management state of Trident on this cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• "managed" - Trident instance on the cluster is managed by Astra</li> <li>• "unmanaged" - Trident instance on the cluster is not managed by Astra</li> </ul>
tridentManagedStateDesired	string	False	<p>JSON string containing a value indicating the desired management state for Trident. Defined values are:</p> <ul style="list-style-type: none"> <li>• "managed" - Manage Trident on this cluster</li> <li>• "unmanaged" - Do not manage Trident on this cluster</li> </ul>
tridentManagedStateDetails	array[type_astra_stateDetails]	False	<p>JSON array of JSON objects that lists additional details about why the state transitioned to "managed" or "unmanaged". If no details are available, this array will be empty.</p> <ul style="list-style-type: none"> <li>• Minimum items: 0</li> </ul>

Name	Type	Required	Description
tridentManagedStateAllowed	array[string]	False	<p>States that can be requested in a given tridentManagedState. The following states can be requested in each defined state:</p> <ul style="list-style-type: none"> <li>• "managed": "managed"</li> <li>• "unmanaged": "unmanaged"</li> </ul>
inUse	string	False	<p>JSON string containing a value indicating if the cluster has any managed applications and therefore cannot be deleted. Defined values are:</p> <ul style="list-style-type: none"> <li>• "false" - The cluster is not managed or is managed but has no managed applications associated with it</li> <li>• "true" - The cluster is managed and has managed applications associated with it</li> </ul>
accHost	string	False	<p>JSON string that indicates that this cluster hosts the instance of Astra Control Center that is currently being accessed. Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - This cluster is hosting the instance of Astra Control Center that is currently being accessed.</li> </ul>



Name	Type	Required	Description
clusterType	string	False	<p>JSON string containing a value indicating the type of cluster.            Defined values are:</p> <ul style="list-style-type: none"> <li>• "gke" - Kubernetes hosted on Google Kubernetes Engine</li> <li>• "aks" - Kubernetes hosted on Microsoft Azure Kubernetes Service</li> <li>• "eks" - Kubernetes hosted on Amazon Elastic Kubernetes Service</li> <li>• "rke" - The cluster is of type Rancher</li> <li>• "tanzu" -The cluster is of type Tanzu Kubernetes Grid</li> <li>• "openshift" - The cluster is of type OpenShift</li> <li>• "kubernetes" - The cluster is generic Kubernetes</li> </ul>
clusterVersion	string	False	<p>JSON string containing a value indicating the semantic versioning representation of the cluster environment.            For Kubernetes clusters, this is the Kubernetes version.            Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 31</li> </ul>

Name	Type	Required	Description
clusterVersionString	string	False	<p>JSON string containing a value indicating the extended versioning information for the cluster environment.</p> <p>For Kubernetes clusters, this is the full Kubernetes version.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 31</li> </ul>
clusterCreationTimestamp	string	False	<p>JSON string containing the timestamp indicating when the cluster was originally created.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>
namespaces	array[string]	False	<p>JSON array of JSON strings, each indicating a namespace within the cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 253</li> </ul>
defaultStorageClass	string	False	<p>JSON string containing a storageClass ID that corresponds to the default storage class set in Kubernetes.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
cloudID	string	False	<p>JSON string containing a value indicating the ID of the cloud the cluster is running on.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
credentialID	string	False	<p>JSON string containing a value indicating the ID of the credential that contains the kubeconfig file for the cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
location	string	False	<p>JSON string containing a value provided by the cloud that the cluster is running on, indicating the cloud-specific location of the cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>
isMultizonal	string	False	<p>JSON string containing a value provided by the cloud the cluster is running on, indicating whether the cluster spans two or more availability zones.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - The cluster spans two or more availability zones</li> <li>• "false" - The cluster is wholly located within a single availability zone</li> </ul>

Name	Type	Required	Description
privateRouteID	string	False	JSON string containing the location ID for private clusters. <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>
apiServiceID	string	False	JSON string containing the UUID from the Kubernetes (k8s) API service object. Used to uniquely identify a cluster.
metadata	<a href="#">type_astra_metadata_update</a>	False	Client and service-specified metadata associated with the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</li> </ul>

### Example request

```
{
  "type": "application/astra-cluster",
  "version": "1.3"
}
```

### Response

Status: 204, Indicates if the cluster resource was updated.

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

## Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Response

Status: 500, Internal server error

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	

Name	Type	Required	Description
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/65",
  "title": "Cluster GET not performed",
  "detail": "The cluster GET call didn't perform the lookup operation
on the cluster.",
  "status": "500"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/1",
  "title": "Resource not found",
  "detail": "The resource specified in the request URI wasn't found.",
  "status": "404"
}
```

### Definitions

## See Definitions

### type\_astra\_stateDetails

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[ <a href="#">type_astra_label</a> ]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid



## Delete a cluster for a cloud

DELETE /accounts/{account\_id}/topology/v1/clouds/{cloud\_id}/clusters/{cluster\_id}

Removes the specified Cluster API resource.

### Side Effects

- Internal data structures are cleaned up.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource  • example: {{.Account}}
cloud_id	string	path	True	ID of the containing cloud resource
cluster_id	string	path	True	ID of the cluster collection to list

### Response

Status: 204, Indicates if the cluster resource was deleted.

### Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	

Name	Type	Required	Description
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/1",
  "title": "Resource not found",
  "detail": "The resource specified in the request URI wasn't found.",
  "status": "404"
}
```

### Definitions

## See Definitions

invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## List all clusters

GET /accounts/{account\_id}/topology/v1/clusters

Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

## Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"><li>example: {{.Account}}</li></ul>
include	string	query	False	Indicates which fields should be returned when listing a collection.  URL examples: "include=id", "include=id,name"  OpenAPI examples: "id" <ul style="list-style-type: none"><li>example: id,name,managedState</li></ul>

Name	Type	In	Required	Description
limit	string	query	False	<p>Indicates the maximum number of resources to return when listing a collection.</p> <p>URL examples: "limit=2"</p> <p>OpenAPI examples: "2"</p>
filter	string	query	False	<p>Indicates which fields should be matched in order to return a resource when listing a collection.</p> <p>Supported operators are:</p> <ul style="list-style-type: none"> <li>• eq - Equality</li> <li>• lt/gt - Less than/Greater than</li> <li>• lte/gte - Less than or equals to/Greater than or equals to</li> </ul> <p>URL example: "filter=field%20eq%20%27value%27"</p> <p>OpenAPI examples: "field eq 'value'"</p>

## Response

Status: 200, Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

Name	Type	Required	Description
items	array[Any of: <a href="#">cluster_1.3_get_response_body</a> , array[]]	True	
metadata	<a href="#">type_astra_metadata_list</a>	True	

### Example response

```
{
  "type": "application/astra-clusters",
  "version": "1.3",
  "items": [
    [
      "0f284377-e5dc-4dcd-bacd-3197f2b8a347",
      "GKE-21",
      "managed"
    ],
    [
      "04dc80fa-d1d8-4850-a49f-3b70d0ec1369",
      "GKE-22",
      "unmanaged"
    ]
  ],
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

### Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	

Name	Type	Required	Description
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't found.",
  "status": "404"
}
```



**Definitions**

## See Definitions

### type\_astra\_stateDetails

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[type_astra_label]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

### cluster\_1.3\_get\_response\_body

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>• "application/astra-cluster"</li></ul>

Name	Type	Required	Description
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "1.0"</li> <li>• "1.1"</li> <li>• "1.2"</li> <li>• "1.3"</li> </ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the UUIDv4 Schema</li> </ul>
name	string	True	JSON string containing a name for the cluster. If not specified, the Kubernetes name of the cluster will be used. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> <li>• This string is internally validated to prevent XSS, Unicode, directory traversal, and SQL-injection attacks</li> </ul>

Name	Type	Required	Description
state	string	True	<p>JSON string containing a value indicating the operational state of the cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "pending" - The cluster is scheduled for discovery</li> <li>• "discovering" - The cluster is in the process of being discovered</li> <li>• "provisioning" - The cluster is in the process of being provisioned</li> <li>• "running" - The cluster is running normally</li> <li>• "failed" - The cluster is in a permanent failure state</li> <li>• "removed" - The cluster is not currently accessible</li> <li>• "unknown" - The cluster state cannot be determined</li> </ul>
stateUnready	array[string]	True	<p>JSON array of JSON strings, each indicating a reason why the cluster is unable to transition to "running" state, when there are issues while in "running" state, or why it has transitioned to "failed" or "removed" state.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 127</li> </ul>

Name	Type	Required	Description
managedState	string	True	<p>JSON string containing a value indicating the management state of the cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "pending" - The cluster is scheduled to be discovered or added</li> <li>• "ineligible" - The cluster is in "running" state, is not under management, and is not eligible for management. The reasons for this ineligibility are provided in the unready key value</li> <li>• "unmanaged" - The cluster is in "running" or "failed" state, is not under management, and is eligible for management</li> <li>• "managing" - The cluster is in "running" state and is in the process of being managed</li> <li>• "managed" - The cluster is in "running", "failed", or "removed" state, and is under management</li> </ul>

Name	Type	Required	Description
protectionState	string	True	<p>JSON string containing a value indicating the protection state of the cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "full" - The clusters default storage class supports snapshots</li> <li>• "partial" - The cluster has only storageClasses that do not support snapshots</li> <li>• "atRisk" - The default storage class of the cluster does not support snapshots</li> </ul>
protectionStateDetails	array[type_astra_stateDetails]	True	<p>JSON array of JSON objects which lists additional details about the current protection state, including why the current state was reached.</p> <p>If no details are available, this array will be empty.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum Items: 0</li> </ul>

Name	Type	Required	Description
restoreTargetSupported	string	False	<p>JSON string containing a value indicating the ability of the cluster to be a <i>target</i> of application data management operations.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - Cluster is an eligible target for app data management operations.</li> <li>• "false" - Cluster is <i>not</i> an eligible target for app data management operations.</li> </ul>
snapshotSupported	string	False	<p>JSON string containing a value indicating the ability of the cluster to perform application data management backup-like operations.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - Cluster is eligible to perform app data management operations.</li> <li>• "false" - Cluster is <i>not</i> eligible to perform app data management operations.</li> </ul>

Name	Type	Required	Description
managedStateUnready	array[string]	True	<p>JSON array of JSON strings, each indicating a reason why the cluster is ineligible to be managed, or that the cluster is managed but non-fatal errors were encountered while managing the cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 127</li> </ul>
managedTimestamp	string	False	<p>JSON string containing the timestamp indicating when the cluster was brought under management.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul> <p>This key is only returned when a cluster has a managedState of "managed".</p>
tridentVersion	string	False	<p>JSON string containing the version of Trident installed on the cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Software Version Schema</li> </ul>



Name	Type	Required	Description
tridentManagedState	string	False	<p>JSON string containing one of a set of enumerated values indicating the management state of Trident on this cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• "managed" - Trident instance on the cluster is managed by Astra</li> <li>• "unmanaged" - Trident instance on the cluster is not managed by Astra</li> </ul>
tridentManagedStateDesired	string	False	<p>JSON string containing a value indicating the desired management state for Trident. Defined values are:</p> <ul style="list-style-type: none"> <li>• "managed" - Manage Trident on this cluster</li> <li>• "unmanaged" - Do not manage Trident on this cluster</li> </ul>
tridentManagedStateDetails	array[ <a href="#">type_astra_stateDetails</a> ]	False	<p>JSON array of JSON objects that lists additional details about why the state transitioned to "managed" or "unmanaged". If no details are available, this array will be empty.</p> <ul style="list-style-type: none"> <li>• Minimum items: 0</li> </ul>

Name	Type	Required	Description
tridentManagedStateAllowed	array[string]	False	<p>States that can be requested in a given tridentManagedState. The following states can be requested in each defined state:</p> <ul style="list-style-type: none"> <li>• "managed": "managed"</li> <li>• "unmanaged": "unmanaged"</li> </ul>
inUse	string	True	<p>JSON string containing a value indicating if the cluster has any managed applications and therefore cannot be deleted. Defined values are:</p> <ul style="list-style-type: none"> <li>• "false" - The cluster is not managed or is managed but has no managed applications associated with it</li> <li>• "true" - The cluster is managed and has managed applications associated with it</li> </ul>
accHost	string	False	<p>JSON string that indicates that this cluster hosts the instance of Astra Control Center that is currently being accessed. Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - This cluster is hosting the instance of Astra Control Center that is currently being accessed.</li> </ul>

Name	Type	Required	Description
clusterType	string	True	<p>JSON string containing a value indicating the type of cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "gke" - Kubernetes hosted on Google Kubernetes Engine</li> <li>• "aks" - Kubernetes hosted on Microsoft Azure Kubernetes Service</li> <li>• "eks" - Kubernetes hosted on Amazon Elastic Kubernetes Service</li> <li>• "rke" - The cluster is of type Rancher</li> <li>• "tanzu" -The cluster is of type Tanzu Kubernetes Grid</li> <li>• "openshift" - The cluster is of type OpenShift</li> <li>• "kubernetes" - The cluster is generic Kubernetes</li> </ul>
clusterVersion	string	False	<p>JSON string containing a value indicating the semantic versioning representation of the cluster environment.</p> <p>For Kubernetes clusters, this is the Kubernetes version.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 31</li> </ul>

Name	Type	Required	Description
clusterVersionString	string	False	<p>JSON string containing a value indicating the extended versioning information for the cluster environment. For Kubernetes clusters, this is the full Kubernetes version. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 31</li> </ul>
clusterCreationTimestamp	string	False	<p>JSON string containing the timestamp indicating when the cluster was originally created. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>
namespaces	array[string]	False	<p>JSON array of JSON strings, each indicating a namespace within the cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 253</li> </ul>
defaultStorageClass	string	False	<p>JSON string containing a storageClass ID that corresponds to the default storage class set in Kubernetes. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
cloudID	string	True	<p>JSON string containing a value indicating the ID of the cloud the cluster is running on.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
credentialID	string	False	<p>JSON string containing a value indicating the ID of the credential that contains the kubeconfig file for the cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
location	string	False	<p>JSON string containing a value provided by the cloud that the cluster is running on, indicating the cloud-specific location of the cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>
isMultizonal	string	False	<p>JSON string containing a value provided by the cloud the cluster is running on, indicating whether the cluster spans two or more availability zones.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - The cluster spans two or more availability zones</li> <li>• "false" - The cluster is wholly located within a single availability zone</li> </ul>

Name	Type	Required	Description
privateRouteID	string	False	JSON string containing the location ID for private clusters. <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>
apiServiceID	string	False	JSON string containing the UUID from the Kubernetes (k8s) API service object. Used to uniquely identify a cluster.
metadata	<a href="#">type_astra_metadata_update</a>	True	Client and service-specified metadata associated with the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</li> </ul>

[type\\_astra\\_metadata\\_list](#)

Name	Type	Required	Description
continue	string	False	
count	number	False	
labels	array[ <a href="#">type_astra_label</a> ]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	

Name	Type	Required	Description
modifiedBy	string	False	

invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Retrieve a cluster

GET /accounts/{account\_id}/topology/v1/clusters/{cluster\_id}

Returns the stored Cluster API resource in the JSON response body.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"> <li>example: <code>{{.Account}}</code></li> </ul>
cluster_id	string	path	True	ID of the cluster collection to list

### Response

Status: 200, Returns the stored Cluster API resource in the JSON response body.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"> <li>"application/astra-cluster"</li> </ul>

Name	Type	Required	Description
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "1.0"</li> <li>• "1.1"</li> <li>• "1.2"</li> <li>• "1.3"</li> </ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the UUIDv4 Schema</li> </ul>
name	string	True	JSON string containing a name for the cluster. If not specified, the Kubernetes name of the cluster will be used. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> <li>• This string is internally validated to prevent XSS, Unicode, directory traversal, and SQL-injection attacks</li> </ul>



Name	Type	Required	Description
state	string	True	<p>JSON string containing a value indicating the operational state of the cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "pending" - The cluster is scheduled for discovery</li> <li>• "discovering" - The cluster is in the process of being discovered</li> <li>• "provisioning" - The cluster is in the process of being provisioned</li> <li>• "running" - The cluster is running normally</li> <li>• "failed" - The cluster is in a permanent failure state</li> <li>• "removed" - The cluster is not currently accessible</li> <li>• "unknown" - The cluster state cannot be determined</li> </ul>
stateUnready	array[string]	True	<p>JSON array of JSON strings, each indicating a reason why the cluster is unable to transition to "running" state, when there are issues while in "running" state, or why it has transitioned to "failed" or "removed" state.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 127</li> </ul>

Name	Type	Required	Description
managedState	string	True	<p>JSON string containing a value indicating the management state of the cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "pending" - The cluster is scheduled to be discovered or added</li> <li>• "ineligible" - The cluster is in "running" state, is not under management, and is not eligible for management. The reasons for this ineligibility are provided in the unready key value</li> <li>• "unmanaged" - The cluster is in "running" or "failed" state, is not under management, and is eligible for management</li> <li>• "managing" - The cluster is in "running" state and is in the process of being managed</li> <li>• "managed" - The cluster is in "running", "failed", or "removed" state, and is under management</li> </ul>

Name	Type	Required	Description
protectionState	string	True	<p>JSON string containing a value indicating the protection state of the cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "full" - The clusters default storage class supports snapshots</li> <li>• "partial" - The cluster has only storageClasses that do not support snapshots</li> <li>• "atRisk" - The default storage class of the cluster does not support snapshots</li> </ul>
protectionStateDetails	array[ <a href="#">type_astra_stateDetails</a> ]	True	<p>JSON array of JSON objects which lists additional details about the current protection state, including why the current state was reached.</p> <p>If no details are available, this array will be empty.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum Items: 0</li> </ul>
restoreTargetSupported	string	False	<p>JSON string containing a value indicating the ability of the cluster to be a <i>target</i> of application data management operations.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - Cluster is an eligible target for app data management operations.</li> <li>• "false" - Cluster is <i>not</i> an eligible target for app data management operations.</li> </ul>

Name	Type	Required	Description
snapshotSupported	string	False	<p>JSON string containing a value indicating the ability of the cluster to perform application data management backup-like operations.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - Cluster is eligible to perform app data management operations.</li> <li>• "false" - Cluster is <i>not</i> eligible to perform app data management operations.</li> </ul>
managedStateUnready	array[string]	True	<p>JSON array of JSON strings, each indicating a reason why the cluster is ineligible to be managed, or that the cluster is managed but non-fatal errors were encountered while managing the cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 127</li> </ul>
managedTimestamp	string	False	<p>JSON string containing the timestamp indicating when the cluster was brought under management.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul> <p>This key is only returned when a cluster has a managedState of "managed".</p>

Name	Type	Required	Description
tridentVersion	string	False	<p>JSON string containing the version of Trident installed on the cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Software Version Schema</li> </ul>
tridentManagedState	string	False	<p>JSON string containing one of a set of enumerated values indicating the management state of Trident on this cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• "managed" - Trident instance on the cluster is managed by Astra</li> <li>• "unmanaged" - Trident instance on the cluster is not managed by Astra</li> </ul>
tridentManagedStateDesired	string	False	<p>JSON string containing a value indicating the desired management state for Trident. Defined values are:</p> <ul style="list-style-type: none"> <li>• "managed" - Manage Trident on this cluster</li> <li>• "unmanaged" - Do not manage Trident on this cluster</li> </ul>
tridentManagedStateDetails	array[type_astra_stateDetails]	False	<p>JSON array of JSON objects that lists additional details about why the state transitioned to "managed" or "unmanaged". If no details are available, this array will be empty.</p> <ul style="list-style-type: none"> <li>• Minimum items: 0</li> </ul>

Name	Type	Required	Description
tridentManagedStateAllowed	array[string]	False	<p>States that can be requested in a given tridentManagedState. The following states can be requested in each defined state:</p> <ul style="list-style-type: none"> <li>• "managed": "managed"</li> <li>• "unmanaged": "unmanaged"</li> </ul>
inUse	string	True	<p>JSON string containing a value indicating if the cluster has any managed applications and therefore cannot be deleted. Defined values are:</p> <ul style="list-style-type: none"> <li>• "false" - The cluster is not managed or is managed but has no managed applications associated with it</li> <li>• "true" - The cluster is managed and has managed applications associated with it</li> </ul>
accHost	string	False	<p>JSON string that indicates that this cluster hosts the instance of Astra Control Center that is currently being accessed. Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - This cluster is hosting the instance of Astra Control Center that is currently being accessed.</li> </ul>

Name	Type	Required	Description
clusterType	string	True	<p>JSON string containing a value indicating the type of cluster.            Defined values are:</p> <ul style="list-style-type: none"> <li>• "gke" - Kubernetes hosted on Google Kubernetes Engine</li> <li>• "aks" - Kubernetes hosted on Microsoft Azure Kubernetes Service</li> <li>• "eks" - Kubernetes hosted on Amazon Elastic Kubernetes Service</li> <li>• "rke" - The cluster is of type Rancher</li> <li>• "tanzu" -The cluster is of type Tanzu Kubernetes Grid</li> <li>• "openshift" - The cluster is of type OpenShift</li> <li>• "kubernetes" - The cluster is generic Kubernetes</li> </ul>
clusterVersion	string	False	<p>JSON string containing a value indicating the semantic versioning representation of the cluster environment.            For Kubernetes clusters, this is the Kubernetes version.            Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 31</li> </ul>

Name	Type	Required	Description
clusterVersionString	string	False	<p>JSON string containing a value indicating the extended versioning information for the cluster environment.</p> <p>For Kubernetes clusters, this is the full Kubernetes version.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 31</li> </ul>
clusterCreationTimestamp	string	False	<p>JSON string containing the timestamp indicating when the cluster was originally created.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>
namespaces	array[string]	False	<p>JSON array of JSON strings, each indicating a namespace within the cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 253</li> </ul>
defaultStorageClass	string	False	<p>JSON string containing a storageClass ID that corresponds to the default storage class set in Kubernetes.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>



Name	Type	Required	Description
cloudID	string	True	<p>JSON string containing a value indicating the ID of the cloud the cluster is running on.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
credentialID	string	False	<p>JSON string containing a value indicating the ID of the credential that contains the kubeconfig file for the cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
location	string	False	<p>JSON string containing a value provided by the cloud that the cluster is running on, indicating the cloud-specific location of the cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>
isMultizonal	string	False	<p>JSON string containing a value provided by the cloud the cluster is running on, indicating whether the cluster spans two or more availability zones.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - The cluster spans two or more availability zones</li> <li>• "false" - The cluster is wholly located within a single availability zone</li> </ul>

Name	Type	Required	Description
privateRouteID	string	False	<p>JSON string containing the location ID for private clusters.</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>
apiServiceID	string	False	<p>JSON string containing the UUID from the Kubernetes (k8s) API service object. Used to uniquely identify a cluster.</p>
metadata	type_astra_metadata_update	True	<p>Client and service-specified metadata associated with the resource. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</li> </ul>

## Example response

```
{
  "type": "application/astra-cluster",
  "version": "1.3",
  "id": "01eaddc3-75b9-5606-97ae-0aa468b59492",
  "name": "GKE-22",
  "state": "running",
  "stateUnready": [],
  "managedState": "unmanaged",
  "managedStateUnready": [],
  "protectionState": "full",
  "protectionStateDetails": [],
  "tridentVersion": "21.07.2",
  "tridentManagedState": "managed",
  "tridentManagedStateDetails": [],
  "inUse": "false",
  "clusterType": "kubernetes",
  "clusterVersion": "1.91.1",
  "clusterVersionString": "1.19.1",
  "clusterCreationTimestamp": "2020-08-06T12:24:52.256624Z",
  "namespaces": [
    "kube-system",
    "kube-public",
    "my-app-1"
  ],
  "defaultStorageClass": "31c95aba-99d9-4987-b1bb-000dfce5952c",
  "cloudID": "548bdc1f-f00e-4a23-a062-83265d224d46",
  "credentialID": "6fa2f917-f730-41b8-9c15-17f531843b31",
  "location": "europe-west4",
  "isMultizonal": "false",
  "apiServiceID": "6bf33af2-872a-4553-a891-26b510c3edbe",
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Response

Status: 500, Internal server error

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	

Name	Type	Required	Description
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/65",
  "title": "Cluster GET not performed",
  "detail": "The cluster GET call didn't perform the lookup operation
on the cluster.",
  "status": "500"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

### Definitions

## See Definitions

### type\_astra\_stateDetails

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[ <a href="#">type_astra_label</a> ]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Modify a cluster

PUT /accounts/{account\_id}/topology/v1/clusters/{cluster\_id}

Replaces the entire stored resource with the supplied JSON request body while preserving key values that are not user-modifiable.

### Side Effects

- If the cluster is in a managed state, an update to credentialID will eventually trigger another attempt to collect the cluster.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"><li>• example: <code>{{.Account}}</code></li></ul>
cluster_id	string	path	True	ID of the cluster collection to list

### Request Body

Replaces the entire stored resource with the supplied JSON request body while preserving key values that are not user-modifiable.

### Side Effects

- If the cluster is in a managed state, an update to credentialID will eventually trigger another attempt to collect the cluster.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>• "application/astra-cluster"</li></ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"><li>• "1.0"</li><li>• "1.1"</li><li>• "1.2"</li><li>• "1.3"</li></ul>



Name	Type	Required	Description
id	string	False	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the UUIDv4 Schema</li> </ul>
name	string	False	JSON string containing a name for the cluster. If not specified, the Kubernetes name of the cluster will be used. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> <li>• This string is internally validated to prevent XSS, Unicode, directory traversal, and SQL-injection attacks</li> </ul>

Name	Type	Required	Description
state	string	False	<p>JSON string containing a value indicating the operational state of the cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "pending" - The cluster is scheduled for discovery</li> <li>• "discovering" - The cluster is in the process of being discovered</li> <li>• "provisioning" - The cluster is in the process of being provisioned</li> <li>• "running" - The cluster is running normally</li> <li>• "failed" - The cluster is in a permanent failure state</li> <li>• "removed" - The cluster is not currently accessible</li> <li>• "unknown" - The cluster state cannot be determined</li> </ul>
stateUnready	array[string]	False	<p>JSON array of JSON strings, each indicating a reason why the cluster is unable to transition to "running" state, when there are issues while in "running" state, or why it has transitioned to "failed" or "removed" state.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 127</li> </ul>

Name	Type	Required	Description
managedState	string	False	<p>JSON string containing a value indicating the management state of the cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "pending" - The cluster is scheduled to be discovered or added</li> <li>• "ineligible" - The cluster is in "running" state, is not under management, and is not eligible for management. The reasons for this ineligibility are provided in the unready key value</li> <li>• "unmanaged" - The cluster is in "running" or "failed" state, is not under management, and is eligible for management</li> <li>• "managing" - The cluster is in "running" state and is in the process of being managed</li> <li>• "managed" - The cluster is in "running", "failed", or "removed" state, and is under management</li> </ul>

Name	Type	Required	Description
protectionState	string	False	<p>JSON string containing a value indicating the protection state of the cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "full" - The clusters default storage class supports snapshots</li> <li>• "partial" - The cluster has only storageClasses that do not support snapshots</li> <li>• "atRisk" - The default storage class of the cluster does not support snapshots</li> </ul>
protectionStateDetails	array[type_astra_stateDetails]	False	<p>JSON array of JSON objects which lists additional details about the current protection state, including why the current state was reached.</p> <p>If no details are available, this array will be empty.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum Items: 0</li> </ul>
restoreTargetSupported	string	False	<p>JSON string containing a value indicating the ability of the cluster to be a <i>target</i> of application data management operations.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - Cluster is an eligible target for app data management operations.</li> <li>• "false" - Cluster is <i>not</i> an eligible target for app data management operations.</li> </ul>

Name	Type	Required	Description
snapshotSupported	string	False	<p>JSON string containing a value indicating the ability of the cluster to perform application data management backup-like operations.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - Cluster is eligible to perform app data management operations.</li> <li>• "false" - Cluster is <i>not</i> eligible to perform app data management operations.</li> </ul>
managedStateUnready	array[string]	False	<p>JSON array of JSON strings, each indicating a reason why the cluster is ineligible to be managed, or that the cluster is managed but non-fatal errors were encountered while managing the cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 127</li> </ul>
managedTimestamp	string	False	<p>JSON string containing the timestamp indicating when the cluster was brought under management.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul> <p>This key is only returned when a cluster has a managedState of "managed".</p>

Name	Type	Required	Description
tridentVersion	string	False	<p>JSON string containing the version of Trident installed on the cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Software Version Schema</li> </ul>
tridentManagedState	string	False	<p>JSON string containing one of a set of enumerated values indicating the management state of Trident on this cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• "managed" - Trident instance on the cluster is managed by Astra</li> <li>• "unmanaged" - Trident instance on the cluster is not managed by Astra</li> </ul>
tridentManagedStateDesired	string	False	<p>JSON string containing a value indicating the desired management state for Trident. Defined values are:</p> <ul style="list-style-type: none"> <li>• "managed" - Manage Trident on this cluster</li> <li>• "unmanaged" - Do not manage Trident on this cluster</li> </ul>
tridentManagedStateDetails	array[type_astra_stateDetails]	False	<p>JSON array of JSON objects that lists additional details about why the state transitioned to "managed" or "unmanaged". If no details are available, this array will be empty.</p> <ul style="list-style-type: none"> <li>• Minimum items: 0</li> </ul>

Name	Type	Required	Description
tridentManagedStateAllowed	array[string]	False	<p>States that can be requested in a given tridentManagedState. The following states can be requested in each defined state:</p> <ul style="list-style-type: none"> <li>• "managed": "managed"</li> <li>• "unmanaged": "unmanaged"</li> </ul>
inUse	string	False	<p>JSON string containing a value indicating if the cluster has any managed applications and therefore cannot be deleted. Defined values are:</p> <ul style="list-style-type: none"> <li>• "false" - The cluster is not managed or is managed but has no managed applications associated with it</li> <li>• "true" - The cluster is managed and has managed applications associated with it</li> </ul>
accHost	string	False	<p>JSON string that indicates that this cluster hosts the instance of Astra Control Center that is currently being accessed. Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - This cluster is hosting the instance of Astra Control Center that is currently being accessed.</li> </ul>

Name	Type	Required	Description
clusterType	string	False	<p>JSON string containing a value indicating the type of cluster.            Defined values are:</p> <ul style="list-style-type: none"> <li>• "gke" - Kubernetes hosted on Google Kubernetes Engine</li> <li>• "aks" - Kubernetes hosted on Microsoft Azure Kubernetes Service</li> <li>• "eks" - Kubernetes hosted on Amazon Elastic Kubernetes Service</li> <li>• "rke" - The cluster is of type Rancher</li> <li>• "tanzu" -The cluster is of type Tanzu Kubernetes Grid</li> <li>• "openshift" - The cluster is of type OpenShift</li> <li>• "kubernetes" - The cluster is generic Kubernetes</li> </ul>
clusterVersion	string	False	<p>JSON string containing a value indicating the semantic versioning representation of the cluster environment.            For Kubernetes clusters, this is the Kubernetes version.            Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 31</li> </ul>



Name	Type	Required	Description
clusterVersionString	string	False	<p>JSON string containing a value indicating the extended versioning information for the cluster environment.</p> <p>For Kubernetes clusters, this is the full Kubernetes version.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 31</li> </ul>
clusterCreationTimestamp	string	False	<p>JSON string containing the timestamp indicating when the cluster was originally created.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>
namespaces	array[string]	False	<p>JSON array of JSON strings, each indicating a namespace within the cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 253</li> </ul>
defaultStorageClass	string	False	<p>JSON string containing a storageClass ID that corresponds to the default storage class set in Kubernetes.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
cloudID	string	False	<p>JSON string containing a value indicating the ID of the cloud the cluster is running on.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
credentialID	string	False	<p>JSON string containing a value indicating the ID of the credential that contains the kubeconfig file for the cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
location	string	False	<p>JSON string containing a value provided by the cloud that the cluster is running on, indicating the cloud-specific location of the cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>
isMultizonal	string	False	<p>JSON string containing a value provided by the cloud the cluster is running on, indicating whether the cluster spans two or more availability zones.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - The cluster spans two or more availability zones</li> <li>• "false" - The cluster is wholly located within a single availability zone</li> </ul>

Name	Type	Required	Description
privateRouteID	string	False	JSON string containing the location ID for private clusters. <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>
apiServiceID	string	False	JSON string containing the UUID from the Kubernetes (k8s) API service object. Used to uniquely identify a cluster.
metadata	<a href="#">type_astra_metadata_update</a>	False	Client and service-specified metadata associated with the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</li> </ul>

### Example request

```
{
  "type": "application/astra-cluster",
  "version": "1.3"
}
```

### Response

Status: 204, Indicates if the cluster resource was updated.

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

## Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Response

Status: 500, Internal server error

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	

Name	Type	Required	Description
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/65",
  "title": "Cluster GET not performed",
  "detail": "The cluster GET call didn't perform the lookup operation
on the cluster.",
  "status": "500"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/1",
  "title": "Resource not found",
  "detail": "The resource specified in the request URI wasn't found.",
  "status": "404"
}
```

### Definitions

## See Definitions

### type\_astra\_stateDetails

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[ <a href="#">type_astra_label</a> ]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Delete a cluster

DELETE /accounts/{account\_id}/topology/v1/clusters/{cluster\_id}

Removes the specified Cluster API resource.

### Side Effects

- Internal data structures are cleaned up.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource  • example: {{.Account}}
cluster_id	string	path	True	ID of the cluster collection to list

### Response

Status: 204, Indicates if the cluster resource was deleted.

### Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	



### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	

Name	Type	Required	Description
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/1",
  "title": "Resource not found",
  "detail": "The resource specified in the request URI wasn't found.",
  "status": "404"
}
```

### Definitions

## See Definitions

invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

# Cluster node

## Cluster node overview

The Cluster Node API provides CRUD (Create-Read-Update-Delete) access to clusterNode resources in order to provide access to the nodes associated with a cluster.

## List the cluster nodes for a cloud

GET

/accounts/{account\_id}/topology/v1/clouds/{cloud\_id}/clusters/{cluster\_id}/clusterNodes

Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

## Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"><li>example: {{.Account}}</li></ul>
cloud_id	string	path	True	ID of the containing cloud resource
cluster_id	string	path	True	ID of the containing cluster resource

Name	Type	In	Required	Description
include	string	query	False	<p>Indicates which fields should be returned when listing a collection.</p> <p>URL examples: "include=id", "include=id,name"</p> <p>OpenAPI examples: "id"</p> <ul style="list-style-type: none"> <li>example: name,instanceType</li> </ul>
limit	string	query	False	<p>Indicates the maximum number of resources to return when listing a collection.</p> <p>URL examples: "limit=2"</p> <p>OpenAPI examples: "2"</p>

## Response

Status: 200, Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

Name	Type	Required	Description
items	array[ <a href="#">Any of: clusterNode_1.0_get_response_body</a> , array[]]	True	
metadata	<a href="#">type_astra_metadata_list</a>	True	

## Example response

```
{
  "type": "application/astra-clusterNodes",
  "version": "1.0",
  "items": [
    [
      "test-0",
      "e2-medium"
    ],
    [
      "test-1",
      "e2-medium"
    ],
    [
      "test-2",
      "e2-medium"
    ],
    [
      "test-3",
      "e2-micro"
    ]
  ],
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	

Name	Type	Required	Description
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't found.",
  "status": "404"
}
```

**Definitions**



## See Definitions

### labels

Name	Type	Required	Description
name	string	True	JSON string containing the label name Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 1</li><li>• Maximum length: 63</li><li>• Defined regex is: "<code>^[\\S.]{1,253}V?([a-z0-9A-Z_-.]){1,63}\$</code>"</li></ul>
value	string	True	JSON string containing the label value Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 1</li><li>• Maximum length: 63</li><li>• Defined regex is: "<code>^[a-z0-9A-Z_-.]{1,63}\$</code>"</li></ul>

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### type\_astra\_metadata

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema

Name	Type	Required	Description
labels	array[ <a href="#">type_astra_label</a> ]	True	
creationTimestamp	string	True	
modificationTimestamp	string	True	
createdBy	string	True	
modifiedBy	string	False	

## clusterNode\_1.0\_get\_response\_body

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>• "application/astra-clusterNode"</li></ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"><li>• "1.0"</li></ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"><li>• Conforms to the UUIDv4 Schema</li></ul>
name	string	True	JSON string containing a value that indicates the Kubernetes name for the node. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 1</li><li>• Maximum length: 254</li></ul>
role	string	True	JSON string containing a value that indicates the Kubernetes role for the node. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 1</li><li>• Maximum length: 254</li></ul>

Name	Type	Required	Description
labels	array[ <a href="#">labels</a> ]	True	<p>JSON array of JSON objects, each containing Kubernetes labels associated with the node.</p> <p>If no details are available, this array will be empty.</p> <ul style="list-style-type: none"> <li>• Minimum items: 0</li> </ul>
creationTime	string	True	<p>JSON string containing an ISO 8601 timestamp that indicates when the node was created.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>
externalIP	string	True	<p>JSON string containing a value that indicates the internal IP address for the node.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>
internalIP	string	True	<p>JSON string containing a value that indicates the external IP address for the node.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>
zone	string	True	<p>JSON string containing a value that indicates the Kubernetes zone for the node.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 254</li> </ul>

Name	Type	Required	Description
region	string	True	JSON string containing a value that indicates the Kubernetes region for the node. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 254</li> </ul>
instanceType	string	True	JSON string containing a value that indicates the Kubernetes instance type for the node. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 254</li> </ul>
kernelVersion	string	True	JSON string containing a value that indicates the kernel version used by the node. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 254</li> </ul>
osImage	string	True	JSON string containing a value that indicates the operating system image used by the node. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 254</li> </ul>

Name	Type	Required	Description
numCpus	string	True	<p>JSON string containing a value that indicates the number of CPUs assigned to the node. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 254</li> </ul>
memory	string	True	<p>JSON string containing a value that indicates the amount of memory assigned to the node. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 254</li> </ul>
state	string	True	<p>JSON string containing a value indicating the operational state of the node. Defined values are:</p> <ul style="list-style-type: none"> <li>• "running" - The node is running normally</li> <li>• "provisioning" - The node is in the process of being provisioned</li> <li>• "discovering" - Aspects of the node are in the process of being discovered</li> <li>• "pending" - The node is scheduled for discovery</li> <li>• "failed" - The node is in a failure state</li> <li>• "unknown" - The state of the node cannot be determined</li> </ul>

Name	Type	Required	Description
metadata	<a href="#">type_astra_metadata</a>	True	Client and service-specified metadata associated with the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema</li> </ul>

#### type\_astra\_metadata\_list

Name	Type	Required	Description
continue	string	False	
count	number	False	
labels	array[ <a href="#">type_astra_label</a> ]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

#### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Retrieve a cluster node for a cloud

GET

/accounts/{account\_id}/topology/v1/clouds/{cloud\_id}/clusters/{cluster\_id}/clusterNodes/{clusterNode\_id}

Returns the stored Cluster Node API resource in the JSON response body.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"> <li>example: <code>{{.Account}}</code></li> </ul>
cloud_id	string	path	True	ID of the containing cloud resource
cluster_id	string	path	True	ID of the containing cluster resource
clusterNode_id	string	path	True	ID of the clusterNode collection to list

## Response

Status: 200, Returns the stored Cluster Node API resource in the JSON response body.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"> <li>"application/astra-clusterNode"</li> </ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>"1.0"</li> </ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>Conforms to the UUIDv4 Schema</li> </ul>

Name	Type	Required	Description
name	string	True	JSON string containing a value that indicates the Kubernetes name for the node. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 254</li> </ul>
role	string	True	JSON string containing a value that indicates the Kubernetes role for the node. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 254</li> </ul>
labels	array[ <a href="#">labels</a> ]	True	JSON array of JSON objects, each containing Kubernetes labels associated with the node. If no details are available, this array will be empty. <ul style="list-style-type: none"> <li>• Minimum items: 0</li> </ul>
creationTime	string	True	JSON string containing an ISO 8601 timestamp that indicates when the node was created. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>
externalIP	string	True	JSON string containing a value that indicates the internal IP address for the node. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>



Name	Type	Required	Description
internalIP	string	True	<p>JSON string containing a value that indicates the external IP address for the node.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>
zone	string	True	<p>JSON string containing a value that indicates the Kubernetes zone for the node.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 254</li> </ul>
region	string	True	<p>JSON string containing a value that indicates the Kubernetes region for the node.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 254</li> </ul>
instanceType	string	True	<p>JSON string containing a value that indicates the Kubernetes instance type for the node.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 254</li> </ul>
kernelVersion	string	True	<p>JSON string containing a value that indicates the kernel version used by the node.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 254</li> </ul>

Name	Type	Required	Description
osImage	string	True	<p>JSON string containing a value that indicates the operating system image used by the node. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 254</li> </ul>
numCpus	string	True	<p>JSON string containing a value that indicates the number of CPUs assigned to the node. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 254</li> </ul>
memory	string	True	<p>JSON string containing a value that indicates the amount of memory assigned to the node. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 254</li> </ul>

Name	Type	Required	Description
state	string	True	<p>JSON string containing a value indicating the operational state of the node.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "running" - The node is running normally</li> <li>• "provisioning" - The node is in the process of being provisioned</li> <li>• "discovering" - Aspects of the node are in the process of being discovered</li> <li>• "pending" - The node is scheduled for discovery</li> <li>• "failed" - The node is in a failure state</li> <li>• "unknown" - The state of the node cannot be determined</li> </ul>
metadata	<a href="#">type_astra_metadata</a>	True	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema</li> </ul>

## Example response

```
{
  "type": "application/astra-clusterNode",
  "version": "1.0",
  "id": "5df0e09f-2c30-5b8a-b6b6-4fb4063525e4",
  "name": "test-0",
  "role": "node-role.kubernetes.io/worker",
  "labels": [],
  "creationTime": "2020-09-06T04:35:23.593845Z",
  "externalIP": "192.168.12.44",
  "internalIP": "10.0.1.1",
  "zone": "us-west1-c",
  "region": "us-east1",
  "instanceType": "e2-medium",
  "kernelVersion": "4.18.0-147.0.3.el8_1.x86_64",
  "osImage": "Red Hat Enterprise Linux CoreOS 42.81.20191203.0",
  "numCpus": "2",
  "memory": "67108864Ki",
  "state": "running",
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	

Name	Type	Required	Description
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't found.",
  "status": "404"
}
```

**Definitions**

## See Definitions

### labels

Name	Type	Required	Description
name	string	True	JSON string containing the label name Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 1</li><li>• Maximum length: 63</li><li>• Defined regex is: "<code>^([\S.]{1,253}V)?([a-z0-9A-Z_-.]){1,63}\$</code>"</li></ul>
value	string	True	JSON string containing the label value Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 1</li><li>• Maximum length: 63</li><li>• Defined regex is: "<code>^[a-z0-9A-Z_-.]{1,63}\$</code>"</li></ul>

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### type\_astra\_metadata

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema

Name	Type	Required	Description
labels	array[ <a href="#">type_astra_label</a> ]	True	
creationTimestamp	string	True	
modificationTimestamp	string	True	
createdBy	string	True	
modifiedBy	string	False	



## invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## List the cluster nodes for a cluster

GET /accounts/{account\_id}/topology/v1/clusters/{cluster\_id}/clusterNodes

Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"><li>example: <code>{{.Account}}</code></li></ul>
cluster_id	string	path	True	ID of the containing cluster resource
include	string	query	False	Indicates which fields should be returned when listing a collection.  URL examples: "include=id", "include=id,name"  OpenAPI examples: "id" <ul style="list-style-type: none"><li>example: <code>name,instanceType</code></li></ul>

Name	Type	In	Required	Description
limit	string	query	False	Indicates the maximum number of resources to return when listing a collection.  URL examples: "limit=2"  OpenAPI examples: "2"

## Response

Status: 200, Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

Name	Type	Required	Description
items	array[Any of: <a href="#">clusterNode_1.0_get_response_body</a> , array[]]	True	
metadata	<a href="#">type_astra_metadata_list</a>	True	

## Example response

```
{
  "type": "application/astra-clusterNodes",
  "version": "1.0",
  "items": [
    [
      "test-0",
      "e2-medium"
    ],
    [
      "test-1",
      "e2-medium"
    ],
    [
      "test-2",
      "e2-medium"
    ],
    [
      "test-3",
      "e2-micro"
    ]
  ],
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	

Name	Type	Required	Description
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't found.",
  "status": "404"
}
```

**Definitions**

## See Definitions

### labels

Name	Type	Required	Description
name	string	True	JSON string containing the label name Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 1</li><li>• Maximum length: 63</li><li>• Defined regex is: "<code>^([\S.]{1,253}V)?([a-z0-9A-Z_-.]){1,63}\$</code>"</li></ul>
value	string	True	JSON string containing the label value Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 1</li><li>• Maximum length: 63</li><li>• Defined regex is: "<code>^[a-z0-9A-Z_-.]{1,63}\$</code>"</li></ul>

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### type\_astra\_metadata

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema

Name	Type	Required	Description
labels	array[ <a href="#">type_astra_label</a> ]	True	
creationTimestamp	string	True	
modificationTimestamp	string	True	
createdBy	string	True	
modifiedBy	string	False	

## clusterNode\_1.0\_get\_response\_body

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>• "application/astra-clusterNode"</li></ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"><li>• "1.0"</li></ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"><li>• Conforms to the UUIDv4 Schema</li></ul>
name	string	True	JSON string containing a value that indicates the Kubernetes name for the node. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 1</li><li>• Maximum length: 254</li></ul>
role	string	True	JSON string containing a value that indicates the Kubernetes role for the node. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 1</li><li>• Maximum length: 254</li></ul>



Name	Type	Required	Description
labels	array[ <a href="#">labels</a> ]	True	<p>JSON array of JSON objects, each containing Kubernetes labels associated with the node.</p> <p>If no details are available, this array will be empty.</p> <ul style="list-style-type: none"> <li>• Minimum items: 0</li> </ul>
creationTime	string	True	<p>JSON string containing an ISO 8601 timestamp that indicates when the node was created.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>
externalIP	string	True	<p>JSON string containing a value that indicates the internal IP address for the node.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>
internalIP	string	True	<p>JSON string containing a value that indicates the external IP address for the node.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>
zone	string	True	<p>JSON string containing a value that indicates the Kubernetes zone for the node.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 254</li> </ul>

Name	Type	Required	Description
region	string	True	JSON string containing a value that indicates the Kubernetes region for the node. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 254</li> </ul>
instanceType	string	True	JSON string containing a value that indicates the Kubernetes instance type for the node. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 254</li> </ul>
kernelVersion	string	True	JSON string containing a value that indicates the kernel version used by the node. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 254</li> </ul>
osImage	string	True	JSON string containing a value that indicates the operating system image used by the node. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 254</li> </ul>

Name	Type	Required	Description
numCpus	string	True	<p>JSON string containing a value that indicates the number of CPUs assigned to the node. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 254</li> </ul>
memory	string	True	<p>JSON string containing a value that indicates the amount of memory assigned to the node. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 254</li> </ul>
state	string	True	<p>JSON string containing a value indicating the operational state of the node. Defined values are:</p> <ul style="list-style-type: none"> <li>• "running" - The node is running normally</li> <li>• "provisioning" - The node is in the process of being provisioned</li> <li>• "discovering" - Aspects of the node are in the process of being discovered</li> <li>• "pending" - The node is scheduled for discovery</li> <li>• "failed" - The node is in a failure state</li> <li>• "unknown" - The state of the node cannot be determined</li> </ul>

Name	Type	Required	Description
metadata	<a href="#">type_astra_metadata</a>	True	Client and service-specified metadata associated with the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema</li> </ul>

#### type\_astra\_metadata\_list

Name	Type	Required	Description
continue	string	False	
count	number	False	
labels	array[ <a href="#">type_astra_label</a> ]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

#### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Retrieve a cluster node for a cluster

GET

/accounts/{account\_id}/topology/v1/clusters/{cluster\_id}/clusterNodes/{clusterNode\_id}

Returns the stored Cluster Node API resource in the JSON response body.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"> <li>example: <code>{{.Account}}</code></li> </ul>
cluster_id	string	path	True	ID of the containing cluster resource
clusterNode_id	string	path	True	ID of the clusterNode collection to list

## Response

Status: 200, Returns the stored Cluster Node API resource in the JSON response body.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"> <li>"application/astra-clusterNode"</li> </ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>"1.0"</li> </ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>Conforms to the UUIDv4 Schema</li> </ul>

Name	Type	Required	Description
name	string	True	JSON string containing a value that indicates the Kubernetes name for the node. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 254</li> </ul>
role	string	True	JSON string containing a value that indicates the Kubernetes role for the node. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 254</li> </ul>
labels	array[ <a href="#">labels</a> ]	True	JSON array of JSON objects, each containing Kubernetes labels associated with the node. If no details are available, this array will be empty. <ul style="list-style-type: none"> <li>• Minimum items: 0</li> </ul>
creationTime	string	True	JSON string containing an ISO 8601 timestamp that indicates when the node was created. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>
externalIP	string	True	JSON string containing a value that indicates the internal IP address for the node. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>

Name	Type	Required	Description
internalIP	string	True	<p>JSON string containing a value that indicates the external IP address for the node.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>
zone	string	True	<p>JSON string containing a value that indicates the Kubernetes zone for the node.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 254</li> </ul>
region	string	True	<p>JSON string containing a value that indicates the Kubernetes region for the node.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 254</li> </ul>
instanceType	string	True	<p>JSON string containing a value that indicates the Kubernetes instance type for the node.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 254</li> </ul>
kernelVersion	string	True	<p>JSON string containing a value that indicates the kernel version used by the node.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 254</li> </ul>

Name	Type	Required	Description
osImage	string	True	<p>JSON string containing a value that indicates the operating system image used by the node.            Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 254</li> </ul>
numCpus	string	True	<p>JSON string containing a value that indicates the number of CPUs assigned to the node.            Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 254</li> </ul>
memory	string	True	<p>JSON string containing a value that indicates the amount of memory assigned to the node.            Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 254</li> </ul>



Name	Type	Required	Description
state	string	True	<p>JSON string containing a value indicating the operational state of the node.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "running" - The node is running normally</li> <li>• "provisioning" - The node is in the process of being provisioned</li> <li>• "discovering" - Aspects of the node are in the process of being discovered</li> <li>• "pending" - The node is scheduled for discovery</li> <li>• "failed" - The node is in a failure state</li> <li>• "unknown" - The state of the node cannot be determined</li> </ul>
metadata	<a href="#">type_astra_metadata</a>	True	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema</li> </ul>

## Example response

```
{
  "type": "application/astra-clusterNode",
  "version": "1.0",
  "id": "5df0e09f-2c30-5b8a-b6b6-4fb4063525e4",
  "name": "test-0",
  "role": "node-role.kubernetes.io/worker",
  "labels": [],
  "creationTime": "2020-09-06T04:35:23.593845Z",
  "externalIP": "192.168.12.44",
  "internalIP": "10.0.1.1",
  "zone": "us-west1-c",
  "region": "us-east1",
  "instanceType": "e2-medium",
  "kernelVersion": "4.18.0-147.0.3.el8_1.x86_64",
  "osImage": "Red Hat Enterprise Linux CoreOS 42.81.20191203.0",
  "numCpus": "2",
  "memory": "67108864Ki",
  "state": "running",
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	

Name	Type	Required	Description
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't found.",
  "status": "404"
}
```

**Definitions**

## See Definitions

### labels

Name	Type	Required	Description
name	string	True	JSON string containing the label name Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 1</li><li>• Maximum length: 63</li><li>• Defined regex is: "<code>^[\\S.]{1,253}V?([a-z0-9A-Z_-.]){1,63}\$</code>"</li></ul>
value	string	True	JSON string containing the label value Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 1</li><li>• Maximum length: 63</li><li>• Defined regex is: "<code>^[a-z0-9A-Z_-.]{1,63}\$</code>"</li></ul>

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### type\_astra\_metadata

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema

Name	Type	Required	Description
labels	array[ <a href="#">type_astra_label</a> ]	True	
creationTimestamp	string	True	
modificationTimestamp	string	True	
createdBy	string	True	
modifiedBy	string	False	

## invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## List the cluster nodes for a managed cluster

GET

/accounts/{account\_id}/topology/v1/managedClusters/{managedCluster\_id}/clusterNodes

Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"><li>example: <code>{{.Account}}</code></li></ul>
managedCluster_id	string	path	True	ID of the containing managedCluster resource
include	string	query	False	Indicates which fields should be returned when listing a collection.  URL examples: "include=id", "include=id,name"  OpenAPI examples: "id" <ul style="list-style-type: none"><li>example: <code>name,instanceType</code></li></ul>

Name	Type	In	Required	Description
limit	string	query	False	Indicates the maximum number of resources to return when listing a collection.  URL examples: "limit=2"  OpenAPI examples: "2"

## Response

Status: 200, Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

Name	Type	Required	Description
items	array[Any of: <a href="#">clusterNode_1.0_get_response_body</a> , array[]]	True	
metadata	<a href="#">type_astra_metadata_list</a>	True	



## Example response

```
{
  "type": "application/astra-clusterNodes",
  "version": "1.0",
  "items": [
    [
      "test-0",
      "e2-medium"
    ],
    [
      "test-1",
      "e2-medium"
    ],
    [
      "test-2",
      "e2-medium"
    ],
    [
      "test-3",
      "e2-micro"
    ]
  ],
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	

Name	Type	Required	Description
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't found.",
  "status": "404"
}
```

**Definitions**

## See Definitions

### labels

Name	Type	Required	Description
name	string	True	JSON string containing the label name Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 1</li><li>• Maximum length: 63</li><li>• Defined regex is: "<code>^([\S.]{1,253}V)?([a-z0-9A-Z_-.]){1,63}\$</code>"</li></ul>
value	string	True	JSON string containing the label value Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 1</li><li>• Maximum length: 63</li><li>• Defined regex is: "<code>^[a-z0-9A-Z_-.]{1,63}\$</code>"</li></ul>

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### type\_astra\_metadata

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema

Name	Type	Required	Description
labels	array[ <a href="#">type_astra_label</a> ]	True	
creationTimestamp	string	True	
modificationTimestamp	string	True	
createdBy	string	True	
modifiedBy	string	False	

## clusterNode\_1.0\_get\_response\_body

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>• "application/astra-clusterNode"</li></ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"><li>• "1.0"</li></ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"><li>• Conforms to the UUIDv4 Schema</li></ul>
name	string	True	JSON string containing a value that indicates the Kubernetes name for the node. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 1</li><li>• Maximum length: 254</li></ul>
role	string	True	JSON string containing a value that indicates the Kubernetes role for the node. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 1</li><li>• Maximum length: 254</li></ul>

Name	Type	Required	Description
labels	array[ <a href="#">labels</a> ]	True	<p>JSON array of JSON objects, each containing Kubernetes labels associated with the node.</p> <p>If no details are available, this array will be empty.</p> <ul style="list-style-type: none"> <li>• Minimum items: 0</li> </ul>
creationTime	string	True	<p>JSON string containing an ISO 8601 timestamp that indicates when the node was created.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>
externalIP	string	True	<p>JSON string containing a value that indicates the internal IP address for the node.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>
internalIP	string	True	<p>JSON string containing a value that indicates the external IP address for the node.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>
zone	string	True	<p>JSON string containing a value that indicates the Kubernetes zone for the node.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 254</li> </ul>

Name	Type	Required	Description
region	string	True	JSON string containing a value that indicates the Kubernetes region for the node. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 254</li> </ul>
instanceType	string	True	JSON string containing a value that indicates the Kubernetes instance type for the node. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 254</li> </ul>
kernelVersion	string	True	JSON string containing a value that indicates the kernel version used by the node. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 254</li> </ul>
osImage	string	True	JSON string containing a value that indicates the operating system image used by the node. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 254</li> </ul>



Name	Type	Required	Description
numCpus	string	True	<p>JSON string containing a value that indicates the number of CPUs assigned to the node. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 254</li> </ul>
memory	string	True	<p>JSON string containing a value that indicates the amount of memory assigned to the node. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 254</li> </ul>
state	string	True	<p>JSON string containing a value indicating the operational state of the node. Defined values are:</p> <ul style="list-style-type: none"> <li>• "running" - The node is running normally</li> <li>• "provisioning" - The node is in the process of being provisioned</li> <li>• "discovering" - Aspects of the node are in the process of being discovered</li> <li>• "pending" - The node is scheduled for discovery</li> <li>• "failed" - The node is in a failure state</li> <li>• "unknown" - The state of the node cannot be determined</li> </ul>

Name	Type	Required	Description
metadata	<a href="#">type_astra_metadata</a>	True	Client and service-specified metadata associated with the resource. Defined values are: <ul style="list-style-type: none"> <li>Conforms to the Astra Metadata Schema</li> </ul>

#### type\_astra\_metadata\_list

Name	Type	Required	Description
continue	string	False	
count	number	False	
labels	array[ <a href="#">type_astra_label</a> ]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

#### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Retrieve a cluster node for a managed cluster

GET

/accounts/{account\_id}/topology/v1/managedClusters/{managedCluster\_id}/clusterNodes/{clusterNode\_id}

Returns the stored Cluster Node API resource in the JSON response body.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource  • example: {{.Account}}
managedCluster_id	string	path	True	ID of the containing managedCluster resource
clusterNode_id	string	path	True	ID of the clusterNode collection to list

## Response

Status: 200, Returns the stored Cluster Node API resource in the JSON response body.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are:  • "application/astra-clusterNode"
version	string	True	Version of the resource. Defined values are:  • "1.0"
id	string	True	Globally unique identifier of the resource. Defined values are:  • Conforms to the UUIDv4 Schema

Name	Type	Required	Description
name	string	True	JSON string containing a value that indicates the Kubernetes name for the node. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 254</li> </ul>
role	string	True	JSON string containing a value that indicates the Kubernetes role for the node. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 254</li> </ul>
labels	array[ <a href="#">labels</a> ]	True	JSON array of JSON objects, each containing Kubernetes labels associated with the node. If no details are available, this array will be empty. <ul style="list-style-type: none"> <li>• Minimum items: 0</li> </ul>
creationTime	string	True	JSON string containing an ISO 8601 timestamp that indicates when the node was created. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>
externalIP	string	True	JSON string containing a value that indicates the internal IP address for the node. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>

Name	Type	Required	Description
internalIP	string	True	<p>JSON string containing a value that indicates the external IP address for the node.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>
zone	string	True	<p>JSON string containing a value that indicates the Kubernetes zone for the node.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 254</li> </ul>
region	string	True	<p>JSON string containing a value that indicates the Kubernetes region for the node.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 254</li> </ul>
instanceType	string	True	<p>JSON string containing a value that indicates the Kubernetes instance type for the node.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 254</li> </ul>
kernelVersion	string	True	<p>JSON string containing a value that indicates the kernel version used by the node.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 254</li> </ul>

Name	Type	Required	Description
osImage	string	True	<p>JSON string containing a value that indicates the operating system image used by the node.            Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 254</li> </ul>
numCpus	string	True	<p>JSON string containing a value that indicates the number of CPUs assigned to the node.            Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 254</li> </ul>
memory	string	True	<p>JSON string containing a value that indicates the amount of memory assigned to the node.            Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 254</li> </ul>

Name	Type	Required	Description
state	string	True	<p>JSON string containing a value indicating the operational state of the node.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "running" - The node is running normally</li> <li>• "provisioning" - The node is in the process of being provisioned</li> <li>• "discovering" - Aspects of the node are in the process of being discovered</li> <li>• "pending" - The node is scheduled for discovery</li> <li>• "failed" - The node is in a failure state</li> <li>• "unknown" - The state of the node cannot be determined</li> </ul>
metadata	<a href="#">type_astra_metadata</a>	True	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema</li> </ul>

## Example response

```
{
  "type": "application/astra-clusterNode",
  "version": "1.0",
  "id": "5df0e09f-2c30-5b8a-b6b6-4fb4063525e4",
  "name": "test-0",
  "role": "node-role.kubernetes.io/worker",
  "labels": [],
  "creationTime": "2020-09-06T04:35:23.593845Z",
  "externalIP": "192.168.12.44",
  "internalIP": "10.0.1.1",
  "zone": "us-west1-c",
  "region": "us-east1",
  "instanceType": "e2-medium",
  "kernelVersion": "4.18.0-147.0.3.el8_1.x86_64",
  "osImage": "Red Hat Enterprise Linux CoreOS 42.81.20191203.0",
  "numCpus": "2",
  "memory": "67108864Ki",
  "state": "running",
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	



### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	

Name	Type	Required	Description
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't found.",
  "status": "404"
}
```

## Definitions

See Definitions

labels

Name	Type	Required	Description
name	string	True	JSON string containing the label name Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> <li>• Defined regex is: <code>"^([\S.]{1,253}V)?([a-z0-9A-Z_-.]){1,63}\$"</code></li> </ul>
value	string	True	JSON string containing the label value Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> <li>• Defined regex is: <code>"^{[a-z0-9A-Z_-.]{1,63}\$"</code></li> </ul>

type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

type\_astra\_metadata

Client and service-specified metadata associated with the resource.  
Defined values are:

- Conforms to the Astra Metadata Schema

Name	Type	Required	Description
labels	array[ <a href="#">type_astra_label</a> ]	True	
creationTimestamp	string	True	
modificationTimestamp	string	True	
createdBy	string	True	
modifiedBy	string	False	

## invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

# Credential

## Credential overview

The Credential API provides CRUD (Create-Read-Update-Delete) access to credential resources to securely persist objects containing sensitive information.

## Create a new credential

POST `/accounts/{account_id}/core/v1/credentials`

Indicates the desired values for the Credential API resource to be created.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"><li>example: {{.Account}}</li></ul>

### Request Body

Indicates the desired values for the Credential API resource to be created.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>"application/astra-credential"</li></ul>

Name	Type	Required	Description
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "1.0"</li> <li>• "1.1"</li> </ul>
name	string	True	JSON string containing a user-specified name. When a credential is created for a user, the name will be set to the UUID of that user. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 127</li> </ul>

Name	Type	Required	Description
keyType	string	False	<p>JSON string containing an optional user-specified data validation type descriptor for the contents of the keyStore.</p> <p>Extended update constraints:</p> <ul style="list-style-type: none"> <li>• If a keyType does not exist in the resource and is not specified in an update, the keyType must not continue to exist in the updated resource.</li> <li>• If a keyType does not exist in the resource and is specified in an update, the keyType must be added to the resource and validation must be performed. If the validation fails, the update will fail.</li> <li>• If a keyType exists in the resource and is not specified in an update, the keyType must be preserved.</li> <li>• If a keyType exists in the resource and is specified in an update, and the keyType specified matches the existing keyType, the keyType must be preserved.</li> <li>• If a keyType exists in the resource and is specified in an update, and the keyType specified is different from the existing keyType, the update will fail.</li> </ul> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "generic" - The credential is a generic collection of data. This is equivalent to not including a keyType.</li> </ul>

Extended validation performed as follows:

Name	Type	Required	Description
keyStore	keyStore	True	<p>JSON object containing JSON strings. Each string in the keyStore represents part of the credential. The name of each string represents the credential part, and the corresponding key-value stores the value of that part of the credential in base64 format.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the base64 Encoded Data Schema No limits are placed on the lengths of the strings.</li> </ul>
valid	string	False	<p>JSON string describing whether the credential is valid for use. Default value, if omitted, is "true".</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - The credential is eligible for use.</li> <li>• "false" - The credential must not be used.</li> </ul>
validFromTimestamp	string	False	<p>JSON string containing a timestamp indicating when the credential is valid. These are used for credential rotation.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>

- stored as a hash.
- A "change" string must exist within the keyStore with a value containing a base64-encoded string "true" or "false".
- A credential of type passwordHash can only be deleted if the user ID indicated by the name does not



Name	Type	Required	Description
validUntilTimestamp	string	False	<p>JSON string containing a timestamp indicating when the credential is no longer valid. These are used for credential rotation.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>
metadata	type_astra_metadata_update	False	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</li> </ul>

### Example request

- "certificate" - The credential is a PEM-

```

{
  "type": "application/astra-credential",
  "version": "1.1",
  "name": "myCert",
  "keyStore": {
    "privKey": "SGkh",
    "pubKey": "VGhpcyBpcyBhbiBleGFtcGxlLg=="
  }
}

```

- Extended validation is performed as follows:
- A "privkey" string must exist within the keyStore, with a value containing a base64-encoded PEM private

## Response

Status: 201, Returns the newly created credential resource in the JSON response body.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>• "application/astra-credential"</li></ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"><li>• "1.0"</li><li>• "1.1"</li></ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"><li>• Conforms to the UUIDv4 Schema</li></ul>
name	string	True	JSON string containing a user-specified name. When a credential is created for a user, the name will be set to the UUID of that user. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 1</li><li>• Maximum length: 127</li></ul>

Name	Type	Required	Description
keyType	string	False	<p>JSON string containing an optional user-specified data validation type descriptor for the contents of the keyStore.</p> <p>Extended update constraints:</p> <ul style="list-style-type: none"> <li>• If a keyType does not exist in the resource and is not specified in an update, the keyType must not continue to exist in the updated resource.</li> <li>• If a keyType does not exist in the resource and is specified in an update, the keyType must be added to the resource and validation must be performed. If the validation fails, the update will fail.</li> <li>• If a keyType exists in the resource and is not specified in an update, the keyType must be preserved.</li> <li>• If a keyType exists in the resource and is specified in an update, and the keyType specified matches the existing keyType, the keyType must be preserved.</li> <li>• If a keyType exists in the resource and is specified in an update, and the keyType specified is different from the existing keyType, the update will fail.</li> </ul> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "generic" - The credential is a generic collection of data. This is equivalent to not including a keyType.</li> </ul>

Extended validation performed as follows:

Name	Type	Required	Description
valid	string	True	<p>JSON string describing whether the credential is valid for use. Default value, if omitted, is "true". Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - The credential is eligible for use.</li> <li>• "false" - The credential must not be used.</li> </ul>
validFromTimestamp	string	False	<p>JSON string containing a timestamp indicating when the credential is valid. These are used for credential rotation. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>
validUntilTimestamp	string	False	<p>JSON string containing a timestamp indicating when the credential is no longer valid. These are used for credential rotation. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>

password.

- The password cleartext must conform to the account's password policy.
- The password is stored as a hash.
- A "change" string must exist within the keyStore with a value containing a base64-encoded string "true" or "false".
- A credential of type passwordHash can only be deleted if the user ID indicated by the name does not

Name	Type	Required	Description
metadata	type_astra_metadata_update	True	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>Conforms to the Astra Metadata Schema</li> </ul> <p>If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</p>

### Example response

```

{
  "type": "application/astra-credential",
  "version": "1.1",
  "id": "58e26f6a-a631-5122-8e0e-7afe306675c0",
  "name": "myCert",
  "valid": "true",
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}

```

### Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	

keyStore, with a value containing a base64-encoded PEM

encoded private key

exist within the keyStore, with a value containing a base64-encoded PEM private

Name	Type	Required	Description
detail	string	False	
status	string	True	
correlationID	string	False	

Service (S3) access.

### Example response

- Extended validation is

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

with a value containing a base64-encoded S3 access

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

## Response

Status: 409, Conflict

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

## Example response

```
{
  "type": "https://astra.netapp.io/problems/10",
  "title": "JSON resource conflict",
  "detail": "The request body JSON contains a field that conflicts with an idempotent value.",
  "status": "409"
}
```

## Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

## Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

## Definitions



## See Definitions

### keyStore

JSON object containing JSON strings. Each string in the keyStore represents part of the credential. The name of each string represents the credential part, and the corresponding key-value stores the value of that part of the credential in base64 format.

Defined values are:

- Conforms to the base64 Encoded Data Schema  
No limits are placed on the lengths of the strings.

Hash mapping strings to string

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[ <a href="#">type_astra_label</a> ]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

### invalidFields

Name	Type	Required	Description
name	string	True	Name of the invalid request body field
reason	string	True	Reason why the request body field is invalid

## List all credentials

GET /accounts/{account\_id}/core/v1/credentials

Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"> <li>example: <code>{{.Account}}</code></li> </ul>
continue		query	False	Indicates the token to resume listing from. <p>URL examples:  "continue=&lt;continue token="" from="" collection="" metadata=""&gt;"&lt;/continue&gt;</p> <p>OpenAPI examples:  "&lt;continue token="" from="" collection="" metadata=""&gt;"&lt;/continue&gt;&amp;lt;/continue&amp;gt;</p>

Name	Type	In	Required	Description
filter	string	query	False	<p>Indicates which fields should be matched in order to return a resource when listing a collection.</p> <p>Supported operators are:</p> <ul style="list-style-type: none"> <li>• eq - Equality</li> <li>• lt/gt - Less than/Greater than</li> <li>• lte/gte - Less than or equals to/Greater than or equals to</li> </ul> <p>URL example: "filter=field%20eq%20%27value%27"</p> <p>OpenAPI examples: "field eq 'value'"</p>
include	string	query	False	<p>Indicates which fields should be returned when listing a collection.</p> <p>URL examples: "include=id", "include=id,name"</p> <p>OpenAPI examples: "id"</p> <ul style="list-style-type: none"> <li>• example: id,name</li> </ul>

Name	Type	In	Required	Description
limit	string	query	False	Indicates the maximum number of resources to return when listing a collection.  URL examples: "limit=2"  OpenAPI examples: "2"
orderBy	string	query	False	Indicates the sort order of resource when listing a collection.  URL examples: "orderBy=name", "orderBy=name%20desc"  OpenAPI examples: "name desc"

## Response

Status: 200, Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

Name	Type	Required	Description
items	array[Any of: <a href="#">credential_1.1_get_response_body</a> , array[]]	True	
metadata	<a href="#">type_astra_metadata_list</a>	True	

## Example response

```
{
  "type": "application/astra-credentials",
  "version": "1.1",
  "items": [
    [
      "f97f3441-075e-4f9b-9d1e-47f9f62a3fc4",
      "myCert"
    ],
    [
      "5e365b4d-034f-4f13-95ef-d3a7fbc0df3d",
      "kubeconfig"
    ],
    [
      "11ceb350-1999-4b79-80a6-46a980a27856",
      "password"
    ]
  ],
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

## Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

## Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

## Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	

Name	Type	Required	Description
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

### Definitions

## See Definitions

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[type_astra_label]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

### credential\_1.1\_get\_response\_body

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>• "application/astra-credential"</li></ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"><li>• "1.0"</li><li>• "1.1"</li></ul>



Name	Type	Required	Description
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"><li>• Conforms to the UUIDv4 Schema</li></ul>
name	string	True	JSON string containing a user-specified name. When a credential is created for a user, the name will be set to the UUID of that user. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 1</li><li>• Maximum length: 127</li></ul>

Name	Type	Required	Description
keyType	string	False	<p>JSON string containing an optional user-specified data validation type descriptor for the contents of the keyStore. Extended update constraints:</p> <ul style="list-style-type: none"> <li>• If a keyType does not exist in the resource and is not specified in an update, the keyType must not continue to exist in the updated resource.</li> <li>• If a keyType does not exist in the resource and is specified in an update, the keyType must be added to the resource and validation must be performed. If the validation fails, the update will fail.</li> <li>• If a keyType exists in the resource and is not specified in an update, the keyType must be preserved.</li> <li>• If a keyType exists in the resource and is specified in an update, and the keyType specified matches the existing keyType, the keyType must be preserved.</li> <li>• If a keyType exists in the resource and is specified in an update, and the keyType specified is different from the existing keyType, the update will fail.</li> </ul> <p>Defined values are:</p> <p>"generic" - The credential is a generic collection of data. This is</p>

Name	Type	Required	Description
valid	string	True	<p>JSON string describing whether the credential is valid for use. Default value, if omitted, is "true".</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - The credential is eligible for use.</li> <li>• "false" - The credential must not be used.</li> </ul>
validFromTimestamp	string	False	<p>JSON string containing a timestamp indicating when the credential is valid. These are used for credential rotation.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>
validUntilTimestamp	string	False	<p>JSON string containing a timestamp indicating when the credential is no longer valid. These are used for credential rotation.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>

must exist within the keyStore with a value containing a base64-encoded cleartext password:

- The password cleartext must conform to the account's password policy.
- The password is stored as a hash.
- A "change" string must exist within the keyStore with a value containing a

Name	Type	Required	Description
metadata	<a href="#">type_astra_metadata_update</a>	True	Client and service-specified metadata associated with the resource. Defined values are: <ul style="list-style-type: none"> <li>Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</li> </ul>

type\_astra\_metadata\_list

Name	Type	Required	Description
continue	string	False	
count	number	False	
labels	array[ <a href="#">type_astra_label</a> ]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

is performed as follows:

- A "certificate" string must exist within the keyStore, with a value containing a base64-encoded

## Retrieve a credential

GET /accounts/{account\_id}/core/v1/credentials/{credential\_id}

Returns the stored Credential API resource in the JSON response body.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"><li>example: {{.Account}}</li></ul>
credential_id	string	path	True	ID of the credential collection to list

### Response

Status: 200, Returns the stored Credential API resource in the JSON response body.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>"application/astra-credential"</li></ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"><li>"1.0"</li><li>"1.1"</li></ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"><li>Conforms to the UUIDv4 Schema</li></ul>

Name	Type	Required	Description
name	string	True	<p>JSON string containing a user-specified name. When a credential is created for a user, the name will be set to the UUID of that user. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 127</li> </ul>

value containing a base64-encoded PEM private key.

- "s3" - Indicates the credentials are for Simple Storage Service (S3) access.
- Extended validation is performed as follows:
  - An "accessKey" string must exist within the keyStore with a value containing a base64-encoded S3 access key.
  - An "accessSecret" string must exist within the keyStore with a value containing a base64-encoded S3 access secret.

Name	Type	Required	Description
keyType	string	False	<p>JSON string containing an optional user-specified data validation type descriptor for the contents of the keyStore.</p> <p>Extended update constraints:</p> <ul style="list-style-type: none"> <li>• If a keyType does not exist in the resource and is not specified in an update, the keyType must not continue to exist in the updated resource.</li> <li>• If a keyType does not exist in the resource and is specified in an update, the keyType must be added to the resource and validation must be performed. If the validation fails, the update will fail.</li> <li>• If a keyType exists in the resource and is not specified in an update, the keyType must be preserved.</li> <li>• If a keyType exists in the resource and is specified in an update, and the keyType specified matches the existing keyType, the keyType must be preserved.</li> <li>• If a keyType exists in the resource and is specified in an update, and the keyType specified is different from the existing keyType, the update will fail.</li> </ul> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "generic" - The credential is a generic collection of data. This is equivalent to not including a keyType.</li> </ul>

Extended validation<sup>1043</sup> performed as follows:

Name	Type	Required	Description
valid	string	True	<p>JSON string describing whether the credential is valid for use. Default value, if omitted, is "true". Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - The credential is eligible for use.</li> <li>• "false" - The credential must not be used.</li> </ul>
validFromTimestamp	string	False	<p>JSON string containing a timestamp indicating when the credential is valid. These are used for credential rotation. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>
validUntilTimestamp	string	False	<p>JSON string containing a timestamp indicating when the credential is no longer valid. These are used for credential rotation. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>

password.

- The password cleartext must conform to the account's password policy.
- The password is stored as a hash.
- A "change" string must exist within the keyStore with a value containing a base64-encoded string "true" or "false".
- A credential of type passwordHash can only be deleted if the user ID indicated by the name does not



Name	Type	Required	Description
metadata	type_astra_metadata_update	True	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>Conforms to the Astra Metadata Schema</li> </ul> <p>If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</p>

### Example response

```
{
  "type": "application/astra-credential",
  "version": "1.1",
  "id": "58e26f6a-a631-5122-8e0e-7afe306675c0",
  "name": "myCert",
  "valid": "true",
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

### Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	

keyStore, with a value containing a base64-encoded PEM

encoded private key

exist within the keyStore, with a value containing a base64-encoded PEM private

Name	Type	Required	Description
detail	string	False	
status	string	True	
correlationID	string	False	

Service (S3) access.

### Example response

- Extended validation is

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

with a value containing a base64-encoded S3 access

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

## Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

## Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

## Definitions

## See Definitions

type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[type_astra_label]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Modify a credential

PUT /accounts/{account\_id}/core/v1/credentials/{credential\_id}

Replaces the entire stored resource with the supplied JSON request body while preserving the key values that are not user-modifiable.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"> <li>example: <code>{{.Account}}</code></li> </ul>
credential_id	string	path	True	ID of the credential collection to list

## Request Body

Replaces the entire stored resource with the supplied JSON request body while preserving the key values that are not user-modifiable.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"> <li>"application/astra-credential"</li> </ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>"1.0"</li> <li>"1.1"</li> </ul>
id	string	False	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>Conforms to the UUIDv4 Schema</li> </ul>
name	string	False	JSON string containing a user-specified name. When a credential is created for a user, the name will be set to the UUID of that user. Defined values are: <ul style="list-style-type: none"> <li>Minimum length: 1</li> <li>Maximum length: 127</li> </ul>

Name	Type	Required	Description
keyType	string	False	<p>JSON string containing an optional user-specified data validation type descriptor for the contents of the keyStore.</p> <p>Extended update constraints:</p> <ul style="list-style-type: none"> <li>• If a keyType does not exist in the resource and is not specified in an update, the keyType must not continue to exist in the updated resource.</li> <li>• If a keyType does not exist in the resource and is specified in an update, the keyType must be added to the resource and validation must be performed. If the validation fails, the update will fail.</li> <li>• If a keyType exists in the resource and is not specified in an update, the keyType must be preserved.</li> <li>• If a keyType exists in the resource and is specified in an update, and the keyType specified matches the existing keyType, the keyType must be preserved.</li> <li>• If a keyType exists in the resource and is specified in an update, and the keyType specified is different from the existing keyType, the update will fail.</li> </ul> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "generic" - The credential is a generic collection of data. This is equivalent to not including a keyType.</li> </ul>

Extended validation performed as follows:

Name	Type	Required	Description
keyStore	keyStore	False	<p>JSON object containing JSON strings. Each string in the keyStore represents part of the credential. The name of each string represents the credential part, and the corresponding key-value stores the value of that part of the credential in base64 format.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the base64 Encoded Data Schema No limits are placed on the lengths of the strings.</li> </ul>
valid	string	False	<p>JSON string describing whether the credential is valid for use. Default value, if omitted, is "true".</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - The credential is eligible for use.</li> <li>• "false" - The credential must not be used.</li> </ul>
validFromTimestamp	string	False	<p>JSON string containing a timestamp indicating when the credential is valid. These are used for credential rotation.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>

- stored as a hash.
- A "change" string must exist within the keyStore with a value containing a base64-encoded string "true" or "false".
- A credential of type passwordHash can only be deleted if the user ID indicated by the name does not



Name	Type	Required	Description
validUntilTimestamp	string	False	<p>JSON string containing a timestamp indicating when the credential is no longer valid. These are used for credential rotation.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>
metadata	type_astra_metadata_update	False	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</li> </ul>

### Example request

- "certificate" - The credential is a PEM-

```
{
  "type": "application/astra-credential",
  "version": "1.1",
  "name": "oldCert",
  "keyStore": {
    "privKey": "SGkh",
    "pubKey": "VGhpcyBpcyBhbiBleGFtcGxlLg=="
  }
}
```

- Extended validation is performed as follows:
- A "privkey" string must exist within the keyStore, with a value containing a base64-encoded PEM private

## Response

Status: 204, Indicates if the credential resource was updated.

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

## Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

keyStore with a value containing a base64-encoded S3 access

### Response

Status: 409, Conflict

string must exist

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

### Example response

```
{
  "type": "https://astra.netapp.io/problems/10",
  "title": "JSON resource conflict",
  "detail": "The request body JSON contains a field that conflicts with an idempotent value.",
  "status": "409"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

## Definitions

## See Definitions

### keyStore

JSON object containing JSON strings. Each string in the keyStore represents part of the credential. The name of each string represents the credential part, and the corresponding key-value stores the value of that part of the credential in base64 format.

Defined values are:

- Conforms to the base64 Encoded Data Schema  
No limits are placed on the lengths of the strings.

Hash mapping strings to string

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[ <a href="#">type_astra_label</a> ]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

### invalidFields

Name	Type	Required	Description
name	string	True	Name of the invalid request body field
reason	string	True	Reason why the request body field is invalid

## Delete a credential

DELETE /accounts/{account\_id}/core/v1/credentials/{credential\_id}

Removes the specified Credential API resource.

### Side Effects

- If the credential being deleted is relied on by another resource or API, the deletion might cause unintended side effects within other APIs or the system as a whole.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource  • example: {{.Account}}
credential_id	string	path	True	ID of the credential collection to list

### Response

Status: 204, Indicates if the credential resource was deleted.

### Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	

Name	Type	Required	Description
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response



Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example error response

```
{
  "type": "https://astra.netapp.io/problems/1",
  "title": "Resource not found",
  "detail": "The resource specified in the request URI wasn't found.",
  "status": "404"
}
```

## Definitions

### See Definitions

invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

# Entitlement

## Entitlement overview

The Entitlement API provides CRUD (Create-Read-Update-Delete) access to entitlement resources to represent which features or capacities are enabled by the licenses and subscriptions active for an account.

## List all entitlements

GET /accounts/{account\_id}/core/v1/entitlements

Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

## Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"> <li>example: <code>{{.Account}}</code></li> </ul>
include	string	query	False	Indicates which fields should be returned when listing a collection. <p>URL examples: "include=id", "include=id,name"</p> <p>OpenAPI examples: "id"</p> <ul style="list-style-type: none"> <li>example: product,entitlementType,entitlementValue,allocation</li> </ul>
limit	string	query	False	Indicates the maximum number of resources to return when listing a collection. <p>URL examples: "limit=2"</p> <p>OpenAPI examples: "2"</p>

Name	Type	In	Required	Description
filter	string	query	False	<p>Indicates which fields should be matched in order to return a resource when listing a collection.</p> <p>Supported operators are:</p> <ul style="list-style-type: none"> <li>• eq - Equality</li> <li>• lt/gt - Less than/Greater than</li> <li>• lte/gte - Less than or equals to/Greater than or equals to</li> </ul> <p>URL example: "filter=field%20eq%20%27value%27"</p> <p>OpenAPI examples: "field eq 'value'"</p>
orderBy	string	query	False	<p>Indicates the sort order of resource when listing a collection.</p> <p>URL examples: "orderBy=name", "orderBy=name%20desc"</p> <p>OpenAPI examples: "name desc"</p>
skip	string	query	False	<p>Indicates the number of resources to skip over when listing a collection.</p> <p>URL examples: "skip=1"</p> <p>OpenAPI examples: "1"</p>

Name	Type	In	Required	Description
count	string	query	False	Indicates if the total number of resources should be returned in the metadata object.  URL examples: "count=true"  OpenAPI examples: "true"
continue		query	False	Indicates the token to resume listing from.  URL examples: "continue=<continue token="" from="" collection="" metadata="">"</continue>  OpenAPI examples: "<continue token="" from="" collection="" metadata="">"</continue>&lt;/continue&gt;"

## Response

Status: 200, Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

Name	Type	Required	Description
items	array[Any of: <a href="#">entitlement_1.0_get_response_body</a> , array[]]	True	
metadata	<a href="#">type_astra_metadata_list</a>	True	

## Example response

```
{
  "type": "application/astra-entitlements",
  "version": "1.0",
  "items": [
    [
      "Astra SDS",
      "capacity",
      "2",
      null
    ],
    [
      "Astra Enterprise",
      "clusters",
      "100",
      "5e9fe8f7-4c54-441c-ac94-fd8451f9ca38"
    ]
  ],
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	

Name	Type	Required	Description
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't found.",
  "status": "404"
}
```



## Definitions

## See Definitions

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### type\_astra\_metadata

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema

Name	Type	Required	Description
labels	array[type_astra_label]	True	
creationTimestamp	string	True	
modificationTimestamp	string	True	
createdBy	string	True	
modifiedBy	string	False	

### entitlement\_1.0\_get\_response\_body

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>• "application/astra-entitlement"</li></ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"><li>• "1.0"</li></ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"><li>• Conforms to the UUIDv4 Schema</li></ul>

<b>Name</b>	<b>Type</b>	<b>Required</b>	<b>Description</b>
allocation	string	False	JSON string containing the ID of the object that the entitlement is allocated to. Only present when the entitlement is allocated. String contents not validated by the schema.
product	string	False	JSON string containing the product string extracted from the license or subscription. String contents not validated by the schema.
productVersion	string	False	JSON string containing the version string extracted from the license or subscription. String contents not validated by the schema.
entitlementType	string	True	JSON string containing the type of the entitlement. This is extracted from the license or subscription. String contents not validated by the schema.
entitlementValue	string	True	JSON string containing the capacity associated with the entitlement. String contents not validated by the schema.
entitlementConsumption	string	False	JSON string containing the amount of the capacity associated with the entitlement that is currently in use. String contents not validated by the schema.

Name	Type	Required	Description
sourceLicense	string	False	JSON string containing the license object ID that the entitlement is sourced from. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
sourceSubscription	string	False	JSON string containing the ID of the subscription object that the entitlement is sourced from. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
validFromTimestamp	string	False	JSON string containing a timestamp indicating when the entitlement becomes valid. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>
validUntilTimestamp	string	False	JSON string containing a timestamp indicating when the entitlement is no longer valid. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>
metadata	<a href="#">type_astra_metadata</a>	True	Client and service-specified metadata associated with the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema</li> </ul>

### type\_astra\_metadata\_list

Name	Type	Required	Description
continue	string	False	
count	number	False	
labels	array[type_astra_label]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Retrieve an entitlement

GET /accounts/{account\_id}/core/v1/entitlements/{entitlement\_id}

Returns the stored Entitlement API resource in the JSON response body.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"><li>example: {{.Account}}</li></ul>
entitlement_id	string	path	True	ID of the entitlement collection to list

### Response

Status: 200, Returns the stored Entitlement API resource in the JSON response body.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "application/astra-entitlement"</li> </ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "1.0"</li> </ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the UUIDv4 Schema</li> </ul>
allocation	string	False	JSON string containing the ID of the object that the entitlement is allocated to. Only present when the entitlement is allocated. String contents not validated by the schema.
product	string	False	JSON string containing the product string extracted from the license or subscription. String contents not validated by the schema.
productVersion	string	False	JSON string containing the version string extracted from the license or subscription. String contents not validated by the schema.
entitlementType	string	True	JSON string containing the type of the entitlement. This is extracted from the license or subscription. String contents not validated by the schema.

Name	Type	Required	Description
entitlementValue	string	True	JSON string containing the capacity associated with the entitlement. String contents not validated by the schema.
entitlementConsumption	string	False	JSON string containing the amount of the capacity associated with the entitlement that is currently in use. String contents not validated by the schema.
sourceLicense	string	False	<p>JSON string containing the license object ID that the entitlement is sourced from.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
sourceSubscription	string	False	<p>JSON string containing the ID of the subscription object that the entitlement is sourced from.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
validFromTimestamp	string	False	<p>JSON string containing a timestamp indicating when the entitlement becomes valid.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>

Name	Type	Required	Description
validUntilTimestamp	string	False	JSON string containing a timestamp indicating when the entitlement is no longer valid. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>
metadata	<a href="#">type_astra_metadata</a>	True	Client and service-specified metadata associated with the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema</li> </ul>

### Example response

```
{
  "type": "application/astra-entitlement",
  "version": "1.0",
  "id": "8bdafc19-bde6-5f45-9808-4893c845c9f5",
  "product": "Astra SDS",
  "productVersion": "1.0",
  "entitlementType": "capacity",
  "entitlementValue": "2",
  "entitlementConsumption": "1",
  "sourceLicense": "c8aa757a-5318-489f-8134-a2a1a6956a3e",
  "validFromTimestamp": "2020-08-06T00:00:00.000000Z",
  "validUntilTimestamp": "2021-08-06T00:00:00.000000Z",
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

### Response



Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	

Name	Type	Required	Description
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

### Definitions

## See Definitions

type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

type\_astra\_metadata

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema

Name	Type	Required	Description
labels	array[type_astra_label]	True	
creationTimestamp	string	True	
modificationTimestamp	string	True	
createdBy	string	True	
modifiedBy	string	False	

invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Event

### Event overview

The Event API provides CRUD (Create-Read-Update-Delete) access to event resources to provide access to events occurring in the system.

### List all events

GET /accounts/{account\_id}/core/v1/events

Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

## Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"><li>example: {{.Account}}</li></ul>
include	string	query	False	Indicates which fields should be returned when listing a collection.  URL examples: "include=id", "include=id,name"  OpenAPI examples: "id" <ul style="list-style-type: none"><li>example: id,summary</li></ul>
limit	string	query	False	Indicates the maximum number of resources to return when listing a collection.  URL examples: "limit=2"  OpenAPI examples: "2"

Name	Type	In	Required	Description
filter	string	query	False	<p>Indicates which fields should be matched in order to return a resource when listing a collection.</p> <p>Supported operators are:</p> <ul style="list-style-type: none"> <li>• eq - Equality</li> <li>• lt/gt - Less than/Greater than</li> <li>• lte/gte - Less than or equals to/Greater than or equals to</li> </ul> <p>URL example: "filter=field%20eq%20%27value%27"</p> <p>OpenAPI examples: "field eq 'value'"</p>
orderBy	string	query	False	<p>Indicates the sort order of resource when listing a collection.</p> <p>URL examples: "orderBy=name", "orderBy=name%20desc"</p> <p>OpenAPI examples: "name desc"</p>
skip	string	query	False	<p>Indicates the number of resources to skip over when listing a collection.</p> <p>URL examples: "skip=1"</p> <p>OpenAPI examples: "1"</p>

Name	Type	In	Required	Description
count	string	query	False	Indicates if the total number of resources should be returned in the metadata object.  URL examples: "count=true"  OpenAPI examples: "true"
continue		query	False	Indicates the token to resume listing from.  URL examples: "continue=<continue token="" from="" collection="" metadata="">"</continue>  OpenAPI examples: "<continue token="" from="" collection="" metadata="">"</continue>&lt;/continue&gt;"

## Response

Status: 200, Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

Name	Type	Required	Description
items	array[Any of: <a href="#">event_1.4_get_response_body</a> , array[]]	True	
metadata	<a href="#">type_astra_metadata_list</a>	True	

## Example response

```
{
  "type": "application/astra-events",
  "version": "1.4",
  "items": [
    [
      "4f8273ee-883d-47f0-a512-9e27b6285f20",
      "Discovering Applications in Cluster"
    ],
    [
      "1cdd26dc-5eb0-4cf4-a0c1-39a9b83720e1",
      "Application Discovered"
    ],
    [
      "2064d1c1-4bc6-466e-9c30-b941a11be16a",
      "Application Discovery Failed"
    ],
    [
      "4325f971-ca9c-4a52-bc9a-da6ec62e6bfe",
      "Application Discovered"
    ]
  ],
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	



### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	

Name	Type	Required	Description
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

**Definitions**

## See Definitions

data

JSON object containing additional event-specific information.

Name	Type	Required	Description
ttl	number	False	JSON number indicating the number of seconds (since the eventTime) that the event will be retained. This field is only included when an event is automatically deleted after the specified number of seconds. When deleted, if the event has a notification destination, all associated notifications are also deleted. When deleted, if the event has a banner destination, the banner is also removed. The absence of this field (or a value of "0") means that an event will not be automatically deleted.
isAcknowledgeable	string	False	JSON string indicating whether the banner is dismissible. Defined values are: <ul style="list-style-type: none"><li>• "true" - The banner is dismissible</li><li>• "false" - The banner is not dismissible</li></ul>

type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

type\_astra\_metadata

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema

Name	Type	Required	Description
labels	array[type_astra_label]	True	
creationTimestamp	string	True	
modificationTimestamp	string	True	
createdBy	string	True	
modifiedBy	string	False	

event\_1.4\_get\_response\_body

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>• "application/astra-event"</li></ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"><li>• "1.0"</li><li>• "1.1"</li><li>• "1.2"</li><li>• "1.3"</li><li>• "1.4"</li></ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"><li>• Conforms to the UUIDv4 Schema</li></ul>

Name	Type	Required	Description
name	string	True	<p>JSON string containing a dot notation (.) hierarchical name for the event.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 3</li> <li>• Maximum length: 127</li> <li>• Defined regex is: <code>"^[a-z](\.[a-z])+\$"</code></li> </ul>
sequenceCount	number	True	<p>JSON number containing a sequence count.</p> <p>The number is incremented by the system each time a new event is received.</p>
summary	string	True	<p>JSON string containing the short-form (less than 40 characters) summary of the event.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 3</li> <li>• Maximum length: 79</li> </ul>
eventTime	string	True	<p>JSON string containing a timestamp that indicates when an event occurred.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>
source	string	True	<p>JSON string containing the lowercase name of the service generating an event.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 19</li> <li>• Defined regex is: <code>"^[a-z]*\$"</code></li> </ul>

Name	Type	Required	Description
resourceID	string	True	<p>JSON string containing the resource ID associated with an event.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
additionalResourceIDs	array[string]	True	<p>JSON array of JSON strings, each containing a resource ID of an additional resource associated with the event. While the "resourceID" field contains the primary resource associated with this event, this field contains any number of additional resource IDs to be associated with the same events.</p> <p>If no additional resources are associated with the event, the array will be empty.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
resourceType	string	True	<p>JSON string containing the media type of the resource associated with an event.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 4</li> <li>• Maximum length: 79</li> <li>• Defined regex is: <code>"^application/astra-[a-zA-Z]+\$"</code></li> </ul>

Name	Type	Required	Description
correlationID	string	True	<p>JSON string containing a UUIDv4 correlation ID that allows related events to be grouped together.</p> <p>Defined values are:</p> <ul style="list-style-type: none"><li>• Conforms to the Astra Identifier Schema</li></ul>



Name	Type	Required	Description
severity	string	True	<p>JSON string containing one of the following values that indicate the severity of an event. Defined values are:</p> <ul style="list-style-type: none"> <li>• "cleared" - Indicates that a previously reported event describing a condition is no longer active. An event with severity "cleared" will use the same summary and correlation ID to allow it to be matched up.</li> <li>• "indeterminate" - Indicates that the severity cannot be determined.</li> <li>• "informational" - Indicates a change in state that is both expected and normal (not defined in X.733).</li> <li>• "warning" - Indicates the detection of a potential or impending service affecting fault before any significant effects have been felt.</li> <li>• "critical" - Indicates that a service affecting condition has occurred and immediate corrective action is required. Definitions for "cleared", "indeterminate", "warning" and "critical" are based on definitions in clause 8.1.2.3 of CCITT X.733.</li> </ul>

Name	Type	Required	Description
class	string	True	<p>JSON string containing one of the following values that indicate the class of the event. Defined values are:</p> <ul style="list-style-type: none"> <li>• "system" - The event is related to an internal event or request.</li> <li>• "user" - The event is related to a user-initiated event or request.</li> <li>• "security" - The event is related to a security issue.</li> </ul>
description	string	True	<p>JSON string containing a long-form descriptive text about the event. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 3</li> <li>• Maximum length: 1023</li> </ul>
descriptionURL	string	False	<p>JSON string containing the URL that enables and links a button in the banner to external documentation. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 3</li> <li>• Maximum length: 4095</li> </ul>

Name	Type	Required	Description
correctiveAction	string	False	<p>JSON string containing a long-form descriptive text about what corrective action must be taken in response to the event.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 3</li> <li>• Maximum length: 1023</li> </ul>
correctiveActionURL	string	False	<p>JSON string containing the URL that links a button in the banner to a page within the UI to fix the issue.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 3</li> <li>• Maximum length: 4095</li> </ul>
visibility	array[string]	False	<p>JSON array of JSON strings, each indicating an RBAC role permitted to view the event. Roles are OR-defined together. Optional.</p> <p>If omitted, a user with any RBAC role can view the event.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>

Name	Type	Required	Description
destinations	array[string]	False	<p>JSON array of JSON strings, each indicating an additional destination for the event. These strings allow a service to provide hints about where an event should be routed in addition to the activity log. Optional. Defined values are:</p> <ul style="list-style-type: none"> <li>• "notification" - The event is marked as a notification, and will be accessible through the notifications API endpoint.</li> <li>• "banner" - The event is marked as a banner.</li> <li>• "support" - The event is marked as a support-related event.</li> </ul>
resourceURI	string	False	<p>JSON string containing the URI associated with the event. Only included for events related to API operations. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 3</li> <li>• Maximum length: 4095</li> </ul>
resourceCollectionURL	array[string]	False	<p>JSON array of JSON strings, each indicating the fully-expanded access URL of the resource associated with the event. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 1023</li> </ul>

Name	Type	Required	Description
resourceMethod	string	False	<p>JSON string containing the HTTP method invoked. Only included for events related to API operations.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "options" - OPTIONS API operation</li> <li>• "post" - POST API operation</li> <li>• "get" - GET API operation</li> <li>• "put" - PUT API operation</li> <li>• "delete" - DELETE API operation</li> </ul>
resourceMethodResult	string	False	<p>JSON string containing the result of the HTTP method invoked. Only included for events related to the API operations.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Defined regex is: <code>"^[1-5][0-9]{2}\$"</code></li> </ul>
userID	string	False	<p>JSON string containing the user ID associated with an event. Only included for events associated with the user-initiated actions.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
accountID	string	False	JSON string containing the account ID associated with an event. Only included for events associated with an account. Defined values are: <ul style="list-style-type: none"> <li>Conforms to the Astra Identifier Schema</li> </ul>
data	<a href="#">data</a>	False	JSON object containing additional event-specific information.
metadata	<a href="#">type_astra_metadata</a>	True	Client and service-specified metadata associated with the resource. Defined values are: <ul style="list-style-type: none"> <li>Conforms to the Astra Metadata Schema</li> </ul>

#### type\_astra\_metadata\_list

Name	Type	Required	Description
continue	string	False	
count	number	False	
labels	array[ <a href="#">type_astra_label</a> ]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

#### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter

Name	Type	Required	Description
reason	string	True	Reason why the query parameter is invalid

## Retrieve an event

GET /accounts/{account\_id}/core/v1/events/{event\_id}

Returns the stored Event API resource in the JSON response body.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"> <li>example: <code>{{.Account}}</code></li> </ul>
event_id	string	path	True	ID of the event collection to list

### Response

Status: 200, Returns the stored Event API resource in the JSON response body.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"> <li>"application/astra-event"</li> </ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>"1.0"</li> <li>"1.1"</li> <li>"1.2"</li> <li>"1.3"</li> <li>"1.4"</li> </ul>

Name	Type	Required	Description
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the UUIDv4 Schema</li> </ul>
name	string	True	JSON string containing a dot notation (.) hierarchical name for the event. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 3</li> <li>• Maximum length: 127</li> <li>• Defined regex is: "<code>^[a-z](\.[a-z])+\$</code>"</li> </ul>
sequenceCount	number	True	JSON number containing a sequence count. The number is incremented by the system each time a new event is received.
summary	string	True	JSON string containing the short-form (less than 40 characters) summary of the event. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 3</li> <li>• Maximum length: 79</li> </ul>
eventTime	string	True	JSON string containing a timestamp that indicates when an event occurred. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>



Name	Type	Required	Description
source	string	True	<p>JSON string containing the lowercase name of the service generating an event.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 19</li> <li>• Defined regex is: <code>"^[a-z-]*\$"</code></li> </ul>
resourceID	string	True	<p>JSON string containing the resource ID associated with an event.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
additionalResourceIDs	array[string]	True	<p>JSON array of JSON strings, each containing a resource ID of an additional resource associated with the event. While the "resourceID" field contains the primary resource associated with this event, this field contains any number of additional resource IDs to be associated with the same events.</p> <p>If no additional resources are associated with the event, the array will be empty.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
resourceType	string	True	<p>JSON string containing the media type of the resource associated with an event.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 4</li> <li>• Maximum length: 79</li> <li>• Defined regex is: <code>"^application/astra-([a-zA-Z])+\$"</code></li> </ul>
correlationID	string	True	<p>JSON string containing a UUIDv4 correlation ID that allows related events to be grouped together.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
severity	string	True	<p>JSON string containing one of the following values that indicate the severity of an event. Defined values are:</p> <ul style="list-style-type: none"> <li>• "cleared" - Indicates that a previously reported event describing a condition is no longer active. An event with severity "cleared" will use the same summary and correlation ID to allow it to be matched up.</li> <li>• "indeterminate" - Indicates that the severity cannot be determined.</li> <li>• "informational" - Indicates a change in state that is both expected and normal (not defined in X.733).</li> <li>• "warning" - Indicates the detection of a potential or impending service affecting fault before any significant effects have been felt.</li> <li>• "critical" - Indicates that a service affecting condition has occurred and immediate corrective action is required. Definitions for "cleared", "indeterminate", "warning" and "critical" are based on definitions in clause 8.1.2.3 of CCITT X.733.</li> </ul>

Name	Type	Required	Description
class	string	True	<p>JSON string containing one of the following values that indicate the class of the event. Defined values are:</p> <ul style="list-style-type: none"> <li>• "system" - The event is related to an internal event or request.</li> <li>• "user" - The event is related to a user-initiated event or request.</li> <li>• "security" - The event is related to a security issue.</li> </ul>
description	string	True	<p>JSON string containing a long-form descriptive text about the event. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 3</li> <li>• Maximum length: 1023</li> </ul>
descriptionURL	string	False	<p>JSON string containing the URL that enables and links a button in the banner to external documentation. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 3</li> <li>• Maximum length: 4095</li> </ul>
correctiveAction	string	False	<p>JSON string containing a long-form descriptive text about what corrective action must be taken in response to the event. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 3</li> <li>• Maximum length: 1023</li> </ul>

Name	Type	Required	Description
correctiveActionURL	string	False	<p>JSON string containing the URL that links a button in the banner to a page within the UI to fix the issue.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 3</li> <li>• Maximum length: 4095</li> </ul>
visibility	array[string]	False	<p>JSON array of JSON strings, each indicating an RBAC role permitted to view the event. Roles are OR-defined together. Optional.</p> <p>If omitted, a user with any RBAC role can view the event.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>
destinations	array[string]	False	<p>JSON array of JSON strings, each indicating an additional destination for the event. These strings allow a service to provide hints about where an event should be routed in addition to the activity log. Optional.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "notification" - The event is marked as a notification, and will be accessible through the notifications API endpoint.</li> <li>• "banner" - The event is marked as a banner.</li> <li>• "support" - The event is marked as a support-related event.</li> </ul>

Name	Type	Required	Description
resourceURI	string	False	<p>JSON string containing the URI associated with the event. Only included for events related to API operations.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 3</li> <li>• Maximum length: 4095</li> </ul>
resourceCollectionURL	array[string]	False	<p>JSON array of JSON strings, each indicating the fully-expanded access URL of the resource associated with the event.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 1023</li> </ul>
resourceMethod	string	False	<p>JSON string containing the HTTP method invoked. Only included for events related to API operations.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "options" - OPTIONS API operation</li> <li>• "post" - POST API operation</li> <li>• "get" - GET API operation</li> <li>• "put" - PUT API operation</li> <li>• "delete" - DELETE API operation</li> </ul>

Name	Type	Required	Description
resourceMethodResult	string	False	<p>JSON string containing the result of the HTTP method invoked. Only included for events related to the API operations.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Defined regex is: <code>"^[1-5][0-9]{2}\$"</code></li> </ul>
userID	string	False	<p>JSON string containing the user ID associated with an event. Only included for events associated with the user-initiated actions.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
accountID	string	False	<p>JSON string containing the account ID associated with an event. Only included for events associated with an account.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
data	<a href="#">data</a>	False	<p>JSON object containing additional event-specific information.</p>
metadata	<a href="#">type_astra_metadata</a>	True	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema</li> </ul>

**Example response**

A large, empty rectangular box with a thin, dashed border, occupying most of the page. It is intended for an example response.



```

{
  "type": "application/astra-event",
  "version": "1.4",
  "id": "c32df10b-8cfb-5a1e-9510-2a262b476009",
  "name": "astra.app.discovery.failed",
  "sequenceCount": 48923,
  "summary": "Application Discovery Failed",
  "eventTime": "2020-08-06T12:24:51.846543Z",
  "source": "composite-compute",
  "resourceID": "f670bf11-8850-44bd-b330-815af6186a06",
  "additionalResourceIDs": [
    "84dfef99-b7b2-46d2-9021-0a1a9a5dfd1d6",
    "abb32003-07b9-49b1-9938-1cf6d2f33566"
  ],
  "resourceType": "application/astra-app",
  "correlationID": "3c603442-cfca-4af9-9f1b-40dde5c7a806",
  "severity": "warning",
  "class": "user",
  "description": "Discovering the application 'mysql' was unsuccessful.
K8s error 442. Application marked in state 'error'.",
  "resourceURI": "/accounts/fdaa655c-15ab-4d34-aa61-
1e9098e67be0/topology/v1/managedClusters/dfd9de2d-6f0b-437b-a737-
c8f7f176cd14/apps/f670bf11-8850-44bd-b330-815af6186a06",
  "resourceCollectionURL": [
    "https://www.astra.io/accounts/fdaa655c-15ab-4d34-aa61-
1e9098e67be0/topology/v1/clouds/0df3f1a0-7203-4c12-aabf-
a7bee6302671/clusters/dfd9de2d-6f0b-437b-a737-
c8f7f176cd14/namespaces/f8b58091-4b9c-4c64-9b40-
018dbaf7c5de/apps/f670bf11-8850-44bd-b330-815af6186a06",
    "https://www.astra.io/accounts/fdaa655c-15ab-4d34-aa61-
1e9098e67be0/topology/v1/clouds/0df3f1a0-7203-4c12-aabf-
a7bee6302671/clusters/dfd9de2d-6f0b-437b-a737-
c8f7f176cd14/namespaces/923708f8-0435-45b5-8c00-
fbdef3ffaf25/apps/f670bf11-8850-44bd-b330-815af6186a06"
  ],
  "userID": "abda967f-cd2c-4237-908e-99266648c553",
  "accountID": "f126d214-bccf-4558-86b4-2137a41e734f",
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}

```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

## Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	

Name	Type	Required	Description
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

### Definitions

## See Definitions

data

JSON object containing additional event-specific information.

Name	Type	Required	Description
ttl	number	False	JSON number indicating the number of seconds (since the eventTime) that the event will be retained. This field is only included when an event is automatically deleted after the specified number of seconds. When deleted, if the event has a notification destination, all associated notifications are also deleted. When deleted, if the event has a banner destination, the banner is also removed. The absence of this field (or a value of "0") means that an event will not be automatically deleted.
isAcknowledgeable	string	False	JSON string indicating whether the banner is dismissible. Defined values are: <ul style="list-style-type: none"><li>• "true" - The banner is dismissible</li><li>• "false" - The banner is not dismissible</li></ul>

type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

type\_astra\_metadata

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema

Name	Type	Required	Description
labels	array[type_astra_label]	True	
creationTimestamp	string	True	
modificationTimestamp	string	True	
createdBy	string	True	
modifiedBy	string	False	

invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Execution Hook

### Execution Hook overview

The Execution Hook API provides CRUD (Create-Read-Update-Delete) access to executionHook resources in order to allow simple management of execution hooks. Execution hooks contain additional configuration and references to a hook source resource.

### Create a new execution hook

POST /accounts/{account\_id}/core/v1/executionHooks

Indicates the desired values for the Execution Hook API resource to be created.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"><li>• example: <code>{{.Account}}</code></li></ul>

## Request Body

Indicates the desired values for the Execution Hook API resource to be created.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>• "application/astra-executionHook"</li></ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"><li>• "1.0"</li><li>• "1.1"</li><li>• "1.2"</li></ul>
name	string	True	JSON string containing a user-specified name for the resource. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 1</li><li>• Maximum length: 63 Name must be unique across all execution hook resources.</li></ul>
hookType	string	True	JSON string defining the hook type. Defined values are: <ul style="list-style-type: none"><li>• "netapp" - NetApp provided execution hook.</li><li>• "custom" - Tied to a specific app ID. Execution hook resources with hookType "netapp" are read only.</li></ul>

Name	Type	Required	Description
matchingCriteria	array[ <a href="#">matchingCriteria</a> ]	False	<p>JSON array of JSON objects describing the match criteria for the execution hook. When multiple matchingCriteria are specified a logical AND is applied to criteria. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum items: 0</li> <li>• Maximum items: 10</li> </ul>
action	string	True	<p>JSON string indicating which action the execution hook will run assuming the match criteria are met. Defined values are:</p> <ul style="list-style-type: none"> <li>• "snapshot"</li> <li>• "backup"</li> <li>• "restore"</li> </ul>
stage	string	True	<p>JSON string indicating the stage during the action that the hook will be executed. Defined values are:</p> <ul style="list-style-type: none"> <li>• "pre" - The execution hook will be run before the specified action.</li> <li>• "post" - The execution hook will be run after the specified action. Values for action "snapshot" are "pre" and "post". Values for action "backup" are "pre" and "post". Value for action "restore" is "post".</li> </ul>



Name	Type	Required	Description
hookSourceID	string	True	<p>JSON string containing the hook source ID that is run through this execution hook.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
arguments	array[string]	False	<p>JSON array of JSON strings for the arguments to the source.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum items: 0</li> <li>• Maximum items: 16</li> <li>• Minimum length: 0</li> <li>• Maximum length: 127</li> </ul>
appID	string	True	<p>JSON string containing the associated ID of the application that this hook is linked to. In essence, other matching criteria, if set.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
enabled	string	False	<p>JSON string that indicates if the execution hook is enabled.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - The execution hook is enabled and will be run as specified.</li> <li>• "false" - The execution hook is disabled and will never run. The default value is "true".</li> </ul>

Name	Type	Required	Description
description	string	False	<p>JSON string containing a user-specified description for the hook source.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 0</li> <li>• Maximum length: 511</li> </ul>
metadata	<a href="#">type_astra_metadata_update</a>	False	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</li> </ul>

### Example request

```

{
  "type": "application/astra-executionHook",
  "version": "1.2",
  "name": "Payroll",
  "hookType": "custom",
  "action": "snapshot",
  "stage": "pre",
  "hookSourceID": "50e89023-ba84-435d-bb47-1833f4c250ff",
  "arguments": [
    "freeze"
  ],
  "appID": "7be5ae7c-151d-4230-ac39-ac1d0b33c2a9",
  "enabled": "true",
  "description": "Payroll production hook"
}

```

## Response

Status: 201, Returns the newly created executionHook resource in the JSON response body.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>• "application/astra-executionHook"</li></ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"><li>• "1.0"</li><li>• "1.1"</li><li>• "1.2"</li></ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"><li>• Conforms to the UUIDv4 Schema</li></ul>
name	string	True	JSON string containing a user-specified name for the resource. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 1</li><li>• Maximum length: 63 Name must be unique across all execution hook resources.</li></ul>

Name	Type	Required	Description
hookType	string	True	<p>JSON string defining the hook type.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "netapp" - NetApp provided execution hook.</li> <li>• "custom" - Tied to a specific app ID. Execution hook resources with hookType "netapp" are read only.</li> </ul>
matchingCriteria	array[ <a href="#">matchingCriteria</a> ]	True	<p>JSON array of JSON objects describing the match criteria for the execution hook. When multiple matchingCriteria are specified a logical AND is applied to criteria.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum items: 0</li> <li>• Maximum items: 10</li> </ul>
matchingContainers	array[ <a href="#">matchingContainers</a> ]	False	<p>JSON array of JSON objects of each container that matches the configured matching criteria within the defined app.</p>
matchingImages	array[string]	False	<p>JSON array of JSON strings for the matching container images.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum items: 0</li> <li>• Maximum items: 4095</li> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>

Name	Type	Required	Description
action	string	True	<p>JSON string indicating which action the execution hook will run assuming the match criteria are met. Defined values are:</p> <ul style="list-style-type: none"> <li>• "snapshot"</li> <li>• "backup"</li> <li>• "restore"</li> </ul>
stage	string	True	<p>JSON string indicating the stage during the action that the hook will be executed. Defined values are:</p> <ul style="list-style-type: none"> <li>• "pre" - The execution hook will be run before the specified action.</li> <li>• "post" - The execution hook will be run after the specified action. Values for action "snapshot" are "pre" and "post". Values for action "backup" are "pre" and "post". Value for action "restore" is "post".</li> </ul>
hookSourceID	string	True	<p>JSON string containing the hook source ID that is run through this execution hook. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
arguments	array[string]	False	<p>JSON array of JSON strings for the arguments to the source. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum items: 0</li> <li>• Maximum items: 16</li> <li>• Minimum length: 0</li> <li>• Maximum length: 127</li> </ul>
appID	string	False	<p>JSON string containing the associated ID of the application that this hook is linked to. In essence, other matching criteria, if set. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
enabled	string	True	<p>JSON string that indicates if the execution hook is enabled. Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - The execution hook is enabled and will be run as specified.</li> <li>• "false" - The execution hook is disabled and will never run. The default value is "true".</li> </ul>
description	string	False	<p>JSON string containing a user-specified description for the hook source. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 0</li> <li>• Maximum length: 511</li> </ul>

Name	Type	Required	Description
metadata	<a href="#">type_astra_metadata_update</a>	True	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>Conforms to the Astra Metadata Schema</li> </ul> <p>If not specified on create, a metadata object will be created with no labels.</p> <p>If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</p>

### Example response

```
{
  "type": "application/astra-executionHook",
  "version": "1.2",
  "id": "946e60cb-980b-5374-9e6e-9fe1f6780352",
  "name": "Payroll",
  "hookType": "custom",
  "matchingCriteria": [],
  "action": "snapshot",
  "stage": "pre",
  "hookSourceID": "50e89023-ba84-435d-bb47-1833f4c250ff",
  "arguments": [
    "freeze"
  ],
  "appID": "7be5ae7c-151d-4230-ac39-ac1d0b33c2a9",
  "enabled": "true",
  "description": "Payroll production hook",
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

## Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields



### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 409, Conflict

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

### Example response

```
{
  "type": "https://astra.netapp.io/problems/10",
  "title": "JSON resource conflict",
  "detail": "The request body JSON contains a field that conflicts with an idempotent value.",
  "status": "409"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

**Definitions**

## See Definitions

### matchingCriteria

Name	Type	Required	Description
type	string	False	JSON string identifying the match criteria type.
value	string	False	JSON string containing a regex to match for the given match type. Regex syntax: <a href="https://github.com/google/re2/wiki/Syntax">https://github.com/google/re2/wiki/Syntax</a>

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[ <a href="#">type_astra_label</a> ]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

### matchingCriteria

Name	Type	Required	Description
type	string	True	JSON string identifying the match criteria type.

Name	Type	Required	Description
value	string	True	JSON string containing a regex to match for the given match type. Regex syntax: <a href="https://github.com/google/re2/wiki/Syntax">https://github.com/google/re2/wiki/Syntax</a>

#### type\_k8s\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

#### matchingContainers

Name	Type	Required	Description
podName	string	False	JSON string of matching container's pod name.
podLabels	array[ <a href="#">type_k8s_label</a> ]	False	JSON array of label objects of matching container's pod's labels.
containerImage	string	False	JSON string of matching container's image.
containerName	string	False	JSON string of matching container's name.
namespaceName	string	False	JSON string of matching container's pod's namespace name.

#### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

#### invalidFields

Name	Type	Required	Description
name	string	True	Name of the invalid request body field
reason	string	True	Reason why the request body field is invalid

## List all execution hooks

GET /accounts/{account\_id}/core/v1/executionHooks

Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"> <li>example: <code>{{.Account}}</code></li> </ul>
include	string	query	False	Indicates which fields should be returned when listing a collection. <p>URL examples: "include=id", "include=id,name"</p> <p>OpenAPI examples: "id"</p>
limit	string	query	False	Indicates the maximum number of resources to return when listing a collection. <p>URL examples: "limit=2"</p> <p>OpenAPI examples: "2"</p>

Name	Type	In	Required	Description
filter	string	query	False	<p>Indicates which fields should be matched in order to return a resource when listing a collection.</p> <p>Supported operators are:</p> <ul style="list-style-type: none"> <li>• eq - Equality</li> <li>• lt/gt - Less than/Greater than</li> <li>• lte/gte - Less than or equals to/Greater than or equals to</li> </ul> <p>URL example: "filter=field%20eq%20%27value%27"</p> <p>OpenAPI examples: "field eq 'value'"</p>

## Response

Status: 200, Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

Name	Type	Required	Description
items	array[Any of: <a href="#">executionHook_1.2_get_response_body</a> , array[]]	True	
metadata	<a href="#">type_astra_metadata_list</a>	True	

## Example response

```
{
  "type": "application/astra-executionHooks",
  "version": "1.2",
  "items": [
    {
      "type": "application/astra-executionHook",
      "version": "1.1",
      "id": "4c64792c-806b-4457-938d-8e325a37c593",
      "name": "Payroll",
      "hookType": "custom",
      "matchingCriteria": [
        {
          "type": "containerImage",
          "value": "payroll"
        },
        {
          "type": "podName",
          "value": "^payroll-master"
        }
      ],
      "action": "snapshot",
      "stage": "pre",
      "hookSourceID": "50e89023-ba84-435d-bb47-1833f4c250ff",
      "arguments": [
        "freeze"
      ],
      "appID": "7be5ae7c-151d-4230-ac39-ac1d0b33c2a9",
      "enabled": "true",
      "description": "Payroll production hook",
      "metadata": {
        "labels": [],
        "creationTimestamp": "2020-08-06T12:24:52.256624Z",
        "modificationTimestamp": "2020-08-06T12:24:52.256624Z",
        "createdBy": "64182074-ddb6-42eb-b7f4-b6a02cf9ba7c"
      }
    },
    {
      "type": "application/astra-executionHook",
      "version": "1.1",
      "id": "6659892c-c621-44e8-a0bb-8dbdf378a2dd",
      "name": "Order Processing",
      "hookType": "custom",
      "matchingCriteria": [
        {
```



```

        "type": "containerName",
        "value": "^order-processing$"
    },
    {
        "type": "podLabel",
        "value": "^app=master$|^app=data$"
    }
],
"action": "snapshot",
"stage": "pre",
"hookSourceID": "63f4d6fd-b7f0-4eaa-9890-0b11123604b1",
"arguments": [
    "freeze"
],
"appID": "7be5ae7c-151d-4230-ac39-ac1d0b33c2a9",
"enabled": "true",
"description": "Order processing hook",
"metadata": {
    "labels": [],
    "creationTimestamp": "2020-08-06T12:24:52.256624Z",
    "modificationTimestamp": "2020-08-06T12:24:52.256624Z",
    "createdBy": "64182074-ddb6-42eb-b7f4-b6a02cf9ba7c"
}
},
{
    "type": "application/astra-executionHook",
    "version": "1.1",
    "id": "6659892c-c621-44e8-a0bb-8dbdf378a2dd",
    "name": "NetApp Postgres Hook",
    "hookType": "netapp",
    "matchingCriteria": [
        {
            "type": "podName",
            "value": "^postgres"
        },
        {
            "type": "containerImage",
            "value": "3.8"
        }
    ],
    "action": "snapshot",
    "stage": "pre",
    "hookSourceID": "3601ed09-1a74-4156-a1bd-9cb7144bac0e",
    "arguments": [
        "freeze"
    ],

```

```

    "enabled": "true",
    "description": "Order processing hook",
    "metadata": {
      "labels": [],
      "creationTimestamp": "2020-08-06T12:24:52.256624Z",
      "modificationTimestamp": "2020-08-06T12:24:52.256624Z",
      "createdBy": "64182074-ddb6-42eb-b7f4-b6a02cf9ba7c"
    }
  },
  {
    "type": "application/astra-executionHook",
    "version": "1.1",
    "id": "6659892c-c621-44e8-a0bb-8dbdf378a2dd",
    "name": "Redis Hook",
    "hookType": "custom",
    "matchingCriteria": [
      {
        "type": "containerName",
        "value": "^redis-01$"
      }
    ],
    "action": "snapshot",
    "stage": "pre",
    "hookSourceID": "3601ed09-1a74-4156-a1bd-9cb7144bac0e",
    "arguments": [
      "freeze"
    ],
    "enabled": "true",
    "description": "Order processing hook",
    "metadata": {
      "labels": [],
      "creationTimestamp": "2020-08-06T12:24:52.256624Z",
      "modificationTimestamp": "2020-08-06T12:24:52.256624Z",
      "createdBy": "64182074-ddb6-42eb-b7f4-b6a02cf9ba7c"
    }
  }
],
"metadata": {
  "labels": [],
  "creationTimestamp": "2022-10-06T20:58:16.305662Z",
  "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
  "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
}
}

```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

## Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	

Name	Type	Required	Description
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

### Definitions

## See Definitions

### matchingCriteria

Name	Type	Required	Description
type	string	True	JSON string identifying the match criteria type.
value	string	True	JSON string containing a regex to match for the given match type. Regex syntax: <a href="https://github.com/google/re2/wiki/Syntax">https://github.com/google/re2/wiki/Syntax</a>

### type\_k8s\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### matchingContainers

Name	Type	Required	Description
podName	string	False	JSON string of matching container's pod name.
podLabels	array[ <a href="#">type_k8s_label</a> ]	False	JSON array of label objects of matching container's pod's labels.
containerImage	string	False	JSON string of matching container's image.
containerName	string	False	JSON string of matching container's name.
namespaceName	string	False	JSON string of matching container's pod's namespace name.

### type\_astra\_label

Name	Type	Required	Description
name	string	True	

Name	Type	Required	Description
value	string	True	

#### type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema

If not specified on create, a metadata object will be created with no labels.

If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[type_astra_label]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

#### executionHook\_1.2\_get\_response\_body

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "application/astra-executionHook"</li> </ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "1.0"</li> <li>• "1.1"</li> <li>• "1.2"</li> </ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the UUIDv4 Schema</li> </ul>

Name	Type	Required	Description
name	string	True	<p>JSON string containing a user-specified name for the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul> <p>Name must be unique across all execution hook resources.</p>
hookType	string	True	<p>JSON string defining the hook type.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "netapp" - NetApp provided execution hook.</li> <li>• "custom" - Tied to a specific app ID. Execution hook resources with hookType "netapp" are read only.</li> </ul>
matchingCriteria	array[ <a href="#">matchingCriteria</a> ]	True	<p>JSON array of JSON objects describing the match criteria for the execution hook. When multiple matchingCriteria are specified a logical AND is applied to criteria.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum items: 0</li> <li>• Maximum items: 10</li> </ul>
matchingContainers	array[ <a href="#">matchingContainers</a> ]	False	<p>JSON array of JSON objects of each container that matches the configured matching criteria within the defined app.</p>



Name	Type	Required	Description
matchingImages	array[string]	False	<p>JSON array of JSON strings for the matching container images.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum items: 0</li> <li>• Maximum items: 4095</li> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>
action	string	True	<p>JSON string indicating which action the execution hook will run assuming the match criteria are met.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "snapshot"</li> <li>• "backup"</li> <li>• "restore"</li> </ul>
stage	string	True	<p>JSON string indicating the stage during the action that the hook will be executed.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "pre" - The execution hook will be run before the specified action.</li> <li>• "post" - The execution hook will be run after the specified action. Values for action "snapshot" are "pre" and "post". Values for action "backup" are "pre" and "post". Value for action "restore" is "post".</li> </ul>

Name	Type	Required	Description
hookSourceID	string	True	<p>JSON string containing the hook source ID that is run through this execution hook.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
arguments	array[string]	False	<p>JSON array of JSON strings for the arguments to the source.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum items: 0</li> <li>• Maximum items: 16</li> <li>• Minimum length: 0</li> <li>• Maximum length: 127</li> </ul>
appID	string	False	<p>JSON string containing the associated ID of the application that this hook is linked to. In essence, other matching criteria, if set.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
enabled	string	True	<p>JSON string that indicates if the execution hook is enabled.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - The execution hook is enabled and will be run as specified.</li> <li>• "false" - The execution hook is disabled and will never run.</li> </ul> <p>The default value is "true".</p>

Name	Type	Required	Description
description	string	False	JSON string containing a user-specified description for the hook source. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 0</li> <li>• Maximum length: 511</li> </ul>
metadata	<a href="#">type_astra_metadata_update</a>	True	Client and service-specified metadata associated with the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</li> </ul>

#### type\_astra\_metadata\_list

Name	Type	Required	Description
continue	string	False	
count	number	False	
labels	array[ <a href="#">type_astra_label</a> ]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

#### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Retrieve an execution hook

GET /accounts/{account\_id}/core/v1/executionHooks/{executionHook\_id}

Returns the stored Execution Hook API resource in the JSON response body. Also populates matchingContainers and matchingImages based on the current matchingCriteria and the defined app.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"> <li>example: <code>{{.Account}}</code></li> </ul>
executionHook_id	string	path	True	ID of the executionHook collection to list

### Response

Status: 200, Returns the stored Execution Hook API resource in the JSON response body. Also populates matchingContainers and matchingImages based on the current matchingCriteria and the defined app.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"> <li>"application/astra-executionHook"</li> </ul>

Name	Type	Required	Description
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "1.0"</li> <li>• "1.1"</li> <li>• "1.2"</li> </ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the UUIDv4 Schema</li> </ul>
name	string	True	JSON string containing a user-specified name for the resource. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63 Name must be unique across all execution hook resources.</li> </ul>
hookType	string	True	JSON string defining the hook type. Defined values are: <ul style="list-style-type: none"> <li>• "netapp" - NetApp provided execution hook.</li> <li>• "custom" - Tied to a specific app ID. Execution hook resources with hookType "netapp" are read only.</li> </ul>

Name	Type	Required	Description
matchingCriteria	array[ <a href="#">matchingCriteria</a> ]	True	<p>JSON array of JSON objects describing the match criteria for the execution hook. When multiple matchingCriteria are specified a logical AND is applied to criteria. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum items: 0</li> <li>• Maximum items: 10</li> </ul>
matchingContainers	array[ <a href="#">matchingContainers</a> ]	False	<p>JSON array of JSON objects of each container that matches the configured matching criteria within the defined app.</p>
matchingImages	array[string]	False	<p>JSON array of JSON strings for the matching container images. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum items: 0</li> <li>• Maximum items: 4095</li> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>
action	string	True	<p>JSON string indicating which action the execution hook will run assuming the match criteria are met. Defined values are:</p> <ul style="list-style-type: none"> <li>• "snapshot"</li> <li>• "backup"</li> <li>• "restore"</li> </ul>

Name	Type	Required	Description
stage	string	True	<p>JSON string indicating the stage during the action that the hook will be executed.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "pre" - The execution hook will be run before the specified action.</li> <li>• "post" - The execution hook will be run after the specified action. Values for action "snapshot" are "pre" and "post". Values for action "backup" are "pre" and "post". Value for action "restore" is "post".</li> </ul>
hookSourceID	string	True	<p>JSON string containing the hook source ID that is run through this execution hook.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
arguments	array[string]	False	<p>JSON array of JSON strings for the arguments to the source.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum items: 0</li> <li>• Maximum items: 16</li> <li>• Minimum length: 0</li> <li>• Maximum length: 127</li> </ul>

Name	Type	Required	Description
appID	string	False	<p>JSON string containing the associated ID of the application that this hook is linked to. In essence, other matching criteria, if set.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
enabled	string	True	<p>JSON string that indicates if the execution hook is enabled.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - The execution hook is enabled and will be run as specified.</li> <li>• "false" - The execution hook is disabled and will never run. The default value is "true".</li> </ul>
description	string	False	<p>JSON string containing a user-specified description for the hook source.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 0</li> <li>• Maximum length: 511</li> </ul>



Name	Type	Required	Description
metadata	type_astra_metadata_update	True	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema            If not specified on create, a metadata object will be created with no labels.            If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</li> </ul>

## Example response

```
{
  "type": "application/astra-executionHook",
  "version": "1.2",
  "id": "946e60cb-980b-5374-9e6e-9fe1f6780352",
  "name": "Payroll",
  "hookType": "custom",
  "matchingCriteria": [
    {
      "type": "podLabel",
      "value": "^env=production$"
    },
    {
      "type": "containerName",
      "value": "^payroll-master"
    }
  ],
  "matchingImages": [
    "docker.io/bitnami/payroll:3.7.8",
    "docker.io/bitnami/payroll:4.1.2"
  ],
  "matchingContainers": [
    {
      "namespaceName": "payroll-east",
      "podName": "payroll-release3-7",
      "podLabels": [
        {
          "name": "env",
          "value": "production"
        },
        {
          "name": "app.kubernetes.io/managed-by",
          "value": "Helm"
        }
      ],
      "containerName": "payroll-master-0",
      "containerImage": "docker.io/bitnami/payroll:3.7.8"
    },
    {
      "namespaceName": "payroll-east",
      "podName": "payroll-release3-7",
      "podLabels": [
        {
          "name": "env",
          "value": "production"
        }
      ]
    }
  ]
}
```

```

    },
    {
      "name": "app.kubernetes.io/managed-by",
      "value": "Helm"
    }
  ],
  "containerName": "payroll-master-1",
  "containerImage": "docker.io/bitnami/payroll:3.7.8"
}
],
"action": "snapshot",
"stage": "pre",
"hookSourceID": "50e89023-ba84-435d-bb47-1833f4c250ff",
"arguments": [
  "freeze"
],
"appID": "7be5ae7c-151d-4230-ac39-ac1d0b33c2a9",
"enabled": "true",
"description": "Payroll production hook",
"metadata": {
  "labels": [],
  "creationTimestamp": "2022-10-06T20:58:16.305662Z",
  "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
  "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
}
}
}

```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	

Name	Type	Required	Description
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't found.",
  "status": "404"
}
```

## Definitions

## See Definitions

### matchingCriteria

Name	Type	Required	Description
type	string	True	JSON string identifying the match criteria type.
value	string	True	JSON string containing a regex to match for the given match type. Regex syntax: <a href="https://github.com/google/re2/wiki/Syntax">https://github.com/google/re2/wiki/Syntax</a>

### type\_k8s\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### matchingContainers

Name	Type	Required	Description
podName	string	False	JSON string of matching container's pod name.
podLabels	array[ <a href="#">type_k8s_label</a> ]	False	JSON array of label objects of matching container's pod's labels.
containerImage	string	False	JSON string of matching container's image.
containerName	string	False	JSON string of matching container's name.
namespaceName	string	False	JSON string of matching container's pod's namespace name.

### type\_astra\_label

Name	Type	Required	Description
name	string	True	

Name	Type	Required	Description
value	string	True	

#### type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
 If not specified on create, a metadata object will be created with no labels.  
 If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[type_astra_label]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

#### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Modify an execution hook

PUT /accounts/{account\_id}/core/v1/executionHooks/{executionHook\_id}

Replaces the entire stored resource with the supplied JSON request body while preserving key values that are not user-modifiable.

### Side Effects

- Updating an existing execution hook will impact any future actions of applications that use the updated execution hook.

### Parameters



Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"> <li>example: <code>{{.Account}}</code></li> </ul>
executionHook_id	string	path	True	ID of the executionHook collection to list

### Request Body

Replaces the entire stored resource with the supplied JSON request body while preserving key values that are not user-modifiable.

### Side Effects

- Updating an existing execution hook will impact any future actions of applications that use the updated execution hook.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"> <li>"application/astra-executionHook"</li> </ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>"1.0"</li> <li>"1.1"</li> <li>"1.2"</li> </ul>
id	string	False	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>Conforms to the UUIDv4 Schema</li> </ul>

Name	Type	Required	Description
name	string	False	<p>JSON string containing a user-specified name for the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63 Name must be unique across all execution hook resources.</li> </ul>
hookType	string	False	<p>JSON string defining the hook type.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "netapp" - NetApp provided execution hook.</li> <li>• "custom" - Tied to a specific app ID. Execution hook resources with hookType "netapp" are read only.</li> </ul>
matchingCriteria	array[ <a href="#">matchingCriteria</a> ]	False	<p>JSON array of JSON objects describing the match criteria for the execution hook. When multiple matchingCriteria are specified a logical AND is applied to criteria.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum items: 0</li> <li>• Maximum items: 10</li> </ul>
action	string	False	<p>JSON string indicating which action the execution hook will run assuming the match criteria are met.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "snapshot"</li> <li>• "backup"</li> <li>• "restore"</li> </ul>

Name	Type	Required	Description
stage	string	False	<p>JSON string indicating the stage during the action that the hook will be executed.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "pre" - The execution hook will be run before the specified action.</li> <li>• "post" - The execution hook will be run after the specified action. Values for action "snapshot" are "pre" and "post". Values for action "backup" are "pre" and "post". Value for action "restore" is "post".</li> </ul>
hookSourceID	string	False	<p>JSON string containing the hook source ID that is run through this execution hook.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
arguments	array[string]	False	<p>JSON array of JSON strings for the arguments to the source.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum items: 0</li> <li>• Maximum items: 16</li> <li>• Minimum length: 0</li> <li>• Maximum length: 127</li> </ul>

Name	Type	Required	Description
appID	string	False	<p>JSON string containing the associated ID of the application that this hook is linked to. In essence, other matching criteria, if set.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
enabled	string	False	<p>JSON string that indicates if the execution hook is enabled.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - The execution hook is enabled and will be run as specified.</li> <li>• "false" - The execution hook is disabled and will never run. The default value is "true".</li> </ul>
description	string	False	<p>JSON string containing a user-specified description for the hook source.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 0</li> <li>• Maximum length: 511</li> </ul>

Name	Type	Required	Description
metadata	<a href="#">type_astra_metadata_update</a>	False	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</li> </ul>

### Example request

```
{
  "type": "application/astra-executionHook",
  "version": "1.2",
  "arguments": [
    "freeze",
    "10"
  ]
}
```

### Response

Status: 204, Indicates if the executionHook resource was updated.

### Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	

Name	Type	Required	Description
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

## Response

Status: 409, Conflict

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

## Example response

```
{
  "type": "https://astra.netapp.io/problems/10",
  "title": "JSON resource conflict",
  "detail": "The request body JSON contains a field that conflicts with an idempotent value.",
  "status": "409"
}
```

## Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

## Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example error response

```
{
  "type": "https://astra.netapp.io/problems/1",
  "title": "Resource not found",
  "detail": "The resource specified in the request URI wasn't found.",
  "status": "404"
}
```

## Definitions



## See Definitions

### matchingCriteria

Name	Type	Required	Description
type	string	False	JSON string identifying the match criteria type.
value	string	False	JSON string containing a regex to match for the given match type. Regex syntax: <a href="https://github.com/google/re2/wiki/Syntax">https://github.com/google/re2/wiki/Syntax</a>

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[ <a href="#">type_astra_label</a> ]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter

Name	Type	Required	Description
reason	string	True	Reason why the query parameter is invalid

invalidFields

Name	Type	Required	Description
name	string	True	Name of the invalid request body field
reason	string	True	Reason why the request body field is invalid

## Delete an execution hook

DELETE /accounts/{account\_id}/core/v1/executionHooks/{executionHook\_id}

Removes the specified Execution Hook API resource.

### Side Effects

- The deleted execution hook will no longer run as part of future actions.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"> <li>• example: <code>{{.Account}}</code></li> </ul>
executionHook_id	string	path	True	ID of the executionHook collection to list

### Response

Status: 204, Indicates if the executionHook resource was deleted.

### Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

## Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

## Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

## Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	

Name	Type	Required	Description
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/1",
  "title": "Resource not found",
  "detail": "The resource specified in the request URI wasn't found.",
  "status": "404"
}
```

### Definitions

#### See Definitions

invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

### Create a new execution hook for an app

POST /accounts/{account\_id}/k8s/v1/apps/{app\_id}/executionHooks

Indicates the desired values for the Execution Hook API resource to be created.

#### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"> <li>example: <code>{{.Account}}</code></li> </ul>
app_id	string	path	True	ID of the containing app resource

## Request Body

Indicates the desired values for the Execution Hook API resource to be created.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>• "application/astra-executionHook"</li></ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"><li>• "1.0"</li><li>• "1.1"</li><li>• "1.2"</li></ul>
name	string	True	JSON string containing a user-specified name for the resource. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 1</li><li>• Maximum length: 63 Name must be unique across all execution hook resources.</li></ul>
hookType	string	True	JSON string defining the hook type. Defined values are: <ul style="list-style-type: none"><li>• "netapp" - NetApp provided execution hook.</li><li>• "custom" - Tied to a specific app ID. Execution hook resources with hookType "netapp" are read only.</li></ul>

Name	Type	Required	Description
matchingCriteria	array[ <a href="#">matchingCriteria</a> ]	False	<p>JSON array of JSON objects describing the match criteria for the execution hook. When multiple matchingCriteria are specified a logical AND is applied to criteria. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum items: 0</li> <li>• Maximum items: 10</li> </ul>
action	string	True	<p>JSON string indicating which action the execution hook will run assuming the match criteria are met. Defined values are:</p> <ul style="list-style-type: none"> <li>• "snapshot"</li> <li>• "backup"</li> <li>• "restore"</li> </ul>
stage	string	True	<p>JSON string indicating the stage during the action that the hook will be executed. Defined values are:</p> <ul style="list-style-type: none"> <li>• "pre" - The execution hook will be run before the specified action.</li> <li>• "post" - The execution hook will be run after the specified action. Values for action "snapshot" are "pre" and "post". Values for action "backup" are "pre" and "post". Value for action "restore" is "post".</li> </ul>

Name	Type	Required	Description
hookSourceID	string	True	<p>JSON string containing the hook source ID that is run through this execution hook.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
arguments	array[string]	False	<p>JSON array of JSON strings for the arguments to the source.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum items: 0</li> <li>• Maximum items: 16</li> <li>• Minimum length: 0</li> <li>• Maximum length: 127</li> </ul>
appID	string	True	<p>JSON string containing the associated ID of the application that this hook is linked to. In essence, other matching criteria, if set.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
enabled	string	False	<p>JSON string that indicates if the execution hook is enabled.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - The execution hook is enabled and will be run as specified.</li> <li>• "false" - The execution hook is disabled and will never run.</li> </ul> <p>The default value is "true".</p>



Name	Type	Required	Description
description	string	False	<p>JSON string containing a user-specified description for the hook source.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 0</li> <li>• Maximum length: 511</li> </ul>
metadata	<a href="#">type_astra_metadata_update</a>	False	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</li> </ul>

### Example request

```

{
  "type": "application/astra-executionHook",
  "version": "1.2",
  "name": "Payroll",
  "hookType": "custom",
  "action": "snapshot",
  "stage": "pre",
  "hookSourceID": "50e89023-ba84-435d-bb47-1833f4c250ff",
  "arguments": [
    "freeze"
  ],
  "appID": "7be5ae7c-151d-4230-ac39-ac1d0b33c2a9",
  "enabled": "true",
  "description": "Payroll production hook"
}

```

## Response

Status: 201, Returns the newly created executionHook resource in the JSON response body.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>"application/astra-executionHook"</li></ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"><li>"1.0"</li><li>"1.1"</li><li>"1.2"</li></ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"><li>Conforms to the UUIDv4 Schema</li></ul>
name	string	True	JSON string containing a user-specified name for the resource. Defined values are: <ul style="list-style-type: none"><li>Minimum length: 1</li><li>Maximum length: 63 Name must be unique across all execution hook resources.</li></ul>

Name	Type	Required	Description
hookType	string	True	<p>JSON string defining the hook type.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "netapp" - NetApp provided execution hook.</li> <li>• "custom" - Tied to a specific app ID. Execution hook resources with hookType "netapp" are read only.</li> </ul>
matchingCriteria	array[ <a href="#">matchingCriteria</a> ]	True	<p>JSON array of JSON objects describing the match criteria for the execution hook. When multiple matchingCriteria are specified a logical AND is applied to criteria.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum items: 0</li> <li>• Maximum items: 10</li> </ul>
matchingContainers	array[ <a href="#">matchingContainers</a> ]	False	<p>JSON array of JSON objects of each container that matches the configured matching criteria within the defined app.</p>
matchingImages	array[string]	False	<p>JSON array of JSON strings for the matching container images.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum items: 0</li> <li>• Maximum items: 4095</li> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>

Name	Type	Required	Description
action	string	True	<p>JSON string indicating which action the execution hook will run assuming the match criteria are met.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "snapshot"</li> <li>• "backup"</li> <li>• "restore"</li> </ul>
stage	string	True	<p>JSON string indicating the stage during the action that the hook will be executed.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "pre" - The execution hook will be run before the specified action.</li> <li>• "post" - The execution hook will be run after the specified action. Values for action "snapshot" are "pre" and "post". Values for action "backup" are "pre" and "post". Value for action "restore" is "post".</li> </ul>
hookSourceID	string	True	<p>JSON string containing the hook source ID that is run through this execution hook.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
arguments	array[string]	False	<p>JSON array of JSON strings for the arguments to the source. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum items: 0</li> <li>• Maximum items: 16</li> <li>• Minimum length: 0</li> <li>• Maximum length: 127</li> </ul>
appID	string	False	<p>JSON string containing the associated ID of the application that this hook is linked to. In essence, other matching criteria, if set. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
enabled	string	True	<p>JSON string that indicates if the execution hook is enabled. Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - The execution hook is enabled and will be run as specified.</li> <li>• "false" - The execution hook is disabled and will never run. The default value is "true".</li> </ul>
description	string	False	<p>JSON string containing a user-specified description for the hook source. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 0</li> <li>• Maximum length: 511</li> </ul>

Name	Type	Required	Description
metadata	<a href="#">type_astra_metadata_update</a>	True	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>Conforms to the Astra Metadata Schema</li> </ul> <p>If not specified on create, a metadata object will be created with no labels.</p> <p>If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</p>

### Example response

```
{
  "type": "application/astra-executionHook",
  "version": "1.2",
  "id": "946e60cb-980b-5374-9e6e-9fe1f6780352",
  "name": "Payroll",
  "hookType": "custom",
  "matchingCriteria": [],
  "action": "snapshot",
  "stage": "pre",
  "hookSourceID": "50e89023-ba84-435d-bb47-1833f4c250ff",
  "arguments": [
    "freeze"
  ],
  "appID": "7be5ae7c-151d-4230-ac39-ac1d0b33c2a9",
  "enabled": "true",
  "description": "Payroll production hook",
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

## Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 409, Conflict

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

### Example response

```
{
  "type": "https://astra.netapp.io/problems/10",
  "title": "JSON resource conflict",
  "detail": "The request body JSON contains a field that conflicts with an idempotent value.",
  "status": "409"
}
```

### Response

Status: 403, Forbidden



Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

## Definitions

## See Definitions

### matchingCriteria

Name	Type	Required	Description
type	string	False	JSON string identifying the match criteria type.
value	string	False	JSON string containing a regex to match for the given match type. Regex syntax: <a href="https://github.com/google/re2/wiki/Syntax">https://github.com/google/re2/wiki/Syntax</a>

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[ <a href="#">type_astra_label</a> ]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

### matchingCriteria

Name	Type	Required	Description
type	string	True	JSON string identifying the match criteria type.

Name	Type	Required	Description
value	string	True	JSON string containing a regex to match for the given match type. Regex syntax: <a href="https://github.com/google/re2/wiki/Syntax">https://github.com/google/re2/wiki/Syntax</a>

#### type\_k8s\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

#### matchingContainers

Name	Type	Required	Description
podName	string	False	JSON string of matching container's pod name.
podLabels	array[ <a href="#">type_k8s_label</a> ]	False	JSON array of label objects of matching container's pod's labels.
containerImage	string	False	JSON string of matching container's image.
containerName	string	False	JSON string of matching container's name.
namespaceName	string	False	JSON string of matching container's pod's namespace name.

#### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

#### invalidFields

Name	Type	Required	Description
name	string	True	Name of the invalid request body field
reason	string	True	Reason why the request body field is invalid

## List the execution hooks for an app

GET /accounts/{account\_id}/k8s/v1/apps/{app\_id}/executionHooks

Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource  • example: {{.Account}}
app_id	string	path	True	ID of the containing app resource
include	string	query	False	Indicates which fields should be returned when listing a collection.  URL examples: "include=id", "include=id,name"  OpenAPI examples: "id"

Name	Type	In	Required	Description
limit	string	query	False	<p>Indicates the maximum number of resources to return when listing a collection.</p> <p>URL examples: "limit=2"</p> <p>OpenAPI examples: "2"</p>
filter	string	query	False	<p>Indicates which fields should be matched in order to return a resource when listing a collection.</p> <p>Supported operators are:</p> <ul style="list-style-type: none"> <li>• eq - Equality</li> <li>• lt/gt - Less than/Greater than</li> <li>• lte/gte - Less than or equals to/Greater than or equals to</li> </ul> <p>URL example: "filter=field%20eq%20%27value%27"</p> <p>OpenAPI examples: "field eq 'value'"</p>

## Response

Status: 200, Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

Name	Type	Required	Description
items	array[Any of: <a href="#">executionHook_1.2_get_r</a> <a href="#">esponse_body</a> , array[]]	True	
metadata	<a href="#">type_astra_metadata_list</a>	True	

## Example response

```
{
  "type": "application/astra-executionHooks",
  "version": "1.2",
  "items": [
    {
      "type": "application/astra-executionHook",
      "version": "1.1",
      "id": "4c64792c-806b-4457-938d-8e325a37c593",
      "name": "Payroll",
      "hookType": "custom",
      "matchingCriteria": [
        {
          "type": "containerImage",
          "value": "payroll"
        },
        {
          "type": "podName",
          "value": "^payroll-master"
        }
      ],
      "action": "snapshot",
      "stage": "pre",
      "hookSourceID": "50e89023-ba84-435d-bb47-1833f4c250ff",
      "arguments": [
        "freeze"
      ],
      "appID": "7be5ae7c-151d-4230-ac39-ac1d0b33c2a9",
      "enabled": "true",
      "description": "Payroll production hook",
      "metadata": {
        "labels": [],
        "creationTimestamp": "2020-08-06T12:24:52.256624Z",
        "modificationTimestamp": "2020-08-06T12:24:52.256624Z",
        "createdBy": "64182074-ddb6-42eb-b7f4-b6a02cf9ba7c"
      }
    },
    {
      "type": "application/astra-executionHook",
      "version": "1.1",
      "id": "6659892c-c621-44e8-a0bb-8dbdf378a2dd",
      "name": "Order Processing",
      "hookType": "custom",
      "matchingCriteria": [
        {
```



```

        "type": "containerName",
        "value": "^order-processing$"
    },
    {
        "type": "podLabel",
        "value": "^app=master$|^app=data$"
    }
],
"action": "snapshot",
"stage": "pre",
"hookSourceID": "63f4d6fd-b7f0-4eaa-9890-0b11123604b1",
"arguments": [
    "freeze"
],
"appID": "7be5ae7c-151d-4230-ac39-ac1d0b33c2a9",
"enabled": "true",
"description": "Order processing hook",
"metadata": {
    "labels": [],
    "creationTimestamp": "2020-08-06T12:24:52.256624Z",
    "modificationTimestamp": "2020-08-06T12:24:52.256624Z",
    "createdBy": "64182074-ddb6-42eb-b7f4-b6a02cf9ba7c"
}
},
{
    "type": "application/astra-executionHook",
    "version": "1.1",
    "id": "6659892c-c621-44e8-a0bb-8dbdf378a2dd",
    "name": "NetApp Postgres Hook",
    "hookType": "netapp",
    "matchingCriteria": [
        {
            "type": "podName",
            "value": "^postgres"
        },
        {
            "type": "containerImage",
            "value": "3.8"
        }
    ],
    "action": "snapshot",
    "stage": "pre",
    "hookSourceID": "3601ed09-1a74-4156-a1bd-9cb7144bac0e",
    "arguments": [
        "freeze"
    ],

```

```

    "enabled": "true",
    "description": "Order processing hook",
    "metadata": {
      "labels": [],
      "creationTimestamp": "2020-08-06T12:24:52.256624Z",
      "modificationTimestamp": "2020-08-06T12:24:52.256624Z",
      "createdBy": "64182074-ddb6-42eb-b7f4-b6a02cf9ba7c"
    }
  },
  {
    "type": "application/astra-executionHook",
    "version": "1.1",
    "id": "6659892c-c621-44e8-a0bb-8dbdf378a2dd",
    "name": "Redis Hook",
    "hookType": "custom",
    "matchingCriteria": [
      {
        "type": "containerName",
        "value": "^redis-01$"
      }
    ],
    "action": "snapshot",
    "stage": "pre",
    "hookSourceID": "3601ed09-1a74-4156-a1bd-9cb7144bac0e",
    "arguments": [
      "freeze"
    ],
    "enabled": "true",
    "description": "Order processing hook",
    "metadata": {
      "labels": [],
      "creationTimestamp": "2020-08-06T12:24:52.256624Z",
      "modificationTimestamp": "2020-08-06T12:24:52.256624Z",
      "createdBy": "64182074-ddb6-42eb-b7f4-b6a02cf9ba7c"
    }
  }
],
"metadata": {
  "labels": [],
  "creationTimestamp": "2022-10-06T20:58:16.305662Z",
  "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
  "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
}
}

```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

## Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	

Name	Type	Required	Description
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

### Definitions

## See Definitions

### matchingCriteria

Name	Type	Required	Description
type	string	True	JSON string identifying the match criteria type.
value	string	True	JSON string containing a regex to match for the given match type. Regex syntax: <a href="https://github.com/google/re2/wiki/Syntax">https://github.com/google/re2/wiki/Syntax</a>

### type\_k8s\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### matchingContainers

Name	Type	Required	Description
podName	string	False	JSON string of matching container's pod name.
podLabels	array[ <a href="#">type_k8s_label</a> ]	False	JSON array of label objects of matching container's pod's labels.
containerImage	string	False	JSON string of matching container's image.
containerName	string	False	JSON string of matching container's name.
namespaceName	string	False	JSON string of matching container's pod's namespace name.

### type\_astra\_label

Name	Type	Required	Description
name	string	True	

Name	Type	Required	Description
value	string	True	

#### type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema

If not specified on create, a metadata object will be created with no labels.

If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[type_astra_label]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

#### executionHook\_1.2\_get\_response\_body

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "application/astra-executionHook"</li> </ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "1.0"</li> <li>• "1.1"</li> <li>• "1.2"</li> </ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the UUIDv4 Schema</li> </ul>

Name	Type	Required	Description
name	string	True	<p>JSON string containing a user-specified name for the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul> <p>Name must be unique across all execution hook resources.</p>
hookType	string	True	<p>JSON string defining the hook type.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "netapp" - NetApp provided execution hook.</li> <li>• "custom" - Tied to a specific app ID. Execution hook resources with hookType "netapp" are read only.</li> </ul>
matchingCriteria	array[ <a href="#">matchingCriteria</a> ]	True	<p>JSON array of JSON objects describing the match criteria for the execution hook. When multiple matchingCriteria are specified a logical AND is applied to criteria.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum items: 0</li> <li>• Maximum items: 10</li> </ul>
matchingContainers	array[ <a href="#">matchingContainers</a> ]	False	<p>JSON array of JSON objects of each container that matches the configured matching criteria within the defined app.</p>



Name	Type	Required	Description
matchingImages	array[string]	False	<p>JSON array of JSON strings for the matching container images.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum items: 0</li> <li>• Maximum items: 4095</li> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>
action	string	True	<p>JSON string indicating which action the execution hook will run assuming the match criteria are met.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "snapshot"</li> <li>• "backup"</li> <li>• "restore"</li> </ul>
stage	string	True	<p>JSON string indicating the stage during the action that the hook will be executed.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "pre" - The execution hook will be run before the specified action.</li> <li>• "post" - The execution hook will be run after the specified action. Values for action "snapshot" are "pre" and "post". Values for action "backup" are "pre" and "post". Value for action "restore" is "post".</li> </ul>

Name	Type	Required	Description
hookSourceID	string	True	<p>JSON string containing the hook source ID that is run through this execution hook.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
arguments	array[string]	False	<p>JSON array of JSON strings for the arguments to the source.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum items: 0</li> <li>• Maximum items: 16</li> <li>• Minimum length: 0</li> <li>• Maximum length: 127</li> </ul>
appID	string	False	<p>JSON string containing the associated ID of the application that this hook is linked to. In essence, other matching criteria, if set.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
enabled	string	True	<p>JSON string that indicates if the execution hook is enabled.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - The execution hook is enabled and will be run as specified.</li> <li>• "false" - The execution hook is disabled and will never run.</li> </ul> <p>The default value is "true".</p>

Name	Type	Required	Description
description	string	False	JSON string containing a user-specified description for the hook source. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 0</li> <li>• Maximum length: 511</li> </ul>
metadata	<a href="#">type_astra_metadata_update</a>	True	Client and service-specified metadata associated with the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</li> </ul>

#### type\_astra\_metadata\_list

Name	Type	Required	Description
continue	string	False	
count	number	False	
labels	array[ <a href="#">type_astra_label</a> ]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

#### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Retrieve an execution hook for an app

GET /accounts/{account\_id}/k8s/v1/apps/{app\_id}/executionHooks/{executionHook\_id}

Returns the stored Execution Hook API resource in the JSON response body. Also populates matchingContainers and matchingImages based on the current matchingCriteria and the defined app.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"> <li>example: <code>{{.Account}}</code></li> </ul>
app_id	string	path	True	ID of the containing app resource
executionHook_id	string	path	True	ID of the executionHook collection to list

### Response

Status: 200, Returns the stored Execution Hook API resource in the JSON response body. Also populates matchingContainers and matchingImages based on the current matchingCriteria and the defined app.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"> <li>"application/astra-executionHook"</li> </ul>

Name	Type	Required	Description
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "1.0"</li> <li>• "1.1"</li> <li>• "1.2"</li> </ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the UUIDv4 Schema</li> </ul>
name	string	True	JSON string containing a user-specified name for the resource. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63 Name must be unique across all execution hook resources.</li> </ul>
hookType	string	True	JSON string defining the hook type. Defined values are: <ul style="list-style-type: none"> <li>• "netapp" - NetApp provided execution hook.</li> <li>• "custom" - Tied to a specific app ID. Execution hook resources with hookType "netapp" are read only.</li> </ul>

Name	Type	Required	Description
matchingCriteria	array[ <a href="#">matchingCriteria</a> ]	True	<p>JSON array of JSON objects describing the match criteria for the execution hook. When multiple matchingCriteria are specified a logical AND is applied to criteria. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum items: 0</li> <li>• Maximum items: 10</li> </ul>
matchingContainers	array[ <a href="#">matchingContainers</a> ]	False	<p>JSON array of JSON objects of each container that matches the configured matching criteria within the defined app.</p>
matchingImages	array[string]	False	<p>JSON array of JSON strings for the matching container images. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum items: 0</li> <li>• Maximum items: 4095</li> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>
action	string	True	<p>JSON string indicating which action the execution hook will run assuming the match criteria are met. Defined values are:</p> <ul style="list-style-type: none"> <li>• "snapshot"</li> <li>• "backup"</li> <li>• "restore"</li> </ul>

Name	Type	Required	Description
stage	string	True	<p>JSON string indicating the stage during the action that the hook will be executed.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "pre" - The execution hook will be run before the specified action.</li> <li>• "post" - The execution hook will be run after the specified action. Values for action "snapshot" are "pre" and "post". Values for action "backup" are "pre" and "post". Value for action "restore" is "post".</li> </ul>
hookSourceID	string	True	<p>JSON string containing the hook source ID that is run through this execution hook.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
arguments	array[string]	False	<p>JSON array of JSON strings for the arguments to the source.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum items: 0</li> <li>• Maximum items: 16</li> <li>• Minimum length: 0</li> <li>• Maximum length: 127</li> </ul>

Name	Type	Required	Description
appID	string	False	<p>JSON string containing the associated ID of the application that this hook is linked to. In essence, other matching criteria, if set.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
enabled	string	True	<p>JSON string that indicates if the execution hook is enabled.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - The execution hook is enabled and will be run as specified.</li> <li>• "false" - The execution hook is disabled and will never run. The default value is "true".</li> </ul>
description	string	False	<p>JSON string containing a user-specified description for the hook source.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 0</li> <li>• Maximum length: 511</li> </ul>



Name	Type	Required	Description
metadata	type_astra_metadata_update	True	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema            If not specified on create, a metadata object will be created with no labels.            If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</li> </ul>

## Example response

```
{
  "type": "application/astra-executionHook",
  "version": "1.2",
  "id": "946e60cb-980b-5374-9e6e-9fe1f6780352",
  "name": "Payroll",
  "hookType": "custom",
  "matchingCriteria": [
    {
      "type": "podLabel",
      "value": "^env=production$"
    },
    {
      "type": "containerName",
      "value": "^payroll-master"
    }
  ],
  "matchingImages": [
    "docker.io/bitnami/payroll:3.7.8",
    "docker.io/bitnami/payroll:4.1.2"
  ],
  "matchingContainers": [
    {
      "namespaceName": "payroll-east",
      "podName": "payroll-release3-7",
      "podLabels": [
        {
          "name": "env",
          "value": "production"
        },
        {
          "name": "app.kubernetes.io/managed-by",
          "value": "Helm"
        }
      ],
      "containerName": "payroll-master-0",
      "containerImage": "docker.io/bitnami/payroll:3.7.8"
    },
    {
      "namespaceName": "payroll-east",
      "podName": "payroll-release3-7",
      "podLabels": [
        {
          "name": "env",
          "value": "production"
        }
      ]
    }
  ]
}
```

```

    },
    {
      "name": "app.kubernetes.io/managed-by",
      "value": "Helm"
    }
  ],
  "containerName": "payroll-master-1",
  "containerImage": "docker.io/bitnami/payroll:3.7.8"
}
],
"action": "snapshot",
"stage": "pre",
"hookSourceID": "50e89023-ba84-435d-bb47-1833f4c250ff",
"arguments": [
  "freeze"
],
"appID": "7be5ae7c-151d-4230-ac39-ac1d0b33c2a9",
"enabled": "true",
"description": "Payroll production hook",
"metadata": {
  "labels": [],
  "creationTimestamp": "2022-10-06T20:58:16.305662Z",
  "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
  "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
}
}
}

```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	

Name	Type	Required	Description
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't found.",
  "status": "404"
}
```

**Definitions**

## See Definitions

### matchingCriteria

Name	Type	Required	Description
type	string	True	JSON string identifying the match criteria type.
value	string	True	JSON string containing a regex to match for the given match type. Regex syntax: <a href="https://github.com/google/re2/wiki/Syntax">https://github.com/google/re2/wiki/Syntax</a>

### type\_k8s\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### matchingContainers

Name	Type	Required	Description
podName	string	False	JSON string of matching container's pod name.
podLabels	array[ <a href="#">type_k8s_label</a> ]	False	JSON array of label objects of matching container's pod's labels.
containerImage	string	False	JSON string of matching container's image.
containerName	string	False	JSON string of matching container's name.
namespaceName	string	False	JSON string of matching container's pod's namespace name.

### type\_astra\_label

Name	Type	Required	Description
name	string	True	

Name	Type	Required	Description
value	string	True	

#### type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[type_astra_label]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

#### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Modify an execution hook for an app

PUT /accounts/{account\_id}/k8s/v1/apps/{app\_id}/executionHooks/{executionHook\_id}

Replaces the entire stored resource with the supplied JSON request body while preserving key values that are not user-modifiable.

### Side Effects

- Updating an existing execution hook will impact any future actions of applications that use the updated execution hook.

### Parameters



Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"> <li>example: <code>{{.Account}}</code></li> </ul>
app_id	string	path	True	ID of the containing app resource
executionHook_id	string	path	True	ID of the executionHook collection to list

### Request Body

Replaces the entire stored resource with the supplied JSON request body while preserving key values that are not user-modifiable.

### Side Effects

- Updating an existing execution hook will impact any future actions of applications that use the updated execution hook.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"> <li>"application/astra-executionHook"</li> </ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>"1.0"</li> <li>"1.1"</li> <li>"1.2"</li> </ul>
id	string	False	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>Conforms to the UUIDv4 Schema</li> </ul>

Name	Type	Required	Description
name	string	False	<p>JSON string containing a user-specified name for the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63 Name must be unique across all execution hook resources.</li> </ul>
hookType	string	False	<p>JSON string defining the hook type.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "netapp" - NetApp provided execution hook.</li> <li>• "custom" - Tied to a specific app ID. Execution hook resources with hookType "netapp" are read only.</li> </ul>
matchingCriteria	array[ <a href="#">matchingCriteria</a> ]	False	<p>JSON array of JSON objects describing the match criteria for the execution hook. When multiple matchingCriteria are specified a logical AND is applied to criteria.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum items: 0</li> <li>• Maximum items: 10</li> </ul>
action	string	False	<p>JSON string indicating which action the execution hook will run assuming the match criteria are met.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "snapshot"</li> <li>• "backup"</li> <li>• "restore"</li> </ul>

Name	Type	Required	Description
stage	string	False	<p>JSON string indicating the stage during the action that the hook will be executed.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "pre" - The execution hook will be run before the specified action.</li> <li>• "post" - The execution hook will be run after the specified action. Values for action "snapshot" are "pre" and "post". Values for action "backup" are "pre" and "post". Value for action "restore" is "post".</li> </ul>
hookSourceID	string	False	<p>JSON string containing the hook source ID that is run through this execution hook.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
arguments	array[string]	False	<p>JSON array of JSON strings for the arguments to the source.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum items: 0</li> <li>• Maximum items: 16</li> <li>• Minimum length: 0</li> <li>• Maximum length: 127</li> </ul>

Name	Type	Required	Description
appID	string	False	<p>JSON string containing the associated ID of the application that this hook is linked to. In essence, other matching criteria, if set.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
enabled	string	False	<p>JSON string that indicates if the execution hook is enabled.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - The execution hook is enabled and will be run as specified.</li> <li>• "false" - The execution hook is disabled and will never run. The default value is "true".</li> </ul>
description	string	False	<p>JSON string containing a user-specified description for the hook source.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 0</li> <li>• Maximum length: 511</li> </ul>

Name	Type	Required	Description
metadata	<a href="#">type_astra_metadata_update</a>	False	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>Conforms to the Astra Metadata Schema</li> </ul> <p>If not specified on create, a metadata object will be created with no labels.</p> <p>If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</p>

### Example request

```
{
  "type": "application/astra-executionHook",
  "version": "1.2",
  "arguments": [
    "freeze",
    "10"
  ]
}
```

### Response

Status: 204, Indicates if the executionHook resource was updated.

### Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	

Name	Type	Required	Description
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

## Response

Status: 409, Conflict

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

## Example response

```
{
  "type": "https://astra.netapp.io/problems/10",
  "title": "JSON resource conflict",
  "detail": "The request body JSON contains a field that conflicts with an idempotent value.",
  "status": "409"
}
```

## Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

## Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example error response

```
{
  "type": "https://astra.netapp.io/problems/1",
  "title": "Resource not found",
  "detail": "The resource specified in the request URI wasn't found.",
  "status": "404"
}
```

## Definitions



## See Definitions

### matchingCriteria

Name	Type	Required	Description
type	string	False	JSON string identifying the match criteria type.
value	string	False	JSON string containing a regex to match for the given match type. Regex syntax: <a href="https://github.com/google/re2/wiki/Syntax">https://github.com/google/re2/wiki/Syntax</a>

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[ <a href="#">type_astra_label</a> ]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter

Name	Type	Required	Description
reason	string	True	Reason why the query parameter is invalid

invalidFields

Name	Type	Required	Description
name	string	True	Name of the invalid request body field
reason	string	True	Reason why the request body field is invalid

## Delete an execution hook for an app

DELETE

/accounts/{account\_id}/k8s/v1/apps/{app\_id}/executionHooks/{executionHook\_id}

Removes the specified Execution Hook API resource.

### Side Effects

- The deleted execution hook will no longer run as part of future actions.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource  • example: {{.Account}}
app_id	string	path	True	ID of the containing app resource
executionHook_id	string	path	True	ID of the executionHook collection to list

### Response

Status: 204, Indicates if the executionHook resource was deleted.

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

## Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

## Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

## Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

## Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	

Name	Type	Required	Description
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/1",
  "title": "Resource not found",
  "detail": "The resource specified in the request URI wasn't found.",
  "status": "404"
}
```

### Definitions

#### See Definitions

invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Execution Hook Override

### Execution Hook Override overview

The Execution Hook Override API provides CRUD (Create-Read-Update-Delete) access to allow the disabling of preloaded "netapp" execution hooks for a specific application.

### Create a new execution hook override resource for an app

POST /accounts/{account\_id}/k8s/v1/apps/{app\_id}/executionHookOverrides

Indicates the desired values for the Execution Hook Override API resource to be created.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"> <li>example: <code>{{.Account}}</code></li> </ul>
app_id	string	path	True	ID of the containing app resource

## Request Body

Indicates the desired values for the Execution Hook Override API resource to be created.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"> <li>"application/astra-executionHookOverride"</li> </ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>"1.0"</li> </ul>
executionHookID	string	True	JSON string containing the ID of an execution hook. Defined values are: <ul style="list-style-type: none"> <li>Conforms to the Astra Identifier Schema Only allows the executionHookID of an execution hook resource with a hookType value of "netapp".</li> </ul>

Name	Type	Required	Description
enabled	string	True	<p>JSON string that indicates whether the execution hook is enabled for the specified application. Defined values are:</p> <ul style="list-style-type: none"> <li>"true" - The execution hook is enabled and will run in a specified order</li> <li>"false" - The execution hook is disabled and cannot run</li> </ul>
metadata	<a href="#">type_astra_metadata_update</a>	False	<p>Client and service-specified metadata associated with the resource. Defined values are:</p> <ul style="list-style-type: none"> <li>Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</li> </ul>

### Example request

```
{
  "type": "application/astra-executionHookOverride",
  "version": "1.0",
  "executionHookID": "eb863cc6-0d9a-454d-8ef7-81b7cac91929",
  "enabled": "false"
}
```

### Response

Status: 201, Returns the newly created executionHookOverride resource in the JSON response body.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>• "application/astra-executionHookOverride"</li></ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"><li>• "1.0"</li></ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"><li>• Conforms to the UUIDv4 Schema</li></ul>
executionHookID	string	True	JSON string containing the ID of an execution hook. Defined values are: <ul style="list-style-type: none"><li>• Conforms to the Astra Identifier Schema Only allows the executionHookID of an execution hook resource with a hookType value of "netapp".</li></ul>



Name	Type	Required	Description
enabled	string	True	<p>JSON string that indicates whether the execution hook is enabled for the specified application. Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - The execution hook is enabled and will run in a specified order</li> <li>• "false" - The execution hook is disabled and cannot run</li> </ul>
appID	string	True	<p>JSON string containing the associated ID of the application with which the override is linked. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
metadata	type_astra_metadata_update	True	<p>Client and service-specified metadata associated with the resource. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</li> </ul>

## Example response

```
{
  "type": "application/astra-executionHookOverride",
  "version": "1.0",
  "id": "c11af802-5e53-5897-8cd9-2de730494be3",
  "executionHookID": "eb863cc6-0d9a-454d-8ef7-81b7cac91929",
  "enabled": "false",
  "appID": "4b43c2f7-bffa-4f60-b595-d98a05b64bc9",
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

## Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

## Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

## Response

Status: 409, Conflict

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

### Example response

```
{
  "type": "https://astra.netapp.io/problems/10",
  "title": "JSON resource conflict",
  "detail": "The request body JSON contains a field that conflicts with
an idempotent value.",
  "status": "409"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	

Name	Type	Required	Description
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

### Definitions

## See Definitions

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[type_astra_label]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

### invalidFields

Name	Type	Required	Description
name	string	True	Name of the invalid request body field
reason	string	True	Reason why the request body field is invalid

## List the execution hook override resources for an app

GET /accounts/{account\_id}/k8s/v1/apps/{app\_id}/executionHookOverrides

Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource  • example: {{.Account}}
app_id	string	path	True	ID of the containing app resource
include	string	query	False	Indicates which fields should be returned when listing a collection.  URL examples: "include=id", "include=id,name"  OpenAPI examples: "id"
limit	string	query	False	Indicates the maximum number of resources to return when listing a collection.  URL examples: "limit=2"  OpenAPI examples: "2"

Name	Type	In	Required	Description
filter	string	query	False	<p>Indicates which fields should be matched in order to return a resource when listing a collection.</p> <p>Supported operators are:</p> <ul style="list-style-type: none"> <li>• eq - Equality</li> <li>• lt/gt - Less than/Greater than</li> <li>• lte/gte - Less than or equals to/Greater than or equals to</li> </ul> <p>URL example: "filter=field%20eq%20%27value%27"</p> <p>OpenAPI examples: "field eq 'value'"</p>

## Response

Status: 200, Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

Name	Type	Required	Description
items	array[Any of: <a href="#">executionHookOverride_1</a> , <a href="#">.0_get_response_body</a> , array[]]	True	
metadata	<a href="#">type_astra_metadata_list</a>	True	



## Example response

```
{
  "type": "application/astra-executionHookOverrides",
  "version": "1.0",
  "items": [
    {
      "type": "application/astra-executionHookOverride",
      "version": "1.0",
      "id": "36d06222-bd0c-4897-89c2-c16dd9265e12",
      "executionHookID": "eb863cc6-0d9a-454d-8ef7-81b7cac91929",
      "enabled": "false",
      "appID": "4b43c2f7-bffa-4f60-b595-d98a05b64bc9",
      "metadata": {
        "labels": [],
        "creationTimestamp": "2020-08-06T12:24:52.256624Z",
        "modificationTimestamp": "2020-08-06T12:24:52.256624Z",
        "createdBy": "863feb92-8619-4298-b222-c48a886024f8"
      }
    },
    {
      "type": "application/astra-executionHookOverride",
      "version": "1.0",
      "id": "f8d1ce66-6c0e-4d3a-96c5-a5e76669442d",
      "executionHookID": "eb863cc6-0d9a-454d-8ef7-81b7cac91929",
      "enabled": "false",
      "appID": "36b076ae-b7c4-4e96-a323-ed167ede74ba",
      "metadata": {
        "labels": [],
        "creationTimestamp": "2020-08-06T12:24:52.256624Z",
        "modificationTimestamp": "2020-08-06T12:24:52.256624Z",
        "createdBy": "863feb92-8619-4298-b222-c48a886024f8"
      }
    }
  ],
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

## Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	

Name	Type	Required	Description
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

### Definitions

## See Definitions

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[type_astra_label]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

### executionHookOverride\_1.0\_get\_response\_body

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>• "application/astra-executionHookOverride"</li></ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"><li>• "1.0"</li></ul>

Name	Type	Required	Description
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the UUIDv4 Schema</li> </ul>
executionHookID	string	True	JSON string containing the ID of an execution hook. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema Only allows the executionHookID of an execution hook resource with a hookType value of "netapp".</li> </ul>
enabled	string	True	JSON string that indicates whether the execution hook is enabled for the specified application. Defined values are: <ul style="list-style-type: none"> <li>• "true" - The execution hook is enabled and will run in a specified order</li> <li>• "false" - The execution hook is disabled and cannot run</li> </ul>
appID	string	True	JSON string containing the associated ID of the application with which the override is linked. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
metadata	<a href="#">type_astra_metadata_update</a>	True	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>Conforms to the Astra Metadata Schema</li> </ul> <p>If not specified on create, a metadata object will be created with no labels.</p> <p>If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</p>

#### type\_astra\_metadata\_list

Name	Type	Required	Description
continue	string	False	
count	number	False	
labels	array[ <a href="#">type_astra_label</a> ]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

#### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Retrieve an execution hook override resource

GET

/accounts/{account\_id}/k8s/v1/apps/{app\_id}/executionHookOverrides/{executionHookOverride\_id}

Returns the stored Execution Hook Override API resource in the JSON response body.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"><li>example: {{.Account}}</li></ul>
app_id	string	path	True	ID of the containing app resource
executionHookOverride_id	string	path	True	ID of the executionHookOverride collection to list

### Response

Status: 200, Returns the stored Execution Hook Override API resource in the JSON response body.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>"application/astra-executionHookOverride"</li></ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"><li>"1.0"</li></ul>



Name	Type	Required	Description
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the UUIDv4 Schema</li> </ul>
executionHookID	string	True	JSON string containing the ID of an execution hook. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema Only allows the executionHookID of an execution hook resource with a hookType value of "netapp".</li> </ul>
enabled	string	True	JSON string that indicates whether the execution hook is enabled for the specified application. Defined values are: <ul style="list-style-type: none"> <li>• "true" - The execution hook is enabled and will run in a specified order</li> <li>• "false" - The execution hook is disabled and cannot run</li> </ul>
appID	string	True	JSON string containing the associated ID of the application with which the override is linked. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
metadata	<a href="#">type_astra_metadata_update</a>	True	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</li> </ul>

### Example response

```
{
  "type": "application/astra-executionHookOverride",
  "version": "1.0",
  "id": "c11af802-5e53-5897-8cd9-2de730494be3",
  "executionHookID": "eb863cc6-0d9a-454d-8ef7-81b7cac91929",
  "enabled": "false",
  "appID": "4b43c2f7-bffa-4f60-b595-d98a05b64bc9",
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

### Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	

Name	Type	Required	Description
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

## Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

## Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

## Definitions

## See Definitions

type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[type_astra_label]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Modify an execution hook override resource

PUT

/accounts/{account\_id}/k8s/v1/apps/{app\_id}/executionHookOverrides/{executionHookOverride\_id}

Replaces the entire stored resource with the supplied JSON request body while preserving key values that are not user-modifiable.

### Side Effects

- Any execution hook with a hookType value of "netapp" that applies to the specified application will be disabled if the value of enabled is changed from "true" to "false" during the replace operation.
- Any execution hook with a hookType value of "netapp" that applies to the specified application will be enabled if the value of enabled is changed from "false" to "true" during the replace operation.

## Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource  • example: {{.Account}}
app_id	string	path	True	ID of the containing app resource
executionHookOverride_id	string	path	True	ID of the executionHookOverride collection to list

## Request Body

Replaces the entire stored resource with the supplied JSON request body while preserving key values that are not user-modifiable.

## Side Effects

- Any execution hook with a hookType value of "netapp" that applies to the specified application will be disabled if the value of enabled is changed from "true" to "false" during the replace operation.
- Any execution hook with a hookType value of "netapp" that applies to the specified application will be enabled if the value of enabled is changed from "false" to "true" during the replace operation.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are:  • "application/astra-executionHookOverride"
version	string	True	Version of the resource. Defined values are:  • "1.0"

Name	Type	Required	Description
id	string	False	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the UUIDv4 Schema</li> </ul>
executionHookID	string	False	JSON string containing the ID of an execution hook. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema Only allows the executionHookID of an execution hook resource with a hookType value of "netapp".</li> </ul>
enabled	string	False	JSON string that indicates whether the execution hook is enabled for the specified application. Defined values are: <ul style="list-style-type: none"> <li>• "true" - The execution hook is enabled and will run in a specified order</li> <li>• "false" - The execution hook is disabled and cannot run</li> </ul>
appID	string	False	JSON string containing the associated ID of the application with which the override is linked. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>



Name	Type	Required	Description
metadata	<a href="#">type_astra_metadata_update</a>	False	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</li> </ul>

### Example request

```
{
  "type": "application/astra-executionHookOverride",
  "version": "1.0",
  "enabled": "false"
}
```

### Response

Status: 204, Indicates if the executionHookOverride resource was updated.

### Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	

Name	Type	Required	Description
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 409, Conflict

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

### Example response

```
{
  "type": "https://astra.netapp.io/problems/10",
  "title": "JSON resource conflict",
  "detail": "The request body JSON contains a field that conflicts with an idempotent value.",
  "status": "409"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

## Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example error response

```
{
  "type": "https://astra.netapp.io/problems/1",
  "title": "Resource not found",
  "detail": "The resource specified in the request URI wasn't found.",
  "status": "404"
}
```

## Definitions

## See Definitions

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[type_astra_label]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

### invalidFields

Name	Type	Required	Description
name	string	True	Name of the invalid request body field
reason	string	True	Reason why the request body field is invalid

## Delete an execution hook override resource

DELETE

/accounts/{account\_id}/k8s/v1/apps/{app\_id}/executionHookOverrides/{executionHookOverride\_id}

Removes the specified Execution Hook Override API resource.

### Side Effects

- Any execution hook with a hookType value of "netapp" that applies to the specified application will be enabled when a new execution hook override is deleted if it had an enabled value of "false".

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"><li>example: <code>{{.Account}}</code></li></ul>
app_id	string	path	True	ID of the containing app resource
executionHookOverride_id	string	path	True	ID of the executionHookOverride collection to list

### Response

Status: 204, Indicates if the executionHookOverride resource was deleted.

### Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	

Name	Type	Required	Description
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/1",
  "title": "Resource not found",
  "detail": "The resource specified in the request URI wasn't found.",
  "status": "404"
}
```

### Definitions



## See Definitions

invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

# Feature

## Feature overview

The Feature API provides read-only access to feature flag resources in order to determine which features are enabled or disabled in the system.

## List all features

GET `/accounts/{account_id}/core/v1/features`

Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

## Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"><li>example: {{.Account}}</li></ul>
include	string	query	False	Indicates which fields should be returned when listing a collection.  URL examples: "include=id", "include=id,name"  OpenAPI examples: "id"

Name	Type	In	Required	Description
limit	string	query	False	<p>Indicates the maximum number of resources to return when listing a collection.</p> <p>URL examples: "limit=2"</p> <p>OpenAPI examples: "2"</p>
filter	string	query	False	<p>Indicates which fields should be matched in order to return a resource when listing a collection.</p> <p>Supported operators are:</p> <ul style="list-style-type: none"> <li>• eq - Equality</li> <li>• lt/gt - Less than/Greater than</li> <li>• lte/gte - Less than or equals to/Greater than or equals to</li> </ul> <p>URL example: "filter=field%20eq%20%27value%27"</p> <p>OpenAPI examples: "field eq 'value'"</p>
count	string	query	False	<p>Indicates if the total number of resources should be returned in the metadata object.</p> <p>URL examples: "count=true"</p> <p>OpenAPI examples: "true"</p>

Name	Type	In	Required	Description
orderBy	string	query	False	Indicates the sort order of resource when listing a collection.  URL examples: "orderBy=name", "orderBy=name%20desc"  OpenAPI examples: "name desc"
skip	string	query	False	Indicates the number of resources to skip over when listing a collection.  URL examples: "skip=1"  OpenAPI examples: "1"

## Response

Status: 200, Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

Name	Type	Required	Description
items	array[Any of: <a href="#">feature_1.0_get_response_body</a> , array[]]	True	
metadata	<a href="#">type_astra_metadata_list</a>	True	

## Example response

```
{
  "type": "application/astra-features",
  "version": "1.0",
  "items": [
    {
      "type": "application/astra-feature",
      "version": "1.0",
      "id": "c1d4d2f7-9b30-45a2-9657-8b24f17a4fd1",
      "name": "astra.account.rbac",
      "isEnabled": "true",
      "metadata": {
        "labels": [],
        "creationTimestamp": "2021-02-19T22:10:22.448274Z",
        "modificationTimestamp": "2021-02-19T22:10:22.448274Z",
        "createdBy": "c9550bbb-e70b-4578-8504-07397f875bcb"
      }
    },
    {
      "type": "application/astra-feature",
      "version": "1.0",
      "id": "85c693cd-2f89-4944-982a-e885301162bd",
      "name": "astra.account.smtp",
      "isEnabled": "false",
      "metadata": {
        "labels": [],
        "creationTimestamp": "2021-02-19T22:10:22.448274Z",
        "modificationTimestamp": "2021-02-19T22:10:22.448274Z",
        "createdBy": "c9550bbb-e70b-4578-8504-07397f875bcb"
      }
    }
  ],
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

## Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

## Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

## Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	

Name	Type	Required	Description
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

### Definitions

## See Definitions

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### type\_astra\_metadata

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema

Name	Type	Required	Description
labels	array[type_astra_label]	True	
creationTimestamp	string	True	
modificationTimestamp	string	True	
createdBy	string	True	
modifiedBy	string	False	

### feature\_1.0\_get\_response\_body

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>• "application/astra-feature"</li></ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"><li>• "1.0"</li></ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"><li>• Conforms to the UUIDv4 Schema</li></ul>



Name	Type	Required	Description
name	string	True	JSON string containing a name for the feature, in hierarchal dot notation. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> <li>• This string is internally validated to prevent XSS, Unicode, directory traversal, and SQL-injection attacks.</li> </ul>
isEnabled	string	True	JSON string containing a value indicating whether the feature flag is turned on or off. Defined values are: <ul style="list-style-type: none"> <li>• "true" - The feature flag is enabled.</li> <li>• "false" - The feature flag is disabled.</li> </ul>
metadata	<a href="#">type_astra_metadata</a>	True	Client and service-specified metadata associated with the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema</li> </ul>

#### type\_astra\_metadata\_list

Name	Type	Required	Description
continue	string	False	
count	number	False	
labels	array[ <a href="#">type_astra_label</a> ]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

## invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Retrieve a feature

GET /accounts/{account\_id}/core/v1/features/{feature\_id}

Returns the stored Feature API resource in the JSON response body.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"><li>example: {{.Account}}</li></ul>
feature_id	string	path	True	ID of the feature collection to list

### Response

Status: 200, Returns the stored Feature API resource in the JSON response body.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>"application/astra-feature"</li></ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"><li>"1.0"</li></ul>

Name	Type	Required	Description
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the UUIDv4 Schema</li> </ul>
name	string	True	JSON string containing a name for the feature, in hierarchal dot notation. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> <li>• This string is internally validated to prevent XSS, Unicode, directory traversal, and SQL-injection attacks.</li> </ul>
isEnabled	string	True	JSON string containing a value indicating whether the feature flag is turned on or off. Defined values are: <ul style="list-style-type: none"> <li>• "true" - The feature flag is enabled.</li> <li>• "false" - The feature flag is disabled.</li> </ul>
metadata	<a href="#">type_astra_metadata</a>	True	Client and service-specified metadata associated with the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema</li> </ul>

### Example response

```
{
  "type": "application/astra-feature",
  "version": "1.0",
  "id": "c4fdb3b8-9ca8-523d-b9d9-f7727b753612",
  "name": "astra.account.rbac",
  "isEnabled": "true",
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

### Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

## Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

## Definitions

## See Definitions

type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

type\_astra\_metadata

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema

Name	Type	Required	Description
labels	array[type_astra_label]	True	
creationTimestamp	string	True	
modificationTimestamp	string	True	
createdBy	string	True	
modifiedBy	string	False	

invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

# Group

## Group overview

The Group API provides CRUD (Create-Read-Update-Delete) access to Astra group resources.

## Create a new group

POST /accounts/{account\_id}/core/v1/groups

Indicates the desired values for the Group API resource to be created.

## Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"><li>example: {{.Account}}</li></ul>

## Request Body

Indicates the desired values for the Group API resource to be created.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>"application/astra-group"</li></ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"><li>"1.0"</li></ul>
name	string	False	The name of the group resource. If not specified on create, the value will be set to <ul style="list-style-type: none"><li>first Common Name (CN) Relative Distinguished Names (RDN) if found in the authID,</li><li>authID, otherwise. if not specified on update, the value will be preserved without modification. Defined values are:<ul style="list-style-type: none"><li>Minimum length: 1</li><li>Maximum length: 256</li></ul></li></ul>



Name	Type	Required	Description
authProvider	string	True	The authentication provider for the group resource. Defined values are: <ul style="list-style-type: none"> <li>• "ldap"</li> </ul>
authID	string	True	The Distinguished Name (DN) for an LDAP group. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 256</li> </ul>
metadata	<a href="#">type_astra_metadata_update</a>	False	Client and service-specified metadata associated with the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</li> </ul>

### Example request

```
{
  "type": "application/astra-group",
  "version": "1.0",
  "name": "engineering-group",
  "authProvider": "ldap",
  "authID": "CN=Engineering,CN=Groups,DC=example,DC=com"
}
```

## Response

Status: 201, Returns the newly created group resource in the JSON response body.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>• "application/astra-group"</li></ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"><li>• "1.0"</li></ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"><li>• Conforms to the UUIDv4 Schema</li></ul>
name	string	True	The name of the group resource. If not specified on create, the value will be set to <ul style="list-style-type: none"><li>• first Common Name (CN) Relative Distinguished Names (RDN) if found in the authID,</li><li>• authID, otherwise. if not specified on update, the value will be preserved without modification.</li></ul> Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 1</li><li>• Maximum length: 256</li></ul>

Name	Type	Required	Description
authProvider	string	True	<p>The authentication provider for the group resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "ldap"</li> </ul>
authID	string	True	<p>The Distinguished Name (DN) for an LDAP group.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 256</li> </ul>
metadata	<a href="#">type_astra_metadata_update</a>	True	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema            If not specified on create, a metadata object will be created with no labels.            If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</li> </ul>

## Example response

```
{
  "type": "application/astra-group",
  "version": "1.0",
  "id": "d8560bb2-7c87-5331-a78d-4e870b22e9a9",
  "name": "engineering-group",
  "authProvider": "ldap",
  "authID": "CN=Engineering,CN=Groups,DC=example,DC=com",
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

## Response

Status: 409, Conflict

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

### Example response

```
{
  "type": "https://astra.netapp.io/problems/10",
  "title": "JSON resource conflict",
  "detail": "The request body JSON contains a field that conflicts with
an idempotent value.",
  "status": "409"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/14",
  "title": "Unauthorized access",
  "detail": "The user isn't enabled.",
  "status": "403"
}
```

### Response

Status: 406, Not acceptable

Name	Type	Required	Description
type	string	True	
title	string	True	

Name	Type	Required	Description
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/32",
  "title": "Unsupported content type",
  "detail": "The response can't be returned in the requested format.",
  "status": "406"
}
```

### Response

Status: 500, Internal server error

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/34",
  "title": "Internal server error",
  "detail": "The server was unable to process this request.",
  "status": "500"
}
```

### Error

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/7",
  "title": "Invalid JSON payload",
  "detail": "The request body is not valid JSON.",
  "status": "400"
}
```

### Definitions

## See Definitions

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[type_astra_label]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

### invalidFields

Name	Type	Required	Description
name	string	True	Name of the invalid request body field
reason	string	True	Reason why the request body field is invalid



## List all groups

GET /accounts/{account\_id}/core/v1/groups

Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"><li>example: {{.Account}}</li></ul>
include	string	query	False	Indicates which fields should be returned when listing a collection.  URL examples: "include=id", "include=id,name"  OpenAPI examples: "id" <ul style="list-style-type: none"><li>example: id,authProvider, authID</li></ul>
limit	string	query	False	Indicates the maximum number of resources to return when listing a collection.  URL examples: "limit=2"  OpenAPI examples: "2"

Name	Type	In	Required	Description
filter	string	query	False	<p>Indicates which fields should be matched in order to return a resource when listing a collection.</p> <p>Supported operators are:</p> <ul style="list-style-type: none"> <li>• eq - Equality</li> <li>• lt/gt - Less than/Greater than</li> <li>• lte/gte - Less than or equals to/Greater than or equals to</li> </ul> <p>URL example: "filter=field%20eq%20%27value%27"</p> <p>OpenAPI examples: "field eq 'value'"</p>
orderBy	string	query	False	<p>Indicates the sort order of resource when listing a collection.</p> <p>URL examples: "orderBy=name", "orderBy=name%20desc"</p> <p>OpenAPI examples: "name desc"</p>
skip	string	query	False	<p>Indicates the number of resources to skip over when listing a collection.</p> <p>URL examples: "skip=1"</p> <p>OpenAPI examples: "1"</p>

Name	Type	In	Required	Description
count	string	query	False	Indicates if the total number of resources should be returned in the metadata object.  URL examples: "count=true"  OpenAPI examples: "true"
continue		query	False	Indicates the token to resume listing from.  URL examples: "continue=<continue token="" from="" collection="" metadata=""></continue>  OpenAPI examples: "<continue token="" from="" collection="" metadata=""></continue>&lt;/continue&gt;"

## Response

Status: 200, Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

Name	Type	Required	Description
items	array[Any of: <a href="#">group_1.0_get_response_body</a> , array[]]	True	
metadata	<a href="#">type_astra_metadata_list</a>	True	

## Example response

```
{
  "type": "application/astra-groups",
  "version": "1.0",
  "items": [
    [
      "11c0cfa1-4f27-4ef7-a21c-cb452fc5c9aa",
      "ldap",
      "CN=Testers,CN=groups,DC=example,DC=com"
    ],
    [
      "e324ec3a-706d-4f57-a95d-1d88c03e7b73",
      "ldap",
      "CN=Admins,CN=groups,DC=example,DC=com"
    ],
    [
      "3070c84d-129b-4017-82a8-2c26a42dd77e",
      "ldap",
      "CN=SREs,CN=groups,DC=example,DC=com"
    ]
  ],
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

## Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

Name	Type	Required	Description
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 500, Internal server error

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/34",
  "title": "Internal server error",
  "detail": "The server was unable to process this request.",
  "status": "500"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/1",
  "title": "Resource not found",
  "detail": "The resource specified in the request URI wasn't found.",
  "status": "404"
}
```

### Definitions

## See Definitions

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[type_astra_label]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

### group\_1.0\_get\_response\_body

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>• "application/astra-group"</li></ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"><li>• "1.0"</li></ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"><li>• Conforms to the UUIDv4 Schema</li></ul>

Name	Type	Required	Description
name	string	True	<p>The name of the group resource. If not specified on create, the value will be set to</p> <ul style="list-style-type: none"> <li>• first Common Name (CN) Relative Distinguished Names (RDN) if found in the authID,</li> <li>• authID, otherwise. if not specified on update, the value will be preserved without modification. Defined values are:</li> <li>• Minimum length: 1</li> <li>• Maximum length: 256</li> </ul>
authProvider	string	True	<p>The authentication provider for the group resource. Defined values are:</p> <ul style="list-style-type: none"> <li>• "Idap"</li> </ul>
authID	string	True	<p>The Distinguished Name (DN) for an LDAP group. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 256</li> </ul>



Name	Type	Required	Description
metadata	<a href="#">type_astra_metadata_update</a>	True	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>Conforms to the Astra Metadata Schema</li> </ul> <p>If not specified on create, a metadata object will be created with no labels.</p> <p>If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</p>

#### type\_astra\_metadata\_list

Name	Type	Required	Description
continue	string	False	
count	number	False	
labels	array[ <a href="#">type_astra_label</a> ]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

#### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Retrieve a group

GET /accounts/{account\_id}/core/v1/groups/{group\_id}

Returns the stored Group API resource in the JSON response body.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"><li>example: <code>{{.Account}}</code></li></ul>
group_id	string	path	True	ID of the group collection to list

### Response

Status: 200, Returns the stored Group API resource in the JSON response body.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>"application/astra-group"</li></ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"><li>"1.0"</li></ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"><li>Conforms to the UUIDv4 Schema</li></ul>

Name	Type	Required	Description
name	string	True	<p>The name of the group resource. If not specified on create, the value will be set to</p> <ul style="list-style-type: none"> <li>• first Common Name (CN) Relative Distinguished Names (RDN) if found in the authID,</li> <li>• authID, otherwise. if not specified on update, the value will be preserved without modification. Defined values are:</li> <li>• Minimum length: 1</li> <li>• Maximum length: 256</li> </ul>
authProvider	string	True	<p>The authentication provider for the group resource. Defined values are:</p> <ul style="list-style-type: none"> <li>• "ldap"</li> </ul>
authID	string	True	<p>The Distinguished Name (DN) for an LDAP group. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 256</li> </ul>

Name	Type	Required	Description
metadata	<a href="#">type_astra_metadata_update</a>	True	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</li> </ul>

### Example response

```
{
  "type": "application/astra-group",
  "version": "1.0",
  "id": "d8560bb2-7c87-5331-a78d-4e870b22e9a9",
  "name": "engineering-group",
  "authProvider": "ldap",
  "authID": "CN=Engineering,CN=groups,DC=example,DC=com",
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	

Name	Type	Required	Description
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/12",
  "title": "Invalid headers",
  "detail": "The request headers are invalid.",
  "status": "400"
}
```

### Response

Status: 500, Internal server error

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/34",
  "title": "Internal server error",
  "detail": "The server was unable to process this request.",
  "status": "500"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example error response

```
{
  "type": "https://astra.netapp.io/problems/1",
  "title": "Resource not found",
  "detail": "The resource specified in the request URI wasn't found.",
  "status": "404"
}
```

## Definitions

## See Definitions

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[type_astra_label]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Modify a group

PUT /accounts/{account\_id}/core/v1/groups/{group\_id}

Replaces the entire stored resource with the supplied JSON request body while preserving key values that are not user-modifiable.

### Parameters



Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"> <li>example: <code>{{.Account}}</code></li> </ul>
group_id	string	path	True	ID of the group collection to list

### Request Body

Replaces the entire stored resource with the supplied JSON request body while preserving key values that are not user-modifiable.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"> <li>"application/astra-group"</li> </ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>"1.0"</li> </ul>
id	string	False	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>Conforms to the UUIDv4 Schema</li> </ul>

Name	Type	Required	Description
name	string	False	<p>The name of the group resource. If not specified on create, the value will be set to</p> <ul style="list-style-type: none"> <li>• first Common Name (CN) Relative Distinguished Names (RDN) if found in the authID,</li> <li>• authID, otherwise. if not specified on update, the value will be preserved without modification. Defined values are:</li> <li>• Minimum length: 1</li> <li>• Maximum length: 256</li> </ul>
authProvider	string	False	<p>The authentication provider for the group resource. Defined values are:</p> <ul style="list-style-type: none"> <li>• "ldap"</li> </ul>
authID	string	False	<p>The Distinguished Name (DN) for an LDAP group. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 256</li> </ul>

Name	Type	Required	Description
metadata	<a href="#">type_astra_metadata_update</a>	False	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema</li> </ul> <p>If not specified on create, a metadata object will be created with no labels.</p> <p>If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</p>

### Example request

```
{
  "type": "application/astra-group",
  "version": "1.0",
  "name": "my-qa-group",
  "authID": "CN=QA,CN=Groups,DC=example,DC=com"
}
```

### Response

Status: 204, Indicates if the group resource was updated.

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	

Name	Type	Required	Description
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/7",
  "title": "Invalid JSON payload",
  "detail": "The request body is not valid JSON.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Response

Status: 500, Internal server error

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/34",
  "title": "Internal server error",
  "detail": "The server was unable to process this request.",
  "status": "500"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/1",
  "title": "Resource not found",
  "detail": "The resource specified in the request URI wasn't found.",
  "status": "404"
}
```

## Definitions

### See Definitions

type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[type_astra_label]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Delete a group

DELETE /accounts/{account\_id}/core/v1/groups/{group\_id}

Removes the specified Group API resource.

### Side Effects

- The following resources associated with the group are deleted:

- Role bindings referring to the group

## Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource  • example: {{.Account}}
group_id	string	path	True	ID of the group collection to list

## Response

Status: 204, Indicates if the group resource was deleted.

## Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/12",
  "title": "Invalid headers",
  "detail": "The request headers are invalid.",
  "status": "400"
}
```

## Response

Status: 500, Internal server error

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/34",
  "title": "Internal server error",
  "detail": "The server was unable to process this request.",
  "status": "500"
}
```

## Error

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	



## Example error response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

## Definitions

### See Definitions

invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Hook source

### Hook source overview

The Hook Source API provides CRUD (Create-Read-Update-Delete) access to hookSource resources in order to allow simple management of hook sources separate from the management of execution hook resources. For example, a single hook source can be referenced by multiple execution hooks which avoid duplicate hook sources and make it a single API call to update one hook source, even if it is used by multiple execution hook resources.

### Create a new hook source

POST /accounts/{account\_id}/core/v1/hookSources

Indicates the desired values for the Hook Source API resource to be created.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"> <li>example: <code>{{.Account}}</code></li> </ul>

### Request Body

Indicates the desired values for the Hook Source API resource to be created.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"> <li>"application/astra-hookSource"</li> </ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>"1.0"</li> </ul>
name	string	True	JSON string containing a user-specified name for the resource. Defined values are: <ul style="list-style-type: none"> <li>Minimum length: 1</li> <li>Maximum length: 63 The name is required to be unique within all hook source resources.</li> </ul>
sourceType	string	True	JSON string defining the hook source type. Defined values are: <ul style="list-style-type: none"> <li>"script" - Shell script. The plaintext source must not contain binary data or carriage-return characters, otherwise, an error is returned.</li> </ul>

Name	Type	Required	Description
source	string	True	<p>JSON string containing the script to be run in base64 format.            Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 0</li> <li>• Maximum length: 131072</li> <li>• Conforms to the base64 Encoded Data Schema                The maximum size of a source value is 128 KiB when encoded using base64.</li> </ul>
description	string	False	<p>JSON string containing a user-specified description of the hook source.            Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 0</li> <li>• Maximum length: 511</li> </ul>
metadata	<a href="#">type_astra_metadata_update</a>	False	<p>Client and service-specified metadata associated with the resource.            Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema                If not specified on create, a metadata object will be created with no labels.                If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</li> </ul>

## Example request

```
{
  "type": "application/astra-hookSource",
  "version": "1.0",
  "name": "Payroll script",
  "sourceType": "script",
  "source": "ZWNobyAIVkhKaGJuTWdVbWxuYUhSeklRPT0iIHwgYmFzZTY0IC1k",
  "description": "Pre and post hook script for payroll"
}
```

## Response

Status: 201, Returns the newly created hookSource resource in the JSON response body.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>• "application/astra-hookSource"</li></ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"><li>• "1.0"</li></ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"><li>• Conforms to the UUIDv4 Schema</li></ul>

Name	Type	Required	Description
name	string	True	<p>JSON string containing a user-specified name for the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63 The name is required to be unique within all hook source resources.</li> </ul>
private	string	True	<p>JSON string indicating whether the source field will be exposed in APIs or be intentionally left blank.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - The source value is private and will not be exposed through the API.</li> <li>• "false" - The source value is not private and will be exposed through the API.</li> </ul>
preloaded	string	True	<p>JSON string that indicates whether the source was preloaded.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - The source was preloaded.</li> <li>• "false" - The source was not preloaded. Preloaded hook source resources are read only.</li> </ul>

Name	Type	Required	Description
sourceType	string	True	<p>JSON string defining the hook source type. Defined values are:</p> <ul style="list-style-type: none"> <li>• "script" - Shell script. The plaintext source must not contain binary data or carriage-return characters, otherwise, an error is returned.</li> </ul>
source	string	False	<p>JSON string containing the script to be run in base64 format. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 0</li> <li>• Maximum length: 131072</li> <li>• Conforms to the base64 Encoded Data Schema The maximum size of a source value is 128 KiB when encoded using base64.</li> </ul>
sourceMD5Checksum	string	True	<p>JSON string containing the MD5 checksum computed for the value of the "source" key. Defined values are:</p> <ul style="list-style-type: none"> <li>• Defined regex is: "^[0-9a-fA-F]{32}\$"</li> </ul>
description	string	False	<p>JSON string containing a user-specified description of the hook source. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 0</li> <li>• Maximum length: 511</li> </ul>

Name	Type	Required	Description
metadata	<a href="#">type_astra_metadata_update</a>	True	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>Conforms to the Astra Metadata Schema</li> </ul> <p>If not specified on create, a metadata object will be created with no labels.</p> <p>If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</p>

### Example response

```
{
  "type": "application/astra-hookSource",
  "version": "1.0",
  "id": "fae6dfbb-ecb8-58ff-a116-6357eb7c956a",
  "name": "Payroll script",
  "private": "false",
  "preloaded": "false",
  "sourceType": "script",
  "source": "ZWNobyAIVkhKaGJuTWdVbWxuYUhSeklRPT0iIHwgYmFzZTY0IC1k",
  "sourceMD5Checksum": "b1a4b8b0144c3f6be553b626130ca145",
  "description": "Pre and post hook script for payroll",
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

### Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields



### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 409, Conflict

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

### Example response

```
{
  "type": "https://astra.netapp.io/problems/10",
  "title": "JSON resource conflict",
  "detail": "The request body JSON contains a field that conflicts with an idempotent value.",
  "status": "409"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

## Definitions

### See Definitions

type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[type_astra_label]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

invalidFields

Name	Type	Required	Description
name	string	True	Name of the invalid request body field
reason	string	True	Reason why the request body field is invalid

## List all hook sources

GET /accounts/{account\_id}/core/v1/hookSources

Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource  • example: {{.Account}}
include	string	query	False	Indicates which fields should be returned when listing a collection.  URL examples: "include=id", "include=id,name"  OpenAPI examples: "id"
limit	string	query	False	Indicates the maximum number of resources to return when listing a collection.  URL examples: "limit=2"  OpenAPI examples: "2"

Name	Type	In	Required	Description
filter	string	query	False	<p>Indicates which fields should be matched in order to return a resource when listing a collection.</p> <p>Supported operators are:</p> <ul style="list-style-type: none"> <li>• eq - Equality</li> <li>• lt/gt - Less than/Greater than</li> <li>• lte/gte - Less than or equals to/Greater than or equals to</li> </ul> <p>URL example: "filter=field%20eq%20%27value%27"</p> <p>OpenAPI examples: "field eq 'value'"</p>

## Response

Status: 200, Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

Name	Type	Required	Description
items	array[Any of: <a href="#">hookSource_1.0_get_response_body</a> , array[]]	True	
metadata	<a href="#">type_astra_metadata_list</a>	True	

## Example response

```
{
  "type": "application/astra-hookSources",
  "version": "1.0",
  "items": [
    {
      "type": "application/astra-hookSource",
      "version": "1.0",
      "id": "2d6154dd-6863-4a26-8017-6be092b8b0bd",
      "name": "Payroll script",
      "private": "false",
      "preloaded": "false",
      "sourceType": "script",
      "source": "ZWNobyAIVkhKaGJuTWdVbWxuYUhSeklRPT0iIHwgYmFzZTY0IC1k",
      "sourceMD5Checksum": "b1a4b8b0144c3f6be553b626130ca145",
      "description": "Pre and post hook script for payroll",
      "metadata": {
        "labels": [],
        "creationTimestamp": "2020-08-06T12:24:52.256624Z",
        "modificationTimestamp": "2020-08-06T12:24:52.256624Z",
        "createdBy": "64182074-ddb6-42eb-b7f4-b6a02cf9ba7c"
      }
    },
    {
      "type": "application/astra-hookSource",
      "version": "1.0",
      "id": "b71c6793-aa9b-4654-92ef-60663a0aedac",
      "name": "Payroll script",
      "private": "true",
      "preloaded": "false",
      "sourceType": "script",
      "sourceMD5Checksum": "6469094cb279f6d91358bc5062d15baf",
      "description": "Pre and post hook script for payroll",
      "metadata": {
        "labels": [],
        "creationTimestamp": "2020-08-08T12:24:52.256624Z",
        "modificationTimestamp": "2020-08-08T12:24:52.256624Z",
        "createdBy": "64182074-ddb6-42eb-b7f4-b6a02cf9ba7c"
      }
    },
    {
      "type": "application/astra-hookSource",
      "version": "1.0",
      "id": "682fe9d2-52d2-4c30-bcec-ecefddde359c",
      "name": "NetApp preloaded ",

```

```

    "private": "true",
    "preloaded": "false",
    "sourceType": "script",
    "sourceMD5Checksum": "7864495443c1087104520a320a2225c9",
    "description": "NetApp Postgres preloaded snapshot pre and post",
    "metadata": {
      "labels": [],
      "creationTimestamp": "2020-07-12T12:24:52.256624Z",
      "modificationTimestamp": "2020-07-12T12:24:52.256624Z",
      "createdBy": "4428cfd4-27fd-4248-9f49-bd3a02043ab8"
    }
  },
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}

```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```

{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}

```

## Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

## Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

## Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	



## Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

## Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

## Definitions

## See Definitions

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[type_astra_label]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

### hookSource\_1.0\_get\_response\_body

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>• "application/astra-hookSource"</li></ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"><li>• "1.0"</li></ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"><li>• Conforms to the UUIDv4 Schema</li></ul>

Name	Type	Required	Description
name	string	True	<p>JSON string containing a user-specified name for the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul> <p>The name is required to be unique within all hook source resources.</p>
private	string	True	<p>JSON string indicating whether the source field will be exposed in APIs or be intentionally left blank.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - The source value is private and will not be exposed through the API.</li> <li>• "false" - The source value is not private and will be exposed through the API.</li> </ul>
preloaded	string	True	<p>JSON string that indicates whether the source was preloaded.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - The source was preloaded.</li> <li>• "false" - The source was not preloaded. Preloaded hook source resources are read only.</li> </ul>

Name	Type	Required	Description
sourceType	string	True	<p>JSON string defining the hook source type. Defined values are:</p> <ul style="list-style-type: none"> <li>• "script" - Shell script. The plaintext source must not contain binary data or carriage-return characters, otherwise, an error is returned.</li> </ul>
source	string	False	<p>JSON string containing the script to be run in base64 format. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 0</li> <li>• Maximum length: 131072</li> <li>• Conforms to the base64 Encoded Data Schema The maximum size of a source value is 128 KiB when encoded using base64.</li> </ul>
sourceMD5Checksum	string	True	<p>JSON string containing the MD5 checksum computed for the value of the "source" key. Defined values are:</p> <ul style="list-style-type: none"> <li>• Defined regex is: "^[0-9a-fA-F]{32}\$"</li> </ul>
description	string	False	<p>JSON string containing a user-specified description of the hook source. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 0</li> <li>• Maximum length: 511</li> </ul>

Name	Type	Required	Description
metadata	<a href="#">type_astra_metadata_update</a>	True	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>Conforms to the Astra Metadata Schema</li> </ul> <p>If not specified on create, a metadata object will be created with no labels.</p> <p>If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</p>

#### type\_astra\_metadata\_list

Name	Type	Required	Description
continue	string	False	
count	number	False	
labels	array[ <a href="#">type_astra_label</a> ]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

#### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Retrieve a hook source

GET /accounts/{account\_id}/core/v1/hookSources/{hookSource\_id}

Returns the stored Hook Source API resource in the JSON response body.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"><li>example: <code>{{.Account}}</code></li></ul>
hookSource_id	string	path	True	ID of the hookSource collection to list

### Response

Status: 200, Returns the stored Hook Source API resource in the JSON response body.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>"application/astra-hookSource"</li></ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"><li>"1.0"</li></ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"><li>Conforms to the UUIDv4 Schema</li></ul>

Name	Type	Required	Description
name	string	True	<p>JSON string containing a user-specified name for the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul> <p>The name is required to be unique within all hook source resources.</p>
private	string	True	<p>JSON string indicating whether the source field will be exposed in APIs or be intentionally left blank.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - The source value is private and will not be exposed through the API.</li> <li>• "false" - The source value is not private and will be exposed through the API.</li> </ul>
preloaded	string	True	<p>JSON string that indicates whether the source was preloaded.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - The source was preloaded.</li> <li>• "false" - The source was not preloaded. Preloaded hook source resources are read only.</li> </ul>

Name	Type	Required	Description
sourceType	string	True	<p>JSON string defining the hook source type. Defined values are:</p> <ul style="list-style-type: none"> <li>• "script" - Shell script. The plaintext source must not contain binary data or carriage-return characters, otherwise, an error is returned.</li> </ul>
source	string	False	<p>JSON string containing the script to be run in base64 format. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 0</li> <li>• Maximum length: 131072</li> <li>• Conforms to the base64 Encoded Data Schema The maximum size of a source value is 128 KiB when encoded using base64.</li> </ul>
sourceMD5Checksum	string	True	<p>JSON string containing the MD5 checksum computed for the value of the "source" key. Defined values are:</p> <ul style="list-style-type: none"> <li>• Defined regex is: "^[0-9a-fA-F]{32}\$"</li> </ul>
description	string	False	<p>JSON string containing a user-specified description of the hook source. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 0</li> <li>• Maximum length: 511</li> </ul>



Name	Type	Required	Description
metadata	<a href="#">type_astra_metadata_update</a>	True	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</li> </ul>

### Example response

```
{
  "type": "application/astra-hookSource",
  "version": "1.0",
  "id": "fae6dfbb-ecb8-58ff-a116-6357eb7c956a",
  "name": "Payroll script",
  "private": "false",
  "preloaded": "false",
  "sourceType": "script",
  "source": "ZWNobyAIVkhKaGJuTWdVbWxuYUhSeklRPT0iIHwgYmFzZTY0IC1k",
  "sourceMD5Checksum": "b1a4b8b0144c3f6be553b626130ca145",
  "description": "Pre and post hook script for payroll",
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

### Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	

Name	Type	Required	Description
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

### Definitions

## See Definitions

type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[type_astra_label]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Modify a hook source

PUT /accounts/{account\_id}/core/v1/hookSources/{hookSource\_id}

Replaces the entire stored resource with the supplied JSON request body while preserving key values that are not user-modifiable.

### Side Effects

- Updating an existing source hook will immediately impact any future snapshots of applications that have matching execution hooks that use the updated source hook resource.

- The MD5 checksum is computed on the value of the "source" field and set as the value of the "sourceMD5Checksum" field.

## Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource  • example: {{.Account}}
hookSource_id	string	path	True	ID of the hookSource collection to list

## Request Body

Replaces the entire stored resource with the supplied JSON request body while preserving key values that are not user-modifiable.

## Side Effects

- Updating an existing source hook will immediately impact any future snapshots of applications that have matching execution hooks that use the updated source hook resource.
- The MD5 checksum is computed on the value of the "source" field and set as the value of the "sourceMD5Checksum" field.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are:  • "application/astra-hookSource"
version	string	True	Version of the resource. Defined values are:  • "1.0"
id	string	False	Globally unique identifier of the resource. Defined values are:  • Conforms to the UUIDv4 Schema

Name	Type	Required	Description
name	string	False	<p>JSON string containing a user-specified name for the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul> <p>The name is required to be unique within all hook source resources.</p>
private	string	False	<p>JSON string indicating whether the source field will be exposed in APIs or be intentionally left blank.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - The source value is private and will not be exposed through the API.</li> <li>• "false" - The source value is not private and will be exposed through the API.</li> </ul>
preloaded	string	False	<p>JSON string that indicates whether the source was preloaded.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - The source was preloaded.</li> <li>• "false" - The source was not preloaded. Preloaded hook source resources are read only.</li> </ul>

Name	Type	Required	Description
sourceType	string	False	<p>JSON string defining the hook source type. Defined values are:</p> <ul style="list-style-type: none"> <li>• "script" - Shell script. The plaintext source must not contain binary data or carriage-return characters, otherwise, an error is returned.</li> </ul>
source	string	False	<p>JSON string containing the script to be run in base64 format. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 0</li> <li>• Maximum length: 131072</li> <li>• Conforms to the base64 Encoded Data Schema The maximum size of a source value is 128 KiB when encoded using base64.</li> </ul>
sourceMD5Checksum	string	False	<p>JSON string containing the MD5 checksum computed for the value of the "source" key. Defined values are:</p> <ul style="list-style-type: none"> <li>• Defined regex is: "^[0-9a-fA-F]{32}\$"</li> </ul>
description	string	False	<p>JSON string containing a user-specified description of the hook source. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 0</li> <li>• Maximum length: 511</li> </ul>



Name	Type	Required	Description
metadata	<a href="#">type_astra_metadata_update</a>	False	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema</li> </ul> <p>If not specified on create, a metadata object will be created with no labels.</p> <p>If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</p>

### Example request

```
{
  "type": "application/astra-hookSource",
  "version": "1.0",
  "source": "ZWNobyAiVkhKaGJuTWdVbWxuYUhSeklRPT0iIHwgYmFzZTY0IC1k",
  "description": "Pre and post hook script for order processing v2"
}
```

### Response

Status: 204, Indicates if the hookSource resource was updated.

### Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	

Name	Type	Required	Description
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 409, Conflict

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

### Example response

```
{
  "type": "https://astra.netapp.io/problems/10",
  "title": "JSON resource conflict",
  "detail": "The request body JSON contains a field that conflicts with an idempotent value.",
  "status": "409"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

## Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example error response

```
{
  "type": "https://astra.netapp.io/problems/1",
  "title": "Resource not found",
  "detail": "The resource specified in the request URI wasn't found.",
  "status": "404"
}
```

## Definitions

## See Definitions

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[type_astra_label]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

### invalidFields

Name	Type	Required	Description
name	string	True	Name of the invalid request body field
reason	string	True	Reason why the request body field is invalid

## Delete a hook source

DELETE /accounts/{account\_id}/core/v1/hookSources/{hookSource\_id}

Removes the specified Hook Source API resource.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"><li>example: <code>{{.Account}}</code></li></ul>
hookSource_id	string	path	True	ID of the hookSource collection to list

### Response

Status: 204, Indicates if the hookSource resource was deleted.

### Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	

Name	Type	Required	Description
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/1",
  "title": "Resource not found",
  "detail": "The resource specified in the request URI wasn't found.",
  "status": "404"
}
```

### Definitions



## See Definitions

invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

# Kubernetes API Resource

## Kubernetes API Resource overview

The API Resource API provides Read <sup>®</sup> access to Kubernetes API resources to filter the ones supported by Astra on a given cluster.

## List the K8s API resources for a managed cluster

GET

/accounts/{account\_id}/topology/v1/managedClusters/{managedCluster\_id}/apiResources

Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"><li>example: {{.Account}}</li></ul>
managedCluster_id	string	path	True	ID of the containing managedCluster resource

Name	Type	In	Required	Description
include	string	query	False	<p>Indicates which fields should be returned when listing a collection.</p> <p>URL examples: "include=id", "include=id,name"</p> <p>OpenAPI examples: "id"</p> <ul style="list-style-type: none"> <li>example: id,kind,apiVersion</li> </ul>
limit	string	query	False	<p>Indicates the maximum number of resources to return when listing a collection.</p> <p>URL examples: "limit=2"</p> <p>OpenAPI examples: "2"</p>

## Response

Status: 200, Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

Name	Type	Required	Description
items	array[ <a href="#">Any of: apiResource_1.0_get_response_body</a> , array[]]	True	
metadata	<a href="#">type_astra_metadata_list</a>	True	

## Example response

```
{
  "type": "application/astra-apiResources",
  "version": "1.0",
  "items": [
    [
      "e280ff62-be35-4f31-a31b-a210a1ad1b33",
      "ClusterRole",
      "rbac.authorization.k8s.io/v1"
    ],
    [
      "e8507dad-d33f-44b3-9c15-ec55ba6f6473",
      "ClusterRoleBinding",
      "rbac.authorization.k8s.io/v1"
    ]
  ],
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	

Name	Type	Required	Description
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't found.",
  "status": "404"
}
```

## Definitions

## See Definitions

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### type\_astra\_metadata

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema

Name	Type	Required	Description
labels	array[type_astra_label]	True	
creationTimestamp	string	True	
modificationTimestamp	string	True	
createdBy	string	True	
modifiedBy	string	False	

### apiResource\_1.0\_get\_response\_body

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>• "application/astra-apiResource"</li></ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"><li>• "1.0"</li></ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"><li>• Conforms to the UUIDv4 Schema</li></ul>

Name	Type	Required	Description
apiVersion	string	True	<p>JSON string representing the API version of the resource, as set in or by Kubernetes. APIVersion defines the versioned schema for this object representation. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: <a href="https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources">https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources</a></p>
kind	string	True	<p>JSON string representing the kind of the resource, as set in or by Kubernetes. The kind field uses camel case and contains a string value representing the REST resource this object represents. Servers might infer this from the endpoint the client submits requests to. It cannot be updated. More info: <a href="https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds">https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds</a></p>
metadata	<a href="#">type_astra_metadata</a>	True	<p>Client and service-specified metadata associated with the resource. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema</li> </ul>



## type\_astra\_metadata\_list

Name	Type	Required	Description
continue	string	False	
count	number	False	
labels	array[type_astra_label]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

## invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Retrieve a K8s API resource

GET

```
/accounts/{account_id}/topology/v1/managedClusters/{managedCluster_id}/apiResources/{apiResource_id}
```

Returns the specific API resource in the JSON response body.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"><li>example: <code>{{.Account}}</code></li></ul>
managedCluster_id	string	path	True	ID of the containing managedCluster resource
apiResource_id	string	path	True	ID of the apiResource collection to list

## Response

Status: 200, Returns the specific API resource in the JSON response body.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>• "application/astra-apiResource"</li></ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"><li>• "1.0"</li></ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"><li>• Conforms to the UUIDv4 Schema</li></ul>
apiVersion	string	True	JSON string representing the API version of the resource, as set in or by Kubernetes. APIVersion defines the versioned schema for this object representation. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: <a href="https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources">https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources</a>

Name	Type	Required	Description
kind	string	True	<p>JSON string representing the kind of the resource, as set in or by Kubernetes.</p> <p>The kind field uses camel case and contains a string value representing the REST resource this object represents. Servers might infer this from the endpoint the client submits requests to. It cannot be updated.</p> <p>More info:  <a href="https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds">https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds</a></p>
metadata	<a href="#">type_astra_metadata</a>	True	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema</li> </ul>

### Example response

```
{
  "type": "application/astra-apiResource",
  "version": "1.0",
  "id": "e280ff62-be35-4f31-a31b-a210a1ad1b33",
  "kind": "ClusterRole",
  "apiVersion": "rbac.authorization.k8s.io/v1",
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

## Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

## Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

## Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

## Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	

Name	Type	Required	Description
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

### Definitions

## See Definitions

type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

type\_astra\_metadata

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema

Name	Type	Required	Description
labels	array[type_astra_label]	True	
creationTimestamp	string	True	
modificationTimestamp	string	True	
createdBy	string	True	
modifiedBy	string	False	

invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

# LDAP Group

## LDAP Group overview

The LDAP Group API provides read-only access to LDAP groups within the configured LDAP server.

## List all LDAP groups

GET /accounts/{account\_id}/core/v1/ldapGroups

Returns a JSON array of JSON objects containing the results of the request URL.

## Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"><li>example: {{.Account}}</li></ul>
include	string	query	False	Indicates which fields should be returned when listing a collection.  URL examples: "include=id", "include=id,name"  OpenAPI examples: "id" <ul style="list-style-type: none"><li>example: id,cn,dn</li></ul>
limit	string	query	False	Indicates the maximum number of resources to return when listing a collection.  URL examples: "limit=2"  OpenAPI examples: "2"



Name	Type	In	Required	Description
filter	string	query	False	<p>Indicates which fields should be matched in order to return a resource when listing a collection.</p> <p>Supported operators are:</p> <ul style="list-style-type: none"> <li>• eq - Equality</li> <li>• lt/gt - Less than/Greater than</li> <li>• lte/gte - Less than or equals to/Greater than or equals to</li> </ul> <p>URL example: "filter=field%20eq%20%27value%27"</p> <p>OpenAPI examples: "field eq 'value'"</p>
continue		query	False	<p>Indicates the token to resume listing from.</p> <p>URL examples: "continue=&lt;continue token="" from="" collection="" metadata=""&gt;"&lt;/continue&gt;</p> <p>OpenAPI examples: "&lt;continue token="" from="" collection="" metadata=""&gt;"&lt;/continue&gt;&amp;lt;/continue&amp;gt;"</p>

## Response

Status: 200, Returns a JSON array of JSON objects containing the results of the request URL.

Name	Type	Required	Description
items	array[Any of: ldapGroup_1.0_get_response_body, array[]]	True	
metadata	type_astra_metadata_list	True	

### Example response

```
{
  "type": "application/astra-ldapGroups",
  "version": "1.0",
  "items": [
    [
      "4a461f57-70e6-5732-882e-8d5f684f15a1",
      "boulder_sysadmins",
      "cn=boulder_sysadmins,ou=groups,dc=example,dc=com"
    ],
    [
      "da4bbb6f-8f2c-57eb-a9cf-6eefbf9e35d",
      "rtp_sysadmins",
      "cn=rtp_sysadmins,ou=groups,dc=example,dc=com"
    ]
  ],
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

Name	Type	Required	Description
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/14",
  "title": "Unauthorized access",
  "detail": "The user isn't enabled.",
  "status": "403"
}
```

### Response

Status: 406, Not acceptable

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/32",
  "title": "Unsupported content type",
  "detail": "The response can't be returned in the requested format.",
  "status": "406"
}
```

### Response

Status: 500, Internal server error

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/34",
  "title": "Internal server error",
  "detail": "The server was unable to process this request.",
  "status": "500"
}
```

## Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example error response

```
{
  "type": "https://astra.netapp.io/problems/1",
  "title": "Resource not found",
  "detail": "The resource specified in the request URI wasn't found.",
  "status": "404"
}
```

## Definitions

## See Definitions

type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

type\_astra\_metadata

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema

Name	Type	Required	Description
labels	array[type_astra_label]	True	
creationTimestamp	string	True	
modificationTimestamp	string	True	
createdBy	string	True	
modifiedBy	string	False	

ldapGroup\_1.0\_get\_response\_body

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>• "application/astra-ldapGroup"</li></ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"><li>• "1.0"</li></ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"><li>• Conforms to the UUIDv4 Schema</li></ul>

Name	Type	Required	Description
cn	string	False	JSON string representing the LDAP group name. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>
dn	string	False	JSON string representing the distinguished name of the LDAP group. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to RFC 4514</li> </ul>
metadata	<a href="#">type_astra_metadata</a>	True	Client and service-specified metadata associated with the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema</li> </ul>

#### type\_astra\_metadata\_list

Name	Type	Required	Description
continue	string	False	
count	number	False	
labels	array[ <a href="#">type_astra_label</a> ]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

#### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter

Name	Type	Required	Description
reason	string	True	Reason why the query parameter is invalid

## Retrieve an LDAP group

GET /accounts/{account\_id}/core/v1/ldapGroups/{ldapGroup\_id}

Returns a JSON object representing the stored LDAP resource.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"> <li>example: <code>{{.Account}}</code></li> </ul>
ldapGroup_id	string	path	True	ID of the ldapGroup collection to list

### Response

Status: 200, Returns a JSON object representing the stored LDAP resource.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"> <li>"application/astra-ldapGroup"</li> </ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>"1.0"</li> </ul>



Name	Type	Required	Description
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the UUIDv4 Schema</li> </ul>
cn	string	False	JSON string representing the LDAP group name. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>
dn	string	False	JSON string representing the distinguished name of the LDAP group. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to RFC 4514</li> </ul>
metadata	<a href="#">type_astra_metadata</a>	True	Client and service-specified metadata associated with the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema</li> </ul>

### Example response

```
{
  "type": "application/astra-ldapGroup",
  "version": "1.0",
  "id": "cb05a289-a7a1-502c-a2bc-7e75dba8fddc",
  "cn": "boulder_sysadmins",
  "dn": "cn=boulder_sysadmins,ou=groups,dc=example,dc=com",
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

### Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

## Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

## Definitions

## See Definitions

type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

type\_astra\_metadata

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema

Name	Type	Required	Description
labels	array[type_astra_label]	True	
creationTimestamp	string	True	
modificationTimestamp	string	True	
createdBy	string	True	
modifiedBy	string	False	

invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## LDAP User

### LDAP User overview

The LDAP User API provides read-only access to LDAP users within the configured LDAP server.

### List all LDAP users

GET /accounts/{account\_id}/core/v1/ldapUsers

Returns a JSON array of JSON objects containing the results of the request URL.

## Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"><li>example: {{.Account}}</li></ul>
include	string	query	False	Indicates which fields should be returned when listing a collection.  URL examples: "include=id", "include=id,name"  OpenAPI examples: "id" <ul style="list-style-type: none"><li>example: id,cn,dn</li></ul>
limit	string	query	False	Indicates the maximum number of resources to return when listing a collection.  URL examples: "limit=2"  OpenAPI examples: "2"

Name	Type	In	Required	Description
filter	string	query	False	<p>Indicates which fields should be matched in order to return a resource when listing a collection.</p> <p>Supported operators are:</p> <ul style="list-style-type: none"> <li>• eq - Equality</li> <li>• lt/gt - Less than/Greater than</li> <li>• lte/gte - Less than or equals to/Greater than or equals to</li> </ul> <p>URL example: "filter=field%20eq%20%27value%27"</p> <p>OpenAPI examples: "field eq 'value'"</p>
continue		query	False	<p>Indicates the token to resume listing from.</p> <p>URL examples: "continue=&lt;continue token="" from="" collection="" metadata=""&gt;&lt;/continue&gt;</p> <p>OpenAPI examples: "&lt;continue token="" from="" collection="" metadata=""&gt;&lt;/continue&gt;&amp;lt;/continue&amp;gt;"</p>

## Response

Status: 200, Returns a JSON array of JSON objects containing the results of the request URL.

Name	Type	Required	Description
items	array[Any of: ldapUser_1.0_get_response_body, array[]]	True	
metadata	type_astra_metadata_list	True	

### Example response

```
{
  "type": "application/astra-ldapUsers",
  "version": "1.0",
  "items": [
    [
      "b4bcef18-14ad-5bc1-91ce-3cce15aa8791",
      "John Doe",
      "cn=John Doe,ou=people,dc=example,dc=com"
    ],
    [
      "98b10d6f-8693-555f-b258-70de4cc7301f",
      "Jane Doe",
      "cn=Jane Doe,ou=people,dc=example,dc=com"
    ]
  ],
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	



### Example response

```
{
  "type": "https://astra.netapp.io/problems/14",
  "title": "Unauthorized access",
  "detail": "The user isn't enabled.",
  "status": "403"
}
```

### Response

Status: 406, Not acceptable

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/32",
  "title": "Unsupported content type",
  "detail": "The response can't be returned in the requested format.",
  "status": "406"
}
```

### Response

Status: 500, Internal server error

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	

Name	Type	Required	Description
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/34",
  "title": "Internal server error",
  "detail": "The server was unable to process this request.",
  "status": "500"
}
```

### Error

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Definitions

## See Definitions

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### type\_astra\_metadata

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema

Name	Type	Required	Description
labels	array[type_astra_label]	True	
creationTimestamp	string	True	
modificationTimestamp	string	True	
createdBy	string	True	
modifiedBy	string	False	

### ldapUser\_1.0\_get\_response\_body

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>• "application/astra-ldapUser"</li></ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"><li>• "1.0"</li></ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"><li>• Conforms to the UUIDv4 Schema</li></ul>

Name	Type	Required	Description
email	string	False	JSON string representing the email of the LDAP user. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 3</li> <li>• Maximum length: 63</li> </ul>
firstName	string	False	JSON string representing the first name of the LDAP user. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>
lastName	string	False	JSON string representing the last name of the LDAP user. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>
cn	string	False	JSON string representing the LDAP group name. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>
dn	string	False	JSON string representing the distinguished name of the LDAP group. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to RFC 4514</li> </ul>

Name	Type	Required	Description
metadata	<a href="#">type_astra_metadata</a>	True	Client and service-specified metadata associated with the resource. Defined values are: <ul style="list-style-type: none"> <li>Conforms to the Astra Metadata Schema</li> </ul>

#### type\_astra\_metadata\_list

Name	Type	Required	Description
continue	string	False	
count	number	False	
labels	array[ <a href="#">type_astra_label</a> ]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

#### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Retrieve an LDAP user

GET /accounts/{account\_id}/core/v1/ldapUsers/{ldapUser\_id}

Returns a JSON object representing the stored LDAP resource.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"> <li>example: <code>{{.Account}}</code></li> </ul>
ldapUser_id	string	path	True	ID of the ldapUser collection to list

## Response

Status: 200, Returns a JSON object representing the stored LDAP resource.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"> <li>"application/astra-ldapUser"</li> </ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>"1.0"</li> </ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>Conforms to the UUIDv4 Schema</li> </ul>
email	string	False	JSON string representing the email of the LDAP user. Defined values are: <ul style="list-style-type: none"> <li>Minimum length: 3</li> <li>Maximum length: 63</li> </ul>

Name	Type	Required	Description
firstName	string	False	JSON string representing the first name of the LDAP user. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>
lastName	string	False	JSON string representing the last name of the LDAP user. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>
cn	string	False	JSON string representing the LDAP group name. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>
dn	string	False	JSON string representing the distinguished name of the LDAP group. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to RFC 4514</li> </ul>
metadata	<a href="#">type_astra_metadata</a>	True	Client and service-specified metadata associated with the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema</li> </ul>

## Example response

```
{
  "type": "application/astra-ldapUser",
  "version": "1.0",
  "id": "2add73ff-89dc-5ff1-be85-39d97549556d",
  "email": "<a href="
mailto:johndoe@example.com">johndoe@example.com</a>",
  "firstName": "John",
  "lastName": "Doe",
  "cn": "John Doe",
  "dn": "cn=John Doe,ou=people,dc=example,dc=com",
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```



## Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

## Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

## Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

## Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

## Definitions

## See Definitions

type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

type\_astra\_metadata

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema

Name	Type	Required	Description
labels	array[type_astra_label]	True	
creationTimestamp	string	True	
modificationTimestamp	string	True	
createdBy	string	True	
modifiedBy	string	False	

invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## License

### License overview

The License API provides CRUD (Create-Read-Update-Delete) access to license resources in order to represent licenses loaded into the account.

### Create a new license

POST /accounts/{account\_id}/core/v1/licenses

Indicates the desired values for the License API resource to be created.

## Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"><li>example: {{.Account}}</li></ul>

## Request Body

Indicates the desired values for the License API resource to be created.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>"application/astra-license"</li></ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"><li>"1.0"</li></ul>
allocation	string	False	JSON string containing an ID indicating what the license is allocated to. Only present when the license is allocated. For Astra Control Center licenses, this field must be populated with the account ID and must match the account ID specified in the POST URI. Defined values are: <ul style="list-style-type: none"><li>Conforms to the Astra Identifier Schema</li></ul>

Name	Type	Required	Description
deviceCredentialID	string	False	<p>JSON string containing the identifier of the deviceCredential associated from the Credential API. Only present for Astra Data Store licenses.</p> <p>Defined value are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
licenseText	string	True	<p>JSON string containing a base64 encoded representation of the license JSON as obtained from the NetApp license system. This must be provided in the original byte-level order to allow signature verification.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the base64 Encoded Data Schema</li> </ul>
metadata	type_astra_metadata_update	False	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema</li> </ul> <p>If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</p>

## Example request

```
{
  "type": "application/astra-license",
  "version": "1.0",
  "allocation": "4185d09b-6687-4801-a832-c005a9d94f41",
  "licenseText": "ewogICAic3RhdHVzUmVzcCI6ewogMTYwNzAwIgp9"
}
```

## Response

Status: 201, Returns the newly created license resource in the JSON response body.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>"application/astra-license"</li></ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"><li>"1.0"</li></ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"><li>Conforms to the UUIDv4 Schema</li></ul>

Name	Type	Required	Description
allocation	string	False	<p>JSON string containing an ID indicating what the license is allocated to. Only present when the license is allocated. For Astra Control Center licenses, this field must be populated with the account ID and must match the account ID specified in the POST URI.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
hostID	string	False	<p>JSON string containing a host identifier that a license is bound to. Only present if the license is host-locked.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>
deviceCredentialID	string	False	<p>JSON string containing the identifier of the deviceCredential associated from the Credential API. Only present for Astra Data Store licenses.</p> <p>Defined value are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
isEvaluation	string	True	<p>JSON string indicating whether the license is an evaluation license.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "true"</li> <li>• "false"</li> </ul>

Name	Type	Required	Description
licenseProtocol	string	True	<p>JSON string containing the license protocol extracted from the license.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• String contents not validated by the schema</li> </ul>
licenseText	string	True	<p>JSON string containing a base64 encoded representation of the license JSON as obtained from the NetApp license system. This must be provided in the original byte-level order to allow signature verification.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the base64 Encoded Data Schema</li> </ul>
validFromTimestamp	string	True	<p>JSON string containing a timestamp indicating when the license becomes valid.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>
validUntilTimestamp	string	True	<p>JSON string containing a timestamp indicating when the license is no longer valid.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>



Name	Type	Required	Description
product	string	True	<p>JSON string containing the product string extracted from the license. Defined values are:</p> <ul style="list-style-type: none"> <li>• String contents not validated by the schema</li> </ul>
productVersion	string	True	<p>JSON string containing the version string extracted from the license. Defined values are:</p> <ul style="list-style-type: none"> <li>• String contents not validated by the schema</li> </ul>
productSN	string	True	<p>JSON string containing the serial number string extracted from the license. Defined values are:</p> <ul style="list-style-type: none"> <li>• String contents not validated by the schema</li> </ul>
features	string	True	<p>JSON string containing the package value extracted from the license. Defined values are:</p> <ul style="list-style-type: none"> <li>• String contents not validated by the schema</li> </ul>
capacity	string	True	<p>JSON string containing the capacity extracted from the license.</p>
capacity2	string	True	<p>JSON string containing the secondary capacity extracted from the license.</p>

Name	Type	Required	Description
addons	array[ <a href="#">addons</a> ]	False	<p>JSON array of JSON objects containing the list of add-ons from the license.</p> <p>An add-on is a change in license occurring at a potential future date.</p>
metadata	<a href="#">type_astra_metadata_update</a>	True	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</li> </ul>

## Example response

```
{
  "type": "application/astra-license",
  "version": "1.0",
  "id": "6db53b32-8417-5d3c-8ef0-552fc602c78f",
  "allocation": "4185d09b-6687-4801-a832-c005a9d94f41",
  "hostID": "99132549-e0c2-4203-9d1e-598628b4ff9b",
  "isEvaluation": "false",
  "licenseProtocol": "ASTRASDS-ENT-SUBS",
  "licenseText": "ewogICAic3RhdHVzUmVzcCI6ewogMTYwNzAwIgp9",
  "validFromTimestamp": "2020-08-06T00:00:00.000000Z",
  "validUntilTimestamp": "2021-08-06T00:00:00.000000Z",
  "product": "Astra Control Center",
  "productVersion": "1.0",
  "productSN": "320000046",
  "features": "ASTRA-ENT-STD",
  "capacity": "4000",
  "capacity2": "0",
  "addons": [
    {
      "startDate": "2020-08-06T00:00:00.000000Z",
      "endDate": "2021-08-06T00:00:00.000000Z",
      "capacity": "4000",
      "licenseProtocol": "ASTRA-ENT-STD",
      "features": "p-nfs,dm-storage-policy-based-pvs-for-k8s,dm-spbm-
based-vvols-for-vms,dm-storage-efficiency,dm-data-at-rest-encryption"
    }
  ],
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 409, Conflict

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

### Example response

```
{
  "type": "https://astra.netapp.io/problems/10",
  "title": "JSON resource conflict",
  "detail": "The request body JSON contains a field that conflicts with an idempotent value.",
  "status": "409"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

**Definitions**

## See Definitions

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[type_astra_label]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

### addons

Name	Type	Required	Description
startDate	string	False	JSON string containing a timestamp indicating when this add-on becomes valid. Defined values are: <ul style="list-style-type: none"><li>• Conforms to the ISO-8601 Date Time Schema</li></ul>
endDate	string	False	JSON string containing a timestamp indicating when this add-on is no longer valid. Defined values are: <ul style="list-style-type: none"><li>• Conforms to the ISO-8601 Date Time Schema</li></ul>



Name	Type	Required	Description
features	string	False	JSON string containing the list of features associated with this add-on. Defined values are: <ul style="list-style-type: none"> <li>• String contents not validated by the schema.</li> </ul>
capacity	string	False	JSON string containing the capacity extracted from the add-on. Defined values are: <ul style="list-style-type: none"> <li>• String contents not validated by the schema</li> </ul>
licenseProtocol	string	False	JSON string containing the license protocol associated with this add-on. Defined values are: <ul style="list-style-type: none"> <li>• String contents not validated by the schema</li> </ul>

#### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

#### invalidFields

Name	Type	Required	Description
name	string	True	Name of the invalid request body field
reason	string	True	Reason why the request body field is invalid

## List all licenses

GET /accounts/{account\_id}/core/v1/licenses

Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"><li>example: {{.Account}}</li></ul>
include	string	query	False	Indicates which fields should be returned when listing a collection.  URL examples: "include=id", "include=id,name"  OpenAPI examples: "id" <ul style="list-style-type: none"><li>example: id,product</li></ul>
limit	string	query	False	Indicates the maximum number of resources to return when listing a collection.  URL examples: "limit=2"  OpenAPI examples: "2"

Name	Type	In	Required	Description
filter	string	query	False	<p>Indicates which fields should be matched in order to return a resource when listing a collection.</p> <p>Supported operators are:</p> <ul style="list-style-type: none"> <li>• eq - Equality</li> <li>• lt/gt - Less than/Greater than</li> <li>• lte/gte - Less than or equals to/Greater than or equals to</li> </ul> <p>URL example: "filter=field%20eq%20%27value%27"</p> <p>OpenAPI examples: "field eq 'value'"</p>

## Response

Status: 200, Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

Name	Type	Required	Description
items	array[ <a href="#">Any of: license_1.0_get_response_body, array[]</a> ]	True	
metadata	<a href="#">type_astra_metadata_list</a>	True	

## Example response

```
{
  "type": "application/astra-licenses",
  "version": "1.0",
  "items": [
    [
      "c8aa757a-5318-489f-8134-a2a1a6956a3e",
      "Astra SDS"
    ],
    [
      "0f7cc03d-9afc-4192-af7f-b29ab24f8f2a",
      "Astra Enterprise"
    ]
  ],
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	

Name	Type	Required	Description
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't found.",
  "status": "404"
}
```

## Definitions

## See Definitions

addons

Name	Type	Required	Description
startDate	string	False	JSON string containing a timestamp indicating when this add-on becomes valid. Defined values are: <ul style="list-style-type: none"><li>• Conforms to the ISO-8601 Date Time Schema</li></ul>
endDate	string	False	JSON string containing a timestamp indicating when this add-on is no longer valid. Defined values are: <ul style="list-style-type: none"><li>• Conforms to the ISO-8601 Date Time Schema</li></ul>
features	string	False	JSON string containing the list of features associated with this add-on. Defined values are: <ul style="list-style-type: none"><li>• String contents not validated by the schema.</li></ul>
capacity	string	False	JSON string containing the capacity extracted from the add-on. Defined values are: <ul style="list-style-type: none"><li>• String contents not validated by the schema</li></ul>



Name	Type	Required	Description
licenseProtocol	string	False	JSON string containing the license protocol associated with this add-on. Defined values are: <ul style="list-style-type: none"> <li>String contents not validated by the schema</li> </ul>

#### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

#### type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.  
Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[ <a href="#">type_astra_label</a> ]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

#### license\_1.0\_get\_response\_body

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"> <li>"application/astra-license"</li> </ul>

Name	Type	Required	Description
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "1.0"</li> </ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the UUIDv4 Schema</li> </ul>
allocation	string	False	JSON string containing an ID indicating what the license is allocated to. Only present when the license is allocated. For Astra Control Center licenses, this field must be populated with the account ID and must match the account ID specified in the POST URI. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
hostID	string	False	JSON string containing a host identifier that a license is bound to. Only present if the license is host-locked. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>

Name	Type	Required	Description
deviceCredentialID	string	False	<p>JSON string containing the identifier of the deviceCredential associated from the Credential API. Only present for Astra Data Store licenses.</p> <p>Defined value are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
isEvaluation	string	True	<p>JSON string indicating whether the license is an evaluation license.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "true"</li> <li>• "false"</li> </ul>
licenseProtocol	string	True	<p>JSON string containing the license protocol extracted from the license.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• String contents not validated by the schema</li> </ul>
licenseText	string	True	<p>JSON string containing a base64 encoded representation of the license JSON as obtained from the NetApp license system. This must be provided in the original byte-level order to allow signature verification.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the base64 Encoded Data Schema</li> </ul>

Name	Type	Required	Description
validFromTimestamp	string	True	JSON string containing a timestamp indicating when the license becomes valid. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>
validUntilTimestamp	string	True	JSON string containing a timestamp indicating when the license is no longer valid. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>
product	string	True	JSON string containing the product string extracted from the license. Defined values are: <ul style="list-style-type: none"> <li>• String contents not validated by the schema</li> </ul>
productVersion	string	True	JSON string containing the version string extracted from the license. Defined values are: <ul style="list-style-type: none"> <li>• String contents not validated by the schema</li> </ul>
productSN	string	True	JSON string containing the serial number string extracted from the license. Defined values are: <ul style="list-style-type: none"> <li>• String contents not validated by the schema</li> </ul>

Name	Type	Required	Description
features	string	True	JSON string containing the package value extracted from the license. Defined values are: <ul style="list-style-type: none"> <li>String contents not validated by the schema</li> </ul>
capacity	string	True	JSON string containing the capacity extracted from the license.
capacity2	string	True	JSON string containing the secondary capacity extracted from the license.
addons	array[addons]	False	JSON array of JSON objects containing the list of add-ons from the license. An add-on is a change in license occurring at a potential future date.
metadata	type_astra_metadata_update_date	True	Client and service-specified metadata associated with the resource. Defined values are: <ul style="list-style-type: none"> <li>Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</li> </ul>

type\_astra\_metadata\_list

Name	Type	Required	Description
continue	string	False	
count	number	False	
labels	array[type_astra_label]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

#### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Retrieve a license

GET /accounts/{account\_id}/core/v1/licenses/{license\_id}

Returns the stored License API resource in the JSON response body.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource  • example: {{.Account}}
license_id	string	path	True	ID of the license collection to list

### Response

Status: 200, Returns the stored License API resource in the JSON response body.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "application/astra-license"</li> </ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "1.0"</li> </ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the UUIDv4 Schema</li> </ul>
allocation	string	False	JSON string containing an ID indicating what the license is allocated to. Only present when the license is allocated. For Astra Control Center licenses, this field must be populated with the account ID and must match the account ID specified in the POST URI. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
hostID	string	False	JSON string containing a host identifier that a license is bound to. Only present if the license is host-locked. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>

Name	Type	Required	Description
deviceCredentialID	string	False	<p>JSON string containing the identifier of the deviceCredential associated from the Credential API. Only present for Astra Data Store licenses. Defined value are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
isEvaluation	string	True	<p>JSON string indicating whether the license is an evaluation license. Defined values are:</p> <ul style="list-style-type: none"> <li>• "true"</li> <li>• "false"</li> </ul>
licenseProtocol	string	True	<p>JSON string containing the license protocol extracted from the license. Defined values are:</p> <ul style="list-style-type: none"> <li>• String contents not validated by the schema</li> </ul>
licenseText	string	True	<p>JSON string containing a base64 encoded representation of the license JSON as obtained from the NetApp license system. This must be provided in the original byte-level order to allow signature verification. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the base64 Encoded Data Schema</li> </ul>



Name	Type	Required	Description
validFromTimestamp	string	True	<p>JSON string containing a timestamp indicating when the license becomes valid.            Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>
validUntilTimestamp	string	True	<p>JSON string containing a timestamp indicating when the license is no longer valid.            Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>
product	string	True	<p>JSON string containing the product string extracted from the license.            Defined values are:</p> <ul style="list-style-type: none"> <li>• String contents not validated by the schema</li> </ul>
productVersion	string	True	<p>JSON string containing the version string extracted from the license.            Defined values are:</p> <ul style="list-style-type: none"> <li>• String contents not validated by the schema</li> </ul>
productSN	string	True	<p>JSON string containing the serial number string extracted from the license.            Defined values are:</p> <ul style="list-style-type: none"> <li>• String contents not validated by the schema</li> </ul>

Name	Type	Required	Description
features	string	True	JSON string containing the package value extracted from the license. Defined values are: <ul style="list-style-type: none"> <li>String contents not validated by the schema</li> </ul>
capacity	string	True	JSON string containing the capacity extracted from the license.
capacity2	string	True	JSON string containing the secondary capacity extracted from the license.
addons	array[addons]	False	JSON array of JSON objects containing the list of add-ons from the license. An add-on is a change in license occurring at a potential future date.
metadata	<a href="#">type_astra_metadata_update</a>	True	Client and service-specified metadata associated with the resource. Defined values are: <ul style="list-style-type: none"> <li>Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</li> </ul>

## Example response

```
{
  "type": "application/astra-license",
  "version": "1.0",
  "id": "6db53b32-8417-5d3c-8ef0-552fc602c78f",
  "allocation": "4185d09b-6687-4801-a832-c005a9d94f41",
  "hostID": "99132549-e0c2-4203-9d1e-598628b4ff9b",
  "isEvaluation": "false",
  "licenseProtocol": "ASTRASDS-ENT-SUBS",
  "licenseText": "ewogICAic3RhdHVzUmVzcCI6ewogMTYwNzAwIgp9",
  "validFromTimestamp": "2020-08-06T00:00:00.000000Z",
  "validUntilTimestamp": "2021-08-06T00:00:00.000000Z",
  "product": "Astra Control Center",
  "productVersion": "1.0",
  "productSN": "320000046",
  "features": "ASTRA-ENT-STD",
  "capacity": "4000",
  "capacity2": "0",
  "addons": [
    {
      "startDate": "2020-08-06T00:00:00.000000Z",
      "endDate": "2021-08-06T00:00:00.000000Z",
      "capacity": "4000",
      "licenseProtocol": "ASTRA-ENT-STD",
      "features": "p-nfs,dm-storage-policy-based-pvs-for-k8s,dm-spbm-
based-vvols-for-vms,dm-storage-efficiency,dm-data-at-rest-encryption"
    }
  ],
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	

Name	Type	Required	Description
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

### Definitions

## See Definitions

addons

Name	Type	Required	Description
startDate	string	False	JSON string containing a timestamp indicating when this add-on becomes valid. Defined values are: <ul style="list-style-type: none"><li>• Conforms to the ISO-8601 Date Time Schema</li></ul>
endDate	string	False	JSON string containing a timestamp indicating when this add-on is no longer valid. Defined values are: <ul style="list-style-type: none"><li>• Conforms to the ISO-8601 Date Time Schema</li></ul>
features	string	False	JSON string containing the list of features associated with this add-on. Defined values are: <ul style="list-style-type: none"><li>• String contents not validated by the schema.</li></ul>
capacity	string	False	JSON string containing the capacity extracted from the add-on. Defined values are: <ul style="list-style-type: none"><li>• String contents not validated by the schema</li></ul>

Name	Type	Required	Description
licenseProtocol	string	False	JSON string containing the license protocol associated with this add-on. Defined values are: <ul style="list-style-type: none"> <li>String contents not validated by the schema</li> </ul>

#### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

#### type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.  
Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[ <a href="#">type_astra_label</a> ]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

#### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid



## Modify a license

PUT /accounts/{account\_id}/core/v1/licenses/{license\_id}

Replaces the entire stored resource with the supplied JSON request body while preserving key values that are not user-modifiable.

### Side Effects

- Entitlements are recalculated to add or merge the license entitlements visible through the Entitlement API.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource  • example: {{.Account}}
license_id	string	path	True	ID of the license collection to list

### Request Body

Replaces the entire stored resource with the supplied JSON request body while preserving key values that are not user-modifiable.

### Side Effects

- Entitlements are recalculated to add or merge the license entitlements visible through the Entitlement API.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are:  • "application/astra-license"
version	string	True	Version of the resource. Defined values are:  • "1.0"

Name	Type	Required	Description
id	string	False	<p>Globally unique identifier of the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the UUIDv4 Schema</li> </ul>
allocation	string	False	<p>JSON string containing an ID indicating what the license is allocated to. Only present when the license is allocated. For Astra Control Center licenses, this field must be populated with the account ID and must match the account ID specified in the POST URI.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
hostID	string	False	<p>JSON string containing a host identifier that a license is bound to. Only present if the license is host-locked.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>
deviceCredentialID	string	False	<p>JSON string containing the identifier of the deviceCredential associated from the Credential API. Only present for Astra Data Store licenses.</p> <p>Defined value are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
isEvaluation	string	False	<p>JSON string indicating whether the license is an evaluation license. Defined values are:</p> <ul style="list-style-type: none"> <li>• "true"</li> <li>• "false"</li> </ul>
licenseProtocol	string	False	<p>JSON string containing the license protocol extracted from the license. Defined values are:</p> <ul style="list-style-type: none"> <li>• String contents not validated by the schema</li> </ul>
licenseText	string	False	<p>JSON string containing a base64 encoded representation of the license JSON as obtained from the NetApp license system. This must be provided in the original byte-level order to allow signature verification. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the base64 Encoded Data Schema</li> </ul>
validFromTimestamp	string	False	<p>JSON string containing a timestamp indicating when the license becomes valid. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>

Name	Type	Required	Description
validUntilTimestamp	string	False	<p>JSON string containing a timestamp indicating when the license is no longer valid.            Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>
product	string	False	<p>JSON string containing the product string extracted from the license.            Defined values are:</p> <ul style="list-style-type: none"> <li>• String contents not validated by the schema</li> </ul>
productVersion	string	False	<p>JSON string containing the version string extracted from the license.            Defined values are:</p> <ul style="list-style-type: none"> <li>• String contents not validated by the schema</li> </ul>
productSN	string	False	<p>JSON string containing the serial number string extracted from the license.            Defined values are:</p> <ul style="list-style-type: none"> <li>• String contents not validated by the schema</li> </ul>
features	string	False	<p>JSON string containing the package value extracted from the license.            Defined values are:</p> <ul style="list-style-type: none"> <li>• String contents not validated by the schema</li> </ul>

Name	Type	Required	Description
capacity	string	False	JSON string containing the capacity extracted from the license.
capacity2	string	False	JSON string containing the secondary capacity extracted from the license.
addons	array[addons]	False	JSON array of JSON objects containing the list of add-ons from the license. An add-on is a change in license occurring at a potential future date.
metadata	type_astra_metadata_update	False	Client and service-specified metadata associated with the resource. Defined values are: <ul style="list-style-type: none"> <li>Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</li> </ul>

### Example request

```
{
  "type": "application/astra-license",
  "version": "1.0",
  "allocation": "4185d09b-6687-4801-a832-c005a9d94f41",
  "licenseText": "ewogICAic3RhdHVzUmVzcCI6ewogMTYwNzAwIgp9"
}
```

## Response

Status: 204, Indicates if the license resource was updated.

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

## Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 409, Conflict

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

### Example response

```
{
  "type": "https://astra.netapp.io/problems/10",
  "title": "JSON resource conflict",
  "detail": "The request body JSON contains a field that conflicts with an idempotent value.",
  "status": "409"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/1",
  "title": "Resource not found",
  "detail": "The resource specified in the request URI wasn't found.",
  "status": "404"
}
```



## Definitions

## See Definitions

addons

Name	Type	Required	Description
startDate	string	False	JSON string containing a timestamp indicating when this add-on becomes valid. Defined values are: <ul style="list-style-type: none"><li>• Conforms to the ISO-8601 Date Time Schema</li></ul>
endDate	string	False	JSON string containing a timestamp indicating when this add-on is no longer valid. Defined values are: <ul style="list-style-type: none"><li>• Conforms to the ISO-8601 Date Time Schema</li></ul>
features	string	False	JSON string containing the list of features associated with this add-on. Defined values are: <ul style="list-style-type: none"><li>• String contents not validated by the schema.</li></ul>
capacity	string	False	JSON string containing the capacity extracted from the add-on. Defined values are: <ul style="list-style-type: none"><li>• String contents not validated by the schema</li></ul>

Name	Type	Required	Description
licenseProtocol	string	False	JSON string containing the license protocol associated with this add-on. Defined values are: <ul style="list-style-type: none"> <li>String contents not validated by the schema</li> </ul>

#### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

#### type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.  
Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[ <a href="#">type_astra_label</a> ]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

#### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

#### invalidFields

Name	Type	Required	Description
name	string	True	Name of the invalid request body field
reason	string	True	Reason why the request body field is invalid

## Delete a license

DELETE /accounts/{account\_id}/core/v1/licenses/{license\_id}

Removes the specified License API resource.

### Side Effects

- Entitlements are recalculated to remove the license entitlements visible through the Entitlement API.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource  • example: {{.Account}}
license_id	string	path	True	ID of the license collection to list

### Response

Status: 204, Indicates if the license resource was deleted.

### Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	

Name	Type	Required	Description
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/1",
  "title": "Resource not found",
  "detail": "The resource specified in the request URI wasn't found.",
  "status": "404"
}
```

## Definitions

### See Definitions

invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Managed cluster

### Managed cluster overview

The Managed Cluster API provides CRUD (Create-Read-Update-Delete) access to managed cluster resources in order to represent managed Kubernetes clusters.

### Create a new managed cluster

POST /accounts/{account\_id}/topology/v1/managedClusters

Indicates desired values for the Managed Cluster API resource to be created.

#### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"><li>example: {{.Account}}</li></ul>

#### Request Body

Indicates desired values for the Managed Cluster API resource to be created.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>"application/astra-managedCluster"</li></ul>

Name	Type	Required	Description
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "1.0"</li> <li>• "1.1"</li> <li>• "1.2"</li> </ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the UUIDv4 Schema</li> </ul>
tridentManagedStateDesired	string	False	JSON string containing a value indicating the desired management state for Trident. Defined values are: <ul style="list-style-type: none"> <li>• "managed" - Manage Trident on this cluster</li> <li>• "unmanaged" - Do not manage Trident on this cluster</li> </ul>
defaultStorageClass	string	False	JSON string containing a storageClass ID that corresponds to the default storage class, as set in Kubernetes. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema If not included, it has not yet been discovered.</li> </ul>



Name	Type	Required	Description
metadata	<a href="#">type_astra_metadata_update</a>	False	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</li> </ul>

### Example request

```
{
  "type": "application/astra-managedCluster",
  "version": "1.2",
  "id": "6f2fa469-cdae-54be-a451-d0e94a47fa62",
  "defaultStorageClass": "e280ff62-be35-4f31-a31b-a210a1ad1b33",
  "tridentManagedStateDesired": "managed"
}
```

### Response

Status: 201, Returns the newly created managedCluster resource in the JSON response body.

Name	Type	Required	Description
type	string	True	<p>Media type of the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "application/astra-managedCluster"</li> </ul>

Name	Type	Required	Description
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "1.0"</li> <li>• "1.1"</li> <li>• "1.2"</li> </ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the UUIDv4 Schema</li> </ul>
name	string	True	JSON string containing a name for the cluster. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> <li>• This string is internally validated to prevent XSS, Unicode, directory traversal, and SQL-injection attacks.</li> </ul>

Name	Type	Required	Description
state	string	True	<p>JSON string containing a value indicating the operational state of the cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "pending" - The cluster is scheduled for discovery</li> <li>• "discovering" - The cluster is in the process of being discovered</li> <li>• "provisioning" - The cluster is in the process of being provisioned</li> <li>• "running" - The cluster is running normally</li> <li>• "failed" - The cluster is in a permanent failure state</li> <li>• "removed" - The cluster is not currently accessible</li> <li>• "unknown" - The cluster's state cannot be determined</li> </ul>
restoreTargetSupported	string	False	<p>JSON string containing a value indicating the managed cluster's ability to be a <i>target</i> of application data management operations.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - Cluster is an eligible target for app data management operations.</li> <li>• "false" - Cluster is <i>not</i> an eligible target for app data management operations.</li> </ul>

Name	Type	Required	Description
snapshotSupported	string	False	<p>JSON string containing a value indicating the managed cluster's ability to perform application data management backup-like operations. Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - Cluster is an eligible to perform app data management operations.</li> <li>• "false" - Cluster is <i>not</i> eligible to perform app data management operations.</li> </ul>
stateUnready	array[string]	True	<p>JSON array of JSON strings, each indicating a reason why the cluster is unable to transition to "running" state, when there are issues while in "running" state, or why it has transitioned to the "failed" or "removed" state. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 127</li> </ul>

Name	Type	Required	Description
managedState	string	True	<p>JSON string containing a value indicating the management state of the cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "pending" - The cluster is scheduled to be discovered or added</li> <li>• "ineligible" - The cluster is in a "running" state, is not under management, and is not eligible for management. The reason or reasons for this ineligibility are provided in the unready key's value</li> <li>• "unmanaged" - The cluster is in a "running" or "failed" state, is not under management, and is eligible for management</li> <li>• "managing" - The cluster is in a "running" state and is in the process of being managed</li> <li>• "managed" - The cluster is in a "running", "failed", or "removed" state and is under management</li> </ul>

Name	Type	Required	Description
protectionState	string	True	<p>JSON string containing a value indicating the protection state of the cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "full" - The clusters default storage class supports snapshots</li> <li>• "partial" - The cluster has only storageClasses that do not support snapshots</li> <li>• "atRisk" - The cluster's default storage class does not support snapshots</li> </ul>
protectionStateDetails	array[ <a href="#">type_astra_stateDetails</a> ]	True	<p>JSON array of JSON objects that lists additional details about the current protection state, including why the current state was reached.</p> <p>If no details are available, this array will be empty.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum Items: 0</li> </ul>
managedStateUnready	array[string]	True	<p>JSON array of JSON strings, each indicating a reason why the cluster is ineligible to be managed.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 127</li> </ul>

Name	Type	Required	Description
managedTimestamp	string	True	<p>JSON string containing the timestamp indicating when the cluster was brought under management. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema This key is only returned when a cluster has a managedState of "managed".</li> </ul>
tridentVersion	string	False	<p>JSON string containing the version of Trident installed on the cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Software Version Schema</li> </ul>
tridentManagedState	string	False	<p>JSON string containing one of a set of enumerated values indicating the management state of Trident on this cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• "managed" - Trident instance on the cluster is managed by Astra</li> <li>• "unmanaged" - Trident instance on the cluster is not managed by Astra</li> </ul>

Name	Type	Required	Description
tridentManagedStateDesired	string	False	<p>JSON string containing a value indicating the desired management state for Trident.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "managed" - Manage Trident on this cluster</li> <li>• "unmanaged" - Do not manage Trident on this cluster</li> </ul>
tridentManagedStateDetails	array[ <a href="#">type_astra_stateDetails</a> ]	False	<p>JSON array of JSON objects that lists additional details about why "state" transitioned to "managed" or "unmanaged".</p> <p>If no details are available, this array will be empty.</p> <ul style="list-style-type: none"> <li>• Minimum Items: 0</li> </ul>
tridentManagedStateAllowed	array[string]	False	<p>States that can be requested in a given tridentManagedState.</p> <p>The following states can be requested in each defined state:</p> <ul style="list-style-type: none"> <li>• "managed": "managed"</li> <li>• "unmanaged": "unmanaged"</li> </ul>



Name	Type	Required	Description
inUse	string	True	<p>JSON string containing a value indicating whether the cluster has any managed applications and therefore cannot be deleted.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "false" - The cluster is not managed, or it is managed but has no managed applications associated with it</li> <li>• "true" - The cluster is managed and has managed applications associated with it</li> </ul>
accHost	string	False	<p>JSON string that indicates that this cluster hosts the instance of Astra Control Center that is currently being accessed.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - This cluster is hosting the instance of Astra Control Center that is currently being accessed.</li> </ul>

Name	Type	Required	Description
clusterType	string	True	<p>JSON string containing a value indicating the type of cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "gke" - Kubernetes hosted on Google Kubernetes Engine</li> <li>• "aks" - Kubernetes hosted on Microsoft Azure Kubernetes Service</li> <li>• "eks" - Kubernetes hosted on Amazon Elastic Kubernetes Service</li> <li>• "rke" - The cluster is of type Rancher</li> <li>• "tanzu" -The cluster is of type Tanzu Kubernetes Grid</li> <li>• "openshift" - The cluster is of type OpenShift</li> <li>• "kubernetes" - The cluster is generic Kubernetes</li> </ul>
clusterVersion	string	True	<p>JSON string containing the semantic versioning representation of the cluster environment. For Kubernetes clusters, this is the Kubernetes version.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 31</li> </ul>

Name	Type	Required	Description
clusterVersionString	string	True	<p>JSON string containing a value indicating the extended versioning information for the cluster environment.</p> <p>For Kubernetes clusters, this is the full Kubernetes version.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 31</li> </ul>
clusterCreationTimestamp	string	False	<p>JSON string containing the timestamp indicating when the cluster was originally created.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>
namespaces	array[string]	False	<p>JSON array of JSON strings, each indicating a namespace within the cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 253</li> </ul>
defaultStorageClass	string	False	<p>JSON string containing a storageClass ID that corresponds to the default storage class, as set in Kubernetes.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema If not included, it has not yet been discovered.</li> </ul>

Name	Type	Required	Description
cloudID	string	True	<p>JSON string containing a value indicating the ID of the cloud the cluster is running on.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
credentialID	string	False	<p>JSON string containing a value indicating the ID of the credential that contains the kubeconfig file for the cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
location	string	False	<p>JSON string containing a value provided by the cloud the cluster is running on, indicating the cloud-specific location of the cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>
isMultizonal	string	True	<p>JSON string containing a value provided by the cloud the cluster is running on, indicating whether the cluster spans two or more availability zones.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - The cluster spans two or more availability zones</li> <li>• "false" - The cluster is wholly located within a single availability zone</li> </ul>

Name	Type	Required	Description
privateRouteID	string	False	<p>JSON string containing the locationID for private clusters.</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>
apiServiceID	string	False	<p>JSON string containing the UUID from the Kubernetes (k8s) api service object. Used to uniquely identify a cluster.</p>
metadata	type_astra_metadata_update	True	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</li> </ul>

## Example response

```
{
  "type": "application/astra-managedCluster",
  "version": "1.2",
  "id": "6f2fa469-cdae-54be-a451-d0e94a47fa62",
  "name": "GKE-22",
  "state": "running",
  "stateUnready": [],
  "managedState": "managed",
  "managedStateUnready": [],
  "managedTimestamp": "2020-08-06T12:24:52.256624Z",
  "protectionState": "full",
  "protectionStateDetails": [],
  "tridentVersion": "21.07.2",
  "tridentManagedState": "managed",
  "tridentManagedStateDesired": "managed",
  "tridentManagedStateDetails": [],
  "inUse": "false",
  "clusterType": "kubernetes",
  "clusterVersion": "1.91.1",
  "clusterVersionString": "1.19.1",
  "clusterCreationTimestamp": "2020-08-06T12:24:52.256624Z",
  "namespaces": [
    "kube-system",
    "kube-public",
    "my-app-1"
  ],
  "defaultStorageClass": "e280ff62-be35-4f31-a31b-a210a1ad1b33",
  "cloudID": "548bdc1f-f00e-4a23-a062-83265d224d46",
  "credentialID": "055e365a-2215-40de-aecb-a4070a7e6f1e",
  "location": "europe-west4",
  "isMultizonal": "false",
  "apiServiceID": "6bf33af2-872a-4553-a891-26b510c3edbe",
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

## Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

## Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

## Response

Status: 409, Conflict

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

## Example response

```
{
  "type": "https://astra.netapp.io/problems/10",
  "title": "JSON resource conflict",
  "detail": "The request body JSON contains a field that conflicts with an idempotent value.",
  "status": "409"
}
```

## Response

Status: 403, Forbidden



Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

## Definitions

## See Definitions

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[type_astra_label]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

### type\_astra\_stateDetails

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	

### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

### invalidFields

Name	Type	Required	Description
name	string	True	Name of the invalid request body field
reason	string	True	Reason why the request body field is invalid

## List all managed clusters

GET /accounts/{account\_id}/topology/v1/managedClusters

Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"> <li>example: <code>{{.Account}}</code></li> </ul>
include	string	query	False	Indicates which fields should be returned when listing a collection. <p>URL examples: "include=id", "include=id,name"</p> <p>OpenAPI examples: "id"</p> <ul style="list-style-type: none"> <li>example: <code>id,name,managedState</code></li> </ul>

Name	Type	In	Required	Description
limit	string	query	False	<p>Indicates the maximum number of resources to return when listing a collection.</p> <p>URL examples: "limit=2"</p> <p>OpenAPI examples: "2"</p>
filter	string	query	False	<p>Indicates which fields should be matched in order to return a resource when listing a collection.</p> <p>Supported operators are:</p> <ul style="list-style-type: none"> <li>• eq - Equality</li> <li>• lt/gt - Less than/Greater than</li> <li>• lte/gte - Less than or equals to/Greater than or equals to</li> </ul> <p>URL example: "filter=field%20eq%20%27value%27"</p> <p>OpenAPI examples: "field eq 'value'"</p>

## Response

Status: 200, Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

Name	Type	Required	Description
items	array[Any of: <a href="#">managedCluster_1.2_get_response_body</a> , array[]]	True	
metadata	<a href="#">type_astra_metadata_list</a>	True	

### Example response

```
{
  "type": "application/astra-managedClusters",
  "version": "1.2",
  "items": [
    [
      "0f284377-e5dc-4dcd-bacd-3197f2b8a347",
      "GKE-21",
      "managed"
    ],
    [
      "04dc80fa-d1d8-4850-a49f-3b70d0ec1369",
      "GKE-22",
      "unmanaged"
    ]
  ],
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

### Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	

Name	Type	Required	Description
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't found.",
  "status": "404"
}
```



## Definitions

## See Definitions

### type\_astra\_stateDetails

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[type_astra_label]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

### managedCluster\_1.2\_get\_response\_body

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>• "application/astra-managedCluster"</li></ul>

Name	Type	Required	Description
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "1.0"</li> <li>• "1.1"</li> <li>• "1.2"</li> </ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the UUIDv4 Schema</li> </ul>
name	string	True	JSON string containing a name for the cluster. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> <li>• This string is internally validated to prevent XSS, Unicode, directory traversal, and SQL-injection attacks.</li> </ul>

Name	Type	Required	Description
state	string	True	<p>JSON string containing a value indicating the operational state of the cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "pending" - The cluster is scheduled for discovery</li> <li>• "discovering" - The cluster is in the process of being discovered</li> <li>• "provisioning" - The cluster is in the process of being provisioned</li> <li>• "running" - The cluster is running normally</li> <li>• "failed" - The cluster is in a permanent failure state</li> <li>• "removed" - The cluster is not currently accessible</li> <li>• "unknown" - The cluster's state cannot be determined</li> </ul>
restoreTargetSupported	string	False	<p>JSON string containing a value indicating the managed cluster's ability to be a <i>target</i> of application data management operations.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - Cluster is an eligible target for app data management operations.</li> <li>• "false" - Cluster is <i>not</i> an eligible target for app data management operations.</li> </ul>

Name	Type	Required	Description
snapshotSupported	string	False	<p>JSON string containing a value indicating the managed cluster's ability to perform application data management backup-like operations. Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - Cluster is an eligible to perform app data management operations.</li> <li>• "false" - Cluster is <i>not</i> eligible to perform app data management operations.</li> </ul>
stateUnready	array[string]	True	<p>JSON array of JSON strings, each indicating a reason why the cluster is unable to transition to "running" state, when there are issues while in "running" state, or why it has transitioned to the "failed" or "removed" state. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 127</li> </ul>

Name	Type	Required	Description
managedState	string	True	<p>JSON string containing a value indicating the management state of the cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "pending" - The cluster is scheduled to be discovered or added</li> <li>• "ineligible" - The cluster is in a "running" state, is not under management, and is not eligible for management. The reason or reasons for this ineligibility are provided in the unready key's value</li> <li>• "unmanaged" - The cluster is in a "running" or "failed" state, is not under management, and is eligible for management</li> <li>• "managing" - The cluster is in a "running" state and is in the process of being managed</li> <li>• "managed" - The cluster is in a "running", "failed", or "removed" state and is under management</li> </ul>

Name	Type	Required	Description
protectionState	string	True	<p>JSON string containing a value indicating the protection state of the cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "full" - The clusters default storage class supports snapshots</li> <li>• "partial" - The cluster has only storageClasses that do not support snapshots</li> <li>• "atRisk" - The cluster's default storage class does not support snapshots</li> </ul>
protectionStateDetails	array[type_astra_stateDetails]	True	<p>JSON array of JSON objects that lists additional details about the current protection state, including why the current state was reached.</p> <p>If no details are available, this array will be empty.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum Items: 0</li> </ul>
managedStateUnready	array[string]	True	<p>JSON array of JSON strings, each indicating a reason why the cluster is ineligible to be managed.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 127</li> </ul>

Name	Type	Required	Description
managedTimestamp	string	True	<p>JSON string containing the timestamp indicating when the cluster was brought under management. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema This key is only returned when a cluster has a managedState of "managed".</li> </ul>
tridentVersion	string	False	<p>JSON string containing the version of Trident installed on the cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Software Version Schema</li> </ul>
tridentManagedState	string	False	<p>JSON string containing one of a set of enumerated values indicating the management state of Trident on this cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• "managed" - Trident instance on the cluster is managed by Astra</li> <li>• "unmanaged" - Trident instance on the cluster is not managed by Astra</li> </ul>



Name	Type	Required	Description
tridentManagedStateDesired	string	False	<p>JSON string containing a value indicating the desired management state for Trident.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "managed" - Manage Trident on this cluster</li> <li>• "unmanaged" - Do not manage Trident on this cluster</li> </ul>
tridentManagedStateDetails	array[type_astra_stateDetails]	False	<p>JSON array of JSON objects that lists additional details about why "state" transitioned to "managed" or "unmanaged".</p> <p>If no details are available, this array will be empty.</p> <ul style="list-style-type: none"> <li>• Minimum Items: 0</li> </ul>
tridentManagedStateAllowed	array[string]	False	<p>States that can be requested in a given tridentManagedState.</p> <p>The following states can be requested in each defined state:</p> <ul style="list-style-type: none"> <li>• "managed": "managed"</li> <li>• "unmanaged": "unmanaged"</li> </ul>

Name	Type	Required	Description
inUse	string	True	<p>JSON string containing a value indicating whether the cluster has any managed applications and therefore cannot be deleted.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "false" - The cluster is not managed, or it is managed but has no managed applications associated with it</li> <li>• "true" - The cluster is managed and has managed applications associated with it</li> </ul>
accHost	string	False	<p>JSON string that indicates that this cluster hosts the instance of Astra Control Center that is currently being accessed.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - This cluster is hosting the instance of Astra Control Center that is currently being accessed.</li> </ul>

Name	Type	Required	Description
clusterType	string	True	<p>JSON string containing a value indicating the type of cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "gke" - Kubernetes hosted on Google Kubernetes Engine</li> <li>• "aks" - Kubernetes hosted on Microsoft Azure Kubernetes Service</li> <li>• "eks" - Kubernetes hosted on Amazon Elastic Kubernetes Service</li> <li>• "rke" - The cluster is of type Rancher</li> <li>• "tanzu" -The cluster is of type Tanzu Kubernetes Grid</li> <li>• "openshift" - The cluster is of type OpenShift</li> <li>• "kubernetes" - The cluster is generic Kubernetes</li> </ul>
clusterVersion	string	True	<p>JSON string containing the semantic versioning representation of the cluster environment. For Kubernetes clusters, this is the Kubernetes version.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 31</li> </ul>

Name	Type	Required	Description
clusterVersionString	string	True	<p>JSON string containing a value indicating the extended versioning information for the cluster environment. For Kubernetes clusters, this is the full Kubernetes version. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 31</li> </ul>
clusterCreationTimestamp	string	False	<p>JSON string containing the timestamp indicating when the cluster was originally created. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>
namespaces	array[string]	False	<p>JSON array of JSON strings, each indicating a namespace within the cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 253</li> </ul>
defaultStorageClass	string	False	<p>JSON string containing a storageClass ID that corresponds to the default storage class, as set in Kubernetes. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul> <p>If not included, it has not yet been discovered.</p>

Name	Type	Required	Description
cloudID	string	True	<p>JSON string containing a value indicating the ID of the cloud the cluster is running on.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
credentialID	string	False	<p>JSON string containing a value indicating the ID of the credential that contains the kubeconfig file for the cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
location	string	False	<p>JSON string containing a value provided by the cloud the cluster is running on, indicating the cloud-specific location of the cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>
isMultizonal	string	True	<p>JSON string containing a value provided by the cloud the cluster is running on, indicating whether the cluster spans two or more availability zones.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - The cluster spans two or more availability zones</li> <li>• "false" - The cluster is wholly located within a single availability zone</li> </ul>

Name	Type	Required	Description
privateRouteID	string	False	JSON string containing the locationID for private clusters. <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>
apiServiceID	string	False	JSON string containing the UUID from the Kubernetes (k8s) api service object. Used to uniquely identify a cluster.
metadata	<a href="#">type_astra_metadata_update</a>	True	Client and service-specified metadata associated with the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</li> </ul>

type\_astra\_metadata\_list

Name	Type	Required	Description
continue	string	False	
count	number	False	
labels	array[ <a href="#">type_astra_label</a> ]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	

Name	Type	Required	Description
modifiedBy	string	False	

invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Retrieve a managed cluster

GET /accounts/{account\_id}/topology/v1/managedClusters/{managedCluster\_id}

Returns the stored Managed Cluster API resource in the JSON response body.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"> <li>example: <code>{{.Account}}</code></li> </ul>
managedCluster_id	string	path	True	ID of the managedCluster collection to list

### Response

Status: 200, Returns the stored Managed Cluster API resource in the JSON response body.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"> <li>"application/astra-managedCluster"</li> </ul>

Name	Type	Required	Description
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "1.0"</li> <li>• "1.1"</li> <li>• "1.2"</li> </ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the UUIDv4 Schema</li> </ul>
name	string	True	JSON string containing a name for the cluster. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> <li>• This string is internally validated to prevent XSS, Unicode, directory traversal, and SQL-injection attacks.</li> </ul>



Name	Type	Required	Description
state	string	True	<p>JSON string containing a value indicating the operational state of the cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "pending" - The cluster is scheduled for discovery</li> <li>• "discovering" - The cluster is in the process of being discovered</li> <li>• "provisioning" - The cluster is in the process of being provisioned</li> <li>• "running" - The cluster is running normally</li> <li>• "failed" - The cluster is in a permanent failure state</li> <li>• "removed" - The cluster is not currently accessible</li> <li>• "unknown" - The cluster's state cannot be determined</li> </ul>
restoreTargetSupported	string	False	<p>JSON string containing a value indicating the managed cluster's ability to be a <i>target</i> of application data management operations.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - Cluster is an eligible target for app data management operations.</li> <li>• "false" - Cluster is <i>not</i> an eligible target for app data management operations.</li> </ul>

Name	Type	Required	Description
snapshotSupported	string	False	<p>JSON string containing a value indicating the managed cluster's ability to perform application data management backup-like operations. Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - Cluster is an eligible to perform app data management operations.</li> <li>• "false" - Cluster is <i>not</i> eligible to perform app data management operations.</li> </ul>
stateUnready	array[string]	True	<p>JSON array of JSON strings, each indicating a reason why the cluster is unable to transition to "running" state, when there are issues while in "running" state, or why it has transitioned to the "failed" or "removed" state. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 127</li> </ul>

Name	Type	Required	Description
managedState	string	True	<p>JSON string containing a value indicating the management state of the cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "pending" - The cluster is scheduled to be discovered or added</li> <li>• "ineligible" - The cluster is in a "running" state, is not under management, and is not eligible for management. The reason or reasons for this ineligibility are provided in the unready key's value</li> <li>• "unmanaged" - The cluster is in a "running" or "failed" state, is not under management, and is eligible for management</li> <li>• "managing" - The cluster is in a "running" state and is in the process of being managed</li> <li>• "managed" - The cluster is in a "running", "failed", or "removed" state and is under management</li> </ul>

Name	Type	Required	Description
protectionState	string	True	<p>JSON string containing a value indicating the protection state of the cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "full" - The clusters default storage class supports snapshots</li> <li>• "partial" - The cluster has only storageClasses that do not support snapshots</li> <li>• "atRisk" - The cluster's default storage class does not support snapshots</li> </ul>
protectionStateDetails	array[type_astra_stateDetails]	True	<p>JSON array of JSON objects that lists additional details about the current protection state, including why the current state was reached.</p> <p>If no details are available, this array will be empty.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum Items: 0</li> </ul>
managedStateUnready	array[string]	True	<p>JSON array of JSON strings, each indicating a reason why the cluster is ineligible to be managed.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 127</li> </ul>

Name	Type	Required	Description
managedTimestamp	string	True	<p>JSON string containing the timestamp indicating when the cluster was brought under management. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema This key is only returned when a cluster has a managedState of "managed".</li> </ul>
tridentVersion	string	False	<p>JSON string containing the version of Trident installed on the cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Software Version Schema</li> </ul>
tridentManagedState	string	False	<p>JSON string containing one of a set of enumerated values indicating the management state of Trident on this cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• "managed" - Trident instance on the cluster is managed by Astra</li> <li>• "unmanaged" - Trident instance on the cluster is not managed by Astra</li> </ul>

Name	Type	Required	Description
tridentManagedStateDesired	string	False	<p>JSON string containing a value indicating the desired management state for Trident.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "managed" - Manage Trident on this cluster</li> <li>• "unmanaged" - Do not manage Trident on this cluster</li> </ul>
tridentManagedStateDetails	array[ <a href="#">type_astra_stateDetails</a> ]	False	<p>JSON array of JSON objects that lists additional details about why "state" transitioned to "managed" or "unmanaged".</p> <p>If no details are available, this array will be empty.</p> <ul style="list-style-type: none"> <li>• Minimum Items: 0</li> </ul>
tridentManagedStateAllowed	array[string]	False	<p>States that can be requested in a given tridentManagedState.</p> <p>The following states can be requested in each defined state:</p> <ul style="list-style-type: none"> <li>• "managed": "managed"</li> <li>• "unmanaged": "unmanaged"</li> </ul>

Name	Type	Required	Description
inUse	string	True	<p>JSON string containing a value indicating whether the cluster has any managed applications and therefore cannot be deleted.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "false" - The cluster is not managed, or it is managed but has no managed applications associated with it</li> <li>• "true" - The cluster is managed and has managed applications associated with it</li> </ul>
accHost	string	False	<p>JSON string that indicates that this cluster hosts the instance of Astra Control Center that is currently being accessed.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - This cluster is hosting the instance of Astra Control Center that is currently being accessed.</li> </ul>

Name	Type	Required	Description
clusterType	string	True	<p>JSON string containing a value indicating the type of cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "gke" - Kubernetes hosted on Google Kubernetes Engine</li> <li>• "aks" - Kubernetes hosted on Microsoft Azure Kubernetes Service</li> <li>• "eks" - Kubernetes hosted on Amazon Elastic Kubernetes Service</li> <li>• "rke" - The cluster is of type Rancher</li> <li>• "tanzu" -The cluster is of type Tanzu Kubernetes Grid</li> <li>• "openshift" - The cluster is of type OpenShift</li> <li>• "kubernetes" - The cluster is generic Kubernetes</li> </ul>
clusterVersion	string	True	<p>JSON string containing the semantic versioning representation of the cluster environment. For Kubernetes clusters, this is the Kubernetes version.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 31</li> </ul>



Name	Type	Required	Description
clusterVersionString	string	True	<p>JSON string containing a value indicating the extended versioning information for the cluster environment.</p> <p>For Kubernetes clusters, this is the full Kubernetes version.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 31</li> </ul>
clusterCreationTimestamp	string	False	<p>JSON string containing the timestamp indicating when the cluster was originally created.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>
namespaces	array[string]	False	<p>JSON array of JSON strings, each indicating a namespace within the cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 253</li> </ul>
defaultStorageClass	string	False	<p>JSON string containing a storageClass ID that corresponds to the default storage class, as set in Kubernetes.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema If not included, it has not yet been discovered.</li> </ul>

Name	Type	Required	Description
cloudID	string	True	<p>JSON string containing a value indicating the ID of the cloud the cluster is running on.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
credentialID	string	False	<p>JSON string containing a value indicating the ID of the credential that contains the kubeconfig file for the cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
location	string	False	<p>JSON string containing a value provided by the cloud the cluster is running on, indicating the cloud-specific location of the cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>
isMultizonal	string	True	<p>JSON string containing a value provided by the cloud the cluster is running on, indicating whether the cluster spans two or more availability zones.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - The cluster spans two or more availability zones</li> <li>• "false" - The cluster is wholly located within a single availability zone</li> </ul>

Name	Type	Required	Description
privateRouteID	string	False	<p>JSON string containing the locationID for private clusters.</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>
apiServiceID	string	False	<p>JSON string containing the UUID from the Kubernetes (k8s) api service object. Used to uniquely identify a cluster.</p>
metadata	<a href="#">type_astra_metadata_update</a>	True	<p>Client and service-specified metadata associated with the resource. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</li> </ul>

## Example response

```
{
  "type": "application/astra-managedCluster",
  "version": "1.2",
  "id": "6f2fa469-cdae-54be-a451-d0e94a47fa62",
  "name": "GKE-22",
  "state": "running",
  "stateUnready": [],
  "managedState": "managed",
  "managedStateUnready": [],
  "managedTimestamp": "2020-08-06T12:24:52.256624Z",
  "protectionState": "full",
  "protectionStateDetails": [],
  "tridentVersion": "21.07.2",
  "tridentManagedState": "managed",
  "tridentManagedStateDesired": "managed",
  "tridentManagedStateDetails": [],
  "inUse": "true",
  "clusterType": "kubernetes",
  "clusterVersion": "1.91.1",
  "clusterVersionString": "1.19.1",
  "clusterCreationTimestamp": "2020-08-06T12:24:52.256624Z",
  "namespaces": [
    "kube-system",
    "kube-public",
    "my-app-1"
  ],
  "defaultStorageClass": "e280ff62-be35-4f31-a31b-a210a1ad1b33",
  "cloudID": "548bdc1f-f00e-4a23-a062-83265d224d46",
  "credentialID": "055e365a-2215-40de-aecb-a4070a7e6f1e",
  "location": "europe-west4",
  "isMultizonal": "false",
  "apiServiceID": "6bf33af2-872a-4553-a891-26b510c3edbe",
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

## Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

## Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

## Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

## Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	

Name	Type	Required	Description
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

### Definitions

## See Definitions

### type\_astra\_stateDetails

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[ <a href="#">type_astra_label</a> ]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid



## Modify a managed cluster

PUT /accounts/{account\_id}/topology/v1/managedClusters/{managedCluster\_id}

Replaces the entire stored resource with the supplied JSON request body while preserving key values that are not user-modifiable.

### Side Effects

- When defaultStorageClass is changed, the Kubernetes default storage class will be updated.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource  • example: {{.Account}}
managedCluster_id	string	path	True	ID of the managedCluster collection to list

### Request Body

Replaces the entire stored resource with the supplied JSON request body while preserving key values that are not user-modifiable.

### Side Effects

- When defaultStorageClass is changed, the Kubernetes default storage class will be updated.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are:  • "application/astra-managedCluster"
version	string	True	Version of the resource. Defined values are:  • "1.0" • "1.1" • "1.2"

Name	Type	Required	Description
id	string	False	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"><li>• Conforms to the UUIDv4 Schema</li></ul>
name	string	False	JSON string containing a name for the cluster. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 1</li><li>• Maximum length: 63</li><li>• This string is internally validated to prevent XSS, Unicode, directory traversal, and SQL-injection attacks.</li></ul>

Name	Type	Required	Description
state	string	False	<p>JSON string containing a value indicating the operational state of the cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "pending" - The cluster is scheduled for discovery</li> <li>• "discovering" - The cluster is in the process of being discovered</li> <li>• "provisioning" - The cluster is in the process of being provisioned</li> <li>• "running" - The cluster is running normally</li> <li>• "failed" - The cluster is in a permanent failure state</li> <li>• "removed" - The cluster is not currently accessible</li> <li>• "unknown" - The cluster's state cannot be determined</li> </ul>
restoreTargetSupported	string	False	<p>JSON string containing a value indicating the managed cluster's ability to be a <i>target</i> of application data management operations.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - Cluster is an eligible target for app data management operations.</li> <li>• "false" - Cluster is <i>not</i> an eligible target for app data management operations.</li> </ul>

Name	Type	Required	Description
snapshotSupported	string	False	<p>JSON string containing a value indicating the managed cluster's ability to perform application data management backup-like operations. Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - Cluster is an eligible to perform app data management operations.</li> <li>• "false" - Cluster is <i>not</i> eligible to perform app data management operations.</li> </ul>
stateUnready	array[string]	False	<p>JSON array of JSON strings, each indicating a reason why the cluster is unable to transition to "running" state, when there are issues while in "running" state, or why it has transitioned to the "failed" or "removed" state. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 127</li> </ul>

Name	Type	Required	Description
managedState	string	False	<p>JSON string containing a value indicating the management state of the cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "pending" - The cluster is scheduled to be discovered or added</li> <li>• "ineligible" - The cluster is in a "running" state, is not under management, and is not eligible for management. The reason or reasons for this ineligibility are provided in the unready key's value</li> <li>• "unmanaged" - The cluster is in a "running" or "failed" state, is not under management, and is eligible for management</li> <li>• "managing" - The cluster is in a "running" state and is in the process of being managed</li> <li>• "managed" - The cluster is in a "running", "failed", or "removed" state and is under management</li> </ul>

Name	Type	Required	Description
protectionState	string	False	<p>JSON string containing a value indicating the protection state of the cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "full" - The clusters default storage class supports snapshots</li> <li>• "partial" - The cluster has only storageClasses that do not support snapshots</li> <li>• "atRisk" - The cluster's default storage class does not support snapshots</li> </ul>
protectionStateDetails	array[type_astra_stateDetails]	False	<p>JSON array of JSON objects that lists additional details about the current protection state, including why the current state was reached.</p> <p>If no details are available, this array will be empty.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum Items: 0</li> </ul>
managedStateUnready	array[string]	False	<p>JSON array of JSON strings, each indicating a reason why the cluster is ineligible to be managed.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 127</li> </ul>

Name	Type	Required	Description
managedTimestamp	string	False	<p>JSON string containing the timestamp indicating when the cluster was brought under management. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema This key is only returned when a cluster has a managedState of "managed".</li> </ul>
tridentVersion	string	False	<p>JSON string containing the version of Trident installed on the cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Software Version Schema</li> </ul>
tridentManagedState	string	False	<p>JSON string containing one of a set of enumerated values indicating the management state of Trident on this cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• "managed" - Trident instance on the cluster is managed by Astra</li> <li>• "unmanaged" - Trident instance on the cluster is not managed by Astra</li> </ul>

Name	Type	Required	Description
tridentManagedStateDesired	string	False	<p>JSON string containing a value indicating the desired management state for Trident.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "managed" - Manage Trident on this cluster</li> <li>• "unmanaged" - Do not manage Trident on this cluster</li> </ul>
tridentManagedStateDetails	array[ <a href="#">type_astra_stateDetails</a> ]	False	<p>JSON array of JSON objects that lists additional details about why "state" transitioned to "managed" or "unmanaged".</p> <p>If no details are available, this array will be empty.</p> <ul style="list-style-type: none"> <li>• Minimum Items: 0</li> </ul>
tridentManagedStateAllowed	array[string]	False	<p>States that can be requested in a given tridentManagedState.</p> <p>The following states can be requested in each defined state:</p> <ul style="list-style-type: none"> <li>• "managed": "managed"</li> <li>• "unmanaged": "unmanaged"</li> </ul>



Name	Type	Required	Description
inUse	string	False	<p>JSON string containing a value indicating whether the cluster has any managed applications and therefore cannot be deleted.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "false" - The cluster is not managed, or it is managed but has no managed applications associated with it</li> <li>• "true" - The cluster is managed and has managed applications associated with it</li> </ul>
accHost	string	False	<p>JSON string that indicates that this cluster hosts the instance of Astra Control Center that is currently being accessed.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - This cluster is hosting the instance of Astra Control Center that is currently being accessed.</li> </ul>

Name	Type	Required	Description
clusterType	string	False	<p>JSON string containing a value indicating the type of cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "gke" - Kubernetes hosted on Google Kubernetes Engine</li> <li>• "aks" - Kubernetes hosted on Microsoft Azure Kubernetes Service</li> <li>• "eks" - Kubernetes hosted on Amazon Elastic Kubernetes Service</li> <li>• "rke" - The cluster is of type Rancher</li> <li>• "tanzu" -The cluster is of type Tanzu Kubernetes Grid</li> <li>• "openshift" - The cluster is of type OpenShift</li> <li>• "kubernetes" - The cluster is generic Kubernetes</li> </ul>
clusterVersion	string	False	<p>JSON string containing the semantic versioning representation of the cluster environment. For Kubernetes clusters, this is the Kubernetes version.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 31</li> </ul>

Name	Type	Required	Description
clusterVersionString	string	False	<p>JSON string containing a value indicating the extended versioning information for the cluster environment.</p> <p>For Kubernetes clusters, this is the full Kubernetes version.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 31</li> </ul>
clusterCreationTimestamp	string	False	<p>JSON string containing the timestamp indicating when the cluster was originally created.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>
namespaces	array[string]	False	<p>JSON array of JSON strings, each indicating a namespace within the cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 253</li> </ul>
defaultStorageClass	string	False	<p>JSON string containing a storageClass ID that corresponds to the default storage class, as set in Kubernetes.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul> <p>If not included, it has not yet been discovered.</p>

Name	Type	Required	Description
cloudID	string	False	<p>JSON string containing a value indicating the ID of the cloud the cluster is running on.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
credentialID	string	False	<p>JSON string containing a value indicating the ID of the credential that contains the kubeconfig file for the cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
location	string	False	<p>JSON string containing a value provided by the cloud the cluster is running on, indicating the cloud-specific location of the cluster.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>
isMultizonal	string	False	<p>JSON string containing a value provided by the cloud the cluster is running on, indicating whether the cluster spans two or more availability zones.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - The cluster spans two or more availability zones</li> <li>• "false" - The cluster is wholly located within a single availability zone</li> </ul>

Name	Type	Required	Description
privateRouteID	string	False	JSON string containing the locationID for private clusters. <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>
apiServiceID	string	False	JSON string containing the UUID from the Kubernetes (k8s) api service object. Used to uniquely identify a cluster.
metadata	type_astra_metadata_update	False	Client and service-specified metadata associated with the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</li> </ul>

### Example request

```
{
  "type": "application/astra-managedCluster",
  "version": "1.2",
  "defaultStorageClass": "0b146cda-7fc1-4f32-804c-8130a38a7e1c"
}
```

### Response

Status: 204, Indicates if the managedCluster resource was updated.

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

## Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 409, Conflict

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

### Example response

```
{
  "type": "https://astra.netapp.io/problems/10",
  "title": "JSON resource conflict",
  "detail": "The request body JSON contains a field that conflicts with an idempotent value.",
  "status": "409"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/1",
  "title": "Resource not found",
  "detail": "The resource specified in the request URI wasn't found.",
  "status": "404"
}
```



## Definitions

## See Definitions

### type\_astra\_stateDetails

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[ <a href="#">type_astra_label</a> ]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

### invalidFields

Name	Type	Required	Description
name	string	True	Name of the invalid request body field
reason	string	True	Reason why the request body field is invalid

## Delete a managed cluster

DELETE /accounts/{account\_id}/topology/v1/managedClusters/{managedCluster\_id}

Removes the specified Managed Cluster API resource.

### Side Effects

- Internal data structures are cleaned up.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource  • example: {{.Account}}
managedCluster_id	string	path	True	ID of the managedCluster collection to list

### Response

Status: 204, Indicates if the managedCluster resource was deleted.

### Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	

Name	Type	Required	Description
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example error response

```
{
  "type": "https://astra.netapp.io/problems/1",
  "title": "Resource not found",
  "detail": "The resource specified in the request URI wasn't found.",
  "status": "404"
}
```

## Definitions

### See Definitions

invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Metrics

### Retrieve all metrics for an account

GET /accounts/{account\_id}/metrics

Returns all metrics for the account

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"><li>example: <code>{{.Account}}</code></li></ul>

### Response

Status: 200, Returns a OpenMetrics text document containing all metrics for the account.

## Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

## Error

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example error response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

# Namespace

## Namespace overview

The Namespace API provides CRUD (read-only) access to namespace resources in order to describe namespaces associated with a given cluster.

## List the namespaces for a cloud

GET

/accounts/{account\_id}/topology/v1/clouds/{cloud\_id}/clusters/{cluster\_id}/namespaces

Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

## Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"><li>example: {{.Account}}</li></ul>
cloud_id	string	path	True	ID of the containing cloud resource
cluster_id	string	path	True	ID of the containing cluster resource



Name	Type	In	Required	Description
include	string	query	False	<p>Indicates which fields should be returned when listing a collection.</p> <p>URL examples:  "include=id",  "include=id,name"</p> <p>OpenAPI examples:  "id"</p> <ul style="list-style-type: none"> <li>example:  id,name,kubernetesLabels</li> </ul>
limit	string	query	False	<p>Indicates the maximum number of resources to return when listing a collection.</p> <p>URL examples:  "limit=2"</p> <p>OpenAPI examples:  "2"</p>

Name	Type	In	Required	Description
filter	string	query	False	<p>Indicates which fields should be matched in order to return a resource when listing a collection.</p> <p>Supported operators are:</p> <ul style="list-style-type: none"> <li>• eq - Equality</li> <li>• lt/gt - Less than/Greater than</li> <li>• lte/gte - Less than or equals to/Greater than or equals to</li> </ul> <p>URL example: "filter=field%20eq%20%27value%27"</p> <p>OpenAPI examples: "field eq 'value'"</p>

## Response

Status: 200, Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

Name	Type	Required	Description
items	array[ <a href="#">Any of: namespace_1.1_get_response_body, array[]</a> ]	True	
metadata	<a href="#">type_astra_metadata_list</a>	True	

## Example response

```
{
  "type": "application/astra-namespaces",
  "version": "1.1",
  "items": [
    [
      "7d451d2f-196e-4234-ae9-7e2376047e63",
      "kube-system",
      [
        {
          "name": "app.kubernetes.io/environment",
          "value": "dev"
        }
      ]
    ],
    [
      "66b0873b-214f-4ac7-89d8-922432f941eb",
      "jenkins",
      [
        {
          "name": "app.kubernetes.io/environment",
          "value": "dev"
        }
      ]
    ]
  ],
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	

Name	Type	Required	Description
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

## Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

## Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

## Definitions

## See Definitions

### type\_astra\_stateDetails

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### links

Name	Type	Required	Description
rel	string	True	JSON string containing the type of relation that the link indicates. Defined values are: <ul style="list-style-type: none"><li>"canonical" - The preferred link for accessing the resource</li><li>"collection" - The collection that the resource belongs to</li></ul>
href	string	True	JSON string containing the link. Defined values are:

### type\_astra\_metadata

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema

Name	Type	Required	Description
labels	array[type_astra_label]	True	
creationTimestamp	string	True	

Name	Type	Required	Description
modificationTimestamp	string	True	
createdBy	string	True	
modifiedBy	string	False	

namespace\_1.1\_get\_response\_body

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "application/astra-namespace"</li> </ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "1.0"</li> <li>• "1.1"</li> </ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the UUIDv4 Schema</li> </ul>
name	string	True	JSON string containing a value indicating the name of the namespace. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>



Name	Type	Required	Description
namespaceState	string	True	<p>JSON string containing a value indicating the state of the namespace. Defined values are:</p> <ul style="list-style-type: none"> <li>• "discovered" - The namespace has been found in the cluster</li> <li>• "removed" - The namespace has been deleted from the cluster, or the cluster is not managed but there might be resources referring to the namespace</li> </ul>
namespaceStateDetails	array[ <a href="#">type_astra_stateDetails</a> ]	True	<p>JSON array of JSON objects that lists additional details about why "state" transitioned into "state a", "state b", or "state c". If no details are available, this array will be empty. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum items: 0</li> </ul>
kubernetesLabels	array[ <a href="#">type_astra_label</a> ]	False	<p>JSON array of JSON objects, each containing a Kubernetes label associated with the namespace. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Kubernetes Label Array Schema</li> </ul>

Name	Type	Required	Description
clusterID	string	True	<p>JSON string containing a globally unique identifier of the cluster that the namespace is contained in.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
systemType	string	False	<p>JSON string that denotes that the namespace is a type of system namespace. This field identifies what type of system namespace, if any, the namespace is (version 1.1 only).</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "kubernetes" - A generic Kubernetes (K8s) system namespace, for example, "kube-system"</li> <li>• "netapp" - A NetApp system namespace, for example, "trident" or "netapp-monitoring"</li> <li>• "openshift" - An OpenShift system namespace, for example, "openshift-monitoring"</li> <li>• "rke" - A Rancher namespace, for example, "cattle-logging"</li> <li>• "other" - Common system namespaces that don't necessarily fit elsewhere, for example, "ingress-nginx", "tekton-system"</li> </ul>

Name	Type	Required	Description
links	array[ <a href="#">links</a> ]	True	JSON array of JSON objects, each indicating a link relationship associated with the resource. Defined values are: <ul style="list-style-type: none"> <li>• Minimum items: 2</li> </ul>
metadata	<a href="#">type_astra_metadata</a>	True	Client and service-specified metadata associated with the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema</li> </ul>

#### type\_astra\_metadata\_list

Name	Type	Required	Description
continue	string	False	
count	number	False	
labels	array[ <a href="#">type_astra_label</a> ]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

#### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Retrieve a namespace for a cloud

GET

/accounts/{account\_id}/topology/v1/clouds/{cloud\_id}/clusters/{cluster\_id}/namesp

aces/{namespace\_id}

Returns the stored Namespace API resource in the JSON response body.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"><li>example: {{.Account}}</li></ul>
cloud_id	string	path	True	ID of the containing cloud resource
cluster_id	string	path	True	ID of the containing cluster resource
namespace_id	string	path	True	ID of the namespace collection to list

### Response

Status: 200, Returns the stored Namespace API resource in the JSON response body.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>"application/astra-namespace"</li></ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"><li>"1.0"</li><li>"1.1"</li></ul>

Name	Type	Required	Description
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the UUIDv4 Schema</li> </ul>
name	string	True	JSON string containing a value indicating the name of the namespace. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>
namespaceState	string	True	JSON string containing a value indicating the state of the namespace. Defined values are: <ul style="list-style-type: none"> <li>• "discovered" - The namespace has been found in the cluster</li> <li>• "removed" - The namespace has been deleted from the cluster, or the cluster is not managed but there might be resources referring to the namespace</li> </ul>
namespaceStateDetails	array[type_astra_stateDetails]	True	JSON array of JSON objects that lists additional details about why "state" transitioned into "state a", "state b", or "state c". If no details are available, this array will be empty. Defined values are: <ul style="list-style-type: none"> <li>• Minimum items: 0</li> </ul>

Name	Type	Required	Description
kubernetesLabels	array[ <a href="#">type_astra_label</a> ]	False	<p>JSON array of JSON objects, each containing a Kubernetes label associated with the namespace.            Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Kubernetes Label Array Schema</li> </ul>
clusterID	string	True	<p>JSON string containing a globally unique identifier of the cluster that the namespace is contained in.            Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
systemType	string	False	<p>JSON string that denotes that the namespace is a type of system namespace. This field identifies what type of system namespace, if any, the namespace is (version 1.1 only). Defined values are:</p> <ul style="list-style-type: none"> <li>• "kubernetes" - A generic Kubernetes (K8s) system namespace, for example, "kube-system"</li> <li>• "netapp" - A NetApp system namespace, for example, "trident" or "netapp-monitoring"</li> <li>• "openshift" - An OpenShift system namespace, for example, "openshift-monitoring"</li> <li>• "rke" - A Rancher namespace, for example, "cattle-logging"</li> <li>• "other" - Common system namespaces that don't necessarily fit elsewhere, for example, "ingress-nginx", "tekton-system"</li> </ul>
links	array[ <a href="#">links</a> ]	True	<p>JSON array of JSON objects, each indicating a link relationship associated with the resource. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum items: 2</li> </ul>

Name	Type	Required	Description
metadata	<a href="#">type_astra_metadata</a>	True	Client and service-specified metadata associated with the resource. Defined values are: <ul style="list-style-type: none"><li>• Conforms to the Astra Metadata Schema</li></ul>



## Example response

```
{
  "type": "application/astra-namespace",
  "version": "1.1",
  "id": "2de811a6-ce8f-512c-9c3a-9585ca66de22",
  "name": "kube-system",
  "namespaceState": "discovered",
  "namespaceStateDetails": [
    {
      "type": "https://astra.netapp.io/stateDetails/9",
      "title": "Namespace Discovered",
      "detail": "The namespace was discovered in the indicated managed
cluster"
    }
  ],
  "kubernetesLabels": [
    {
      "name": "app.kubernetes.io/environment",
      "value": "dev"
    }
  ],
  "clusterID": "0f284377-e5dc-4dcd-bacd-3197f2b8a347",
  "systemType": "kubernetes",
  "links": [
    {
      "rel": "canonical",
      "href": "https://www.astra.io/accounts/0b311ae7-d89a-4a11-a52c-
1349ca090415/topology/v1/namespaces/7d451d2f-196e-4234-ae9-
7e2376047e63"
    },
    {
      "rel": "collection",
      "href": "https://www.astra.io/accounts/0b311ae7-d89a-4a11-a52c-
1349ca090415/topology/v1/clouds/e0490197-872e-4de8-9287-
b04a938e801f/clusters/0f284377-e5dc-4dcd-bacd-3197f2b8a347/namespaces"
    }
  ],
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

## Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	

Name	Type	Required	Description
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

### Definitions

## See Definitions

### type\_astra\_stateDetails

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### links

Name	Type	Required	Description
rel	string	True	JSON string containing the type of relation that the link indicates. Defined values are: <ul style="list-style-type: none"><li>"canonical" - The preferred link for accessing the resource</li><li>"collection" - The collection that the resource belongs to</li></ul>
href	string	True	JSON string containing the link. Defined values are:

### type\_astra\_metadata

Client and service-specified metadata associated with the resource.  
Defined values are:

- Conforms to the Astra Metadata Schema

Name	Type	Required	Description
labels	array[type_astra_label]	True	
creationTimestamp	string	True	

Name	Type	Required	Description
modificationTimestamp	string	True	
createdBy	string	True	
modifiedBy	string	False	

invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## List the namespaces for a cluster

GET /accounts/{account\_id}/topology/v1/clusters/{cluster\_id}/namespaces

Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"> <li>example: <code>{{.Account}}</code></li> </ul>
cluster_id	string	path	True	ID of the containing cluster resource

Name	Type	In	Required	Description
include	string	query	False	<p>Indicates which fields should be returned when listing a collection.</p> <p>URL examples:  "include=id",  "include=id,name"</p> <p>OpenAPI examples:  "id"</p> <ul style="list-style-type: none"> <li>example:  id,name,kubernetesLabels</li> </ul>
limit	string	query	False	<p>Indicates the maximum number of resources to return when listing a collection.</p> <p>URL examples:  "limit=2"</p> <p>OpenAPI examples:  "2"</p>

Name	Type	In	Required	Description
filter	string	query	False	<p>Indicates which fields should be matched in order to return a resource when listing a collection.</p> <p>Supported operators are:</p> <ul style="list-style-type: none"> <li>• eq - Equality</li> <li>• lt/gt - Less than/Greater than</li> <li>• lte/gte - Less than or equals to/Greater than or equals to</li> </ul> <p>URL example: "filter=field%20eq%20%27value%27"</p> <p>OpenAPI examples: "field eq 'value'"</p>

## Response

Status: 200, Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

Name	Type	Required	Description
items	array[Any of: <a href="#">namespace_1.1_get_response_body</a> , array[]]	True	
metadata	<a href="#">type_astra_metadata_list</a>	True	



## Example response

```
{
  "type": "application/astra-namespaces",
  "version": "1.1",
  "items": [
    [
      "7d451d2f-196e-4234-ae9-7e2376047e63",
      "kube-system",
      [
        {
          "name": "app.kubernetes.io/environment",
          "value": "dev"
        }
      ]
    ],
    [
      "66b0873b-214f-4ac7-89d8-922432f941eb",
      "jenkins",
      [
        {
          "name": "app.kubernetes.io/environment",
          "value": "dev"
        }
      ]
    ]
  ],
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	

Name	Type	Required	Description
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

## Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

## Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

## Definitions

## See Definitions

### type\_astra\_stateDetails

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### links

Name	Type	Required	Description
rel	string	True	JSON string containing the type of relation that the link indicates. Defined values are: <ul style="list-style-type: none"><li>"canonical" - The preferred link for accessing the resource</li><li>"collection" - The collection that the resource belongs to</li></ul>
href	string	True	JSON string containing the link. Defined values are:

### type\_astra\_metadata

Client and service-specified metadata associated with the resource.  
Defined values are:

- Conforms to the Astra Metadata Schema

Name	Type	Required	Description
labels	array[type_astra_label]	True	
creationTimestamp	string	True	

Name	Type	Required	Description
modificationTimestamp	string	True	
createdBy	string	True	
modifiedBy	string	False	

namespace\_1.1\_get\_response\_body

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "application/astra-namespace"</li> </ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "1.0"</li> <li>• "1.1"</li> </ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the UUIDv4 Schema</li> </ul>
name	string	True	JSON string containing a value indicating the name of the namespace. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>

Name	Type	Required	Description
namespaceState	string	True	<p>JSON string containing a value indicating the state of the namespace.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "discovered" - The namespace has been found in the cluster</li> <li>• "removed" - The namespace has been deleted from the cluster, or the cluster is not managed but there might be resources referring to the namespace</li> </ul>
namespaceStateDetails	array[ <a href="#">type_astra_stateDetails</a> ]	True	<p>JSON array of JSON objects that lists additional details about why "state" transitioned into "state a", "state b", or "state c".</p> <p>If no details are available, this array will be empty.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum items: 0</li> </ul>
kubernetesLabels	array[ <a href="#">type_astra_label</a> ]	False	<p>JSON array of JSON objects, each containing a Kubernetes label associated with the namespace.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Kubernetes Label Array Schema</li> </ul>

Name	Type	Required	Description
clusterID	string	True	<p>JSON string containing a globally unique identifier of the cluster that the namespace is contained in.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
systemType	string	False	<p>JSON string that denotes that the namespace is a type of system namespace. This field identifies what type of system namespace, if any, the namespace is (version 1.1 only).</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "kubernetes" - A generic Kubernetes (K8s) system namespace, for example, "kube-system"</li> <li>• "netapp" - A NetApp system namespace, for example, "trident" or "netapp-monitoring"</li> <li>• "openshift" - An OpenShift system namespace, for example, "openshift-monitoring"</li> <li>• "rke" - A Rancher namespace, for example, "cattle-logging"</li> <li>• "other" - Common system namespaces that don't necessarily fit elsewhere, for example, "ingress-nginx", "tekton-system"</li> </ul>



Name	Type	Required	Description
links	array[ <a href="#">links</a> ]	True	JSON array of JSON objects, each indicating a link relationship associated with the resource. Defined values are: <ul style="list-style-type: none"> <li>• Minimum items: 2</li> </ul>
metadata	<a href="#">type_astra_metadata</a>	True	Client and service-specified metadata associated with the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema</li> </ul>

#### type\_astra\_metadata\_list

Name	Type	Required	Description
continue	string	False	
count	number	False	
labels	array[ <a href="#">type_astra_label</a> ]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

#### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Retrieve a namespace for a cluster

GET

/accounts/{account\_id}/topology/v1/clusters/{cluster\_id}/namespaces/{namespace\_id}

}

Returns the stored Namespace API resource in the JSON response body.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"><li>example: {{.Account}}</li></ul>
cluster_id	string	path	True	ID of the containing cluster resource
namespace_id	string	path	True	ID of the namespace collection to list

### Response

Status: 200, Returns the stored Namespace API resource in the JSON response body.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>"application/astra-namespace"</li></ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"><li>"1.0"</li><li>"1.1"</li></ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"><li>Conforms to the UUIDv4 Schema</li></ul>

Name	Type	Required	Description
name	string	True	<p>JSON string containing a value indicating the name of the namespace.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>
namespaceState	string	True	<p>JSON string containing a value indicating the state of the namespace.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "discovered" - The namespace has been found in the cluster</li> <li>• "removed" - The namespace has been deleted from the cluster, or the cluster is not managed but there might be resources referring to the namespace</li> </ul>
namespaceStateDetails	array[type_astra_stateDetails]	True	<p>JSON array of JSON objects that lists additional details about why "state" transitioned into "state a", "state b", or "state c".</p> <p>If no details are available, this array will be empty.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum items: 0</li> </ul>
kubernetesLabels	array[type_astra_label]	False	<p>JSON array of JSON objects, each containing a Kubernetes label associated with the namespace.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Kubernetes Label Array Schema</li> </ul>

Name	Type	Required	Description
clusterID	string	True	<p>JSON string containing a globally unique identifier of the cluster that the namespace is contained in.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
systemType	string	False	<p>JSON string that denotes that the namespace is a type of system namespace. This field identifies what type of system namespace, if any, the namespace is (version 1.1 only).</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "kubernetes" - A generic Kubernetes (K8s) system namespace, for example, "kube-system"</li> <li>• "netapp" - A NetApp system namespace, for example, "trident" or "netapp-monitoring"</li> <li>• "openshift" - An OpenShift system namespace, for example, "openshift-monitoring"</li> <li>• "rke" - A Rancher namespace, for example, "cattle-logging"</li> <li>• "other" - Common system namespaces that don't necessarily fit elsewhere, for example, "ingress-nginx", "tekton-system"</li> </ul>

Name	Type	Required	Description
links	array[ <a href="#">links</a> ]	True	<p>JSON array of JSON objects, each indicating a link relationship associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum items: 2</li> </ul>
metadata	<a href="#">type_astra_metadata</a>	True	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema</li> </ul>

## Example response

```
{
  "type": "application/astra-namespace",
  "version": "1.1",
  "id": "2de811a6-ce8f-512c-9c3a-9585ca66de22",
  "name": "kube-system",
  "namespaceState": "discovered",
  "namespaceStateDetails": [
    {
      "type": "https://astra.netapp.io/stateDetails/9",
      "title": "Namespace Discovered",
      "detail": "The namespace was discovered in the indicated managed
cluster"
    }
  ],
  "kubernetesLabels": [
    {
      "name": "app.kubernetes.io/environment",
      "value": "dev"
    }
  ],
  "clusterID": "0f284377-e5dc-4dcd-bacd-3197f2b8a347",
  "systemType": "kubernetes",
  "links": [
    {
      "rel": "canonical",
      "href": "https://www.astra.io/accounts/0b311ae7-d89a-4a11-a52c-
1349ca090415/topology/v1/namespaces/7d451d2f-196e-4234-ae9-
7e2376047e63"
    },
    {
      "rel": "collection",
      "href": "https://www.astra.io/accounts/0b311ae7-d89a-4a11-a52c-
1349ca090415/topology/v1/clouds/e0490197-872e-4de8-9287-
b04a938e801f/clusters/0f284377-e5dc-4dcd-bacd-3197f2b8a347/namespaces"
    }
  ],
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

## Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	



Name	Type	Required	Description
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

### Definitions

## See Definitions

### type\_astra\_stateDetails

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### links

Name	Type	Required	Description
rel	string	True	JSON string containing the type of relation that the link indicates. Defined values are: <ul style="list-style-type: none"><li>"canonical" - The preferred link for accessing the resource</li><li>"collection" - The collection that the resource belongs to</li></ul>
href	string	True	JSON string containing the link. Defined values are:

### type\_astra\_metadata

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema

Name	Type	Required	Description
labels	array[type_astra_label]	True	
creationTimestamp	string	True	

Name	Type	Required	Description
modificationTimestamp	string	True	
createdBy	string	True	
modifiedBy	string	False	

invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## List all namespaces

GET /accounts/{account\_id}/topology/v1/namespaces

Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"> <li>example: <code>{{.Account}}</code></li> </ul>
include	string	query	False	Indicates which fields should be returned when listing a collection. <p>URL examples: "include=id", "include=id,name"</p> <p>OpenAPI examples: "id"</p> <ul style="list-style-type: none"> <li>example: id,name,kubernetesLabels</li> </ul>

Name	Type	In	Required	Description
limit	string	query	False	<p>Indicates the maximum number of resources to return when listing a collection.</p> <p>URL examples: "limit=2"</p> <p>OpenAPI examples: "2"</p>
filter	string	query	False	<p>Indicates which fields should be matched in order to return a resource when listing a collection.</p> <p>Supported operators are:</p> <ul style="list-style-type: none"> <li>• eq - Equality</li> <li>• lt/gt - Less than/Greater than</li> <li>• lte/gte - Less than or equals to/Greater than or equals to</li> </ul> <p>URL example: "filter=field%20eq%20%27value%27"</p> <p>OpenAPI examples: "field eq 'value'"</p>

## Response

Status: 200, Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

Name	Type	Required	Description
items	array[Any of: namespace_1.1_get_response_body, array[]]	True	
metadata	type_astra_metadata_list	True	

### Example response

```
{
  "type": "application/astra-namespaces",
  "version": "1.1",
  "items": [
    [
      "7d451d2f-196e-4234-ae9-7e2376047e63",
      "kube-system",
      [
        {
          "name": "app.kubernetes.io/environment",
          "value": "dev"
        }
      ]
    ],
    [
      "66b0873b-214f-4ac7-89d8-922432f941eb",
      "jenkins",
      [
        {
          "name": "app.kubernetes.io/environment",
          "value": "dev"
        }
      ]
    ]
  ],
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

### Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

## Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

## Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

## Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	

Name	Type	Required	Description
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

### Definitions



## See Definitions

### type\_astra\_stateDetails

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### links

Name	Type	Required	Description
rel	string	True	JSON string containing the type of relation that the link indicates. Defined values are: <ul style="list-style-type: none"><li>"canonical" - The preferred link for accessing the resource</li><li>"collection" - The collection that the resource belongs to</li></ul>
href	string	True	JSON string containing the link. Defined values are:

### type\_astra\_metadata

Client and service-specified metadata associated with the resource.  
Defined values are:

- Conforms to the Astra Metadata Schema

Name	Type	Required	Description
labels	array[type_astra_label]	True	
creationTimestamp	string	True	

Name	Type	Required	Description
modificationTimestamp	string	True	
createdBy	string	True	
modifiedBy	string	False	

namespace\_1.1\_get\_response\_body

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "application/astra-namespace"</li> </ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "1.0"</li> <li>• "1.1"</li> </ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the UUIDv4 Schema</li> </ul>
name	string	True	JSON string containing a value indicating the name of the namespace. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>

Name	Type	Required	Description
namespaceState	string	True	<p>JSON string containing a value indicating the state of the namespace. Defined values are:</p> <ul style="list-style-type: none"> <li>• "discovered" - The namespace has been found in the cluster</li> <li>• "removed" - The namespace has been deleted from the cluster, or the cluster is not managed but there might be resources referring to the namespace</li> </ul>
namespaceStateDetails	array[ <a href="#">type_astra_stateDetails</a> ]	True	<p>JSON array of JSON objects that lists additional details about why "state" transitioned into "state a", "state b", or "state c". If no details are available, this array will be empty. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum items: 0</li> </ul>
kubernetesLabels	array[ <a href="#">type_astra_label</a> ]	False	<p>JSON array of JSON objects, each containing a Kubernetes label associated with the namespace. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Kubernetes Label Array Schema</li> </ul>

Name	Type	Required	Description
clusterID	string	True	<p>JSON string containing a globally unique identifier of the cluster that the namespace is contained in.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
systemType	string	False	<p>JSON string that denotes that the namespace is a type of system namespace. This field identifies what type of system namespace, if any, the namespace is (version 1.1 only).</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "kubernetes" - A generic Kubernetes (K8s) system namespace, for example, "kube-system"</li> <li>• "netapp" - A NetApp system namespace, for example, "trident" or "netapp-monitoring"</li> <li>• "openshift" - An OpenShift system namespace, for example, "openshift-monitoring"</li> <li>• "rke" - A Rancher namespace, for example, "cattle-logging"</li> <li>• "other" - Common system namespaces that don't necessarily fit elsewhere, for example, "ingress-nginx", "tekton-system"</li> </ul>

Name	Type	Required	Description
links	array[ <a href="#">links</a> ]	True	JSON array of JSON objects, each indicating a link relationship associated with the resource. Defined values are: <ul style="list-style-type: none"> <li>• Minimum items: 2</li> </ul>
metadata	<a href="#">type_astra_metadata</a>	True	Client and service-specified metadata associated with the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema</li> </ul>

#### type\_astra\_metadata\_list

Name	Type	Required	Description
continue	string	False	
count	number	False	
labels	array[ <a href="#">type_astra_label</a> ]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

#### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Retrieve a namespace

GET /accounts/{account\_id}/topology/v1/namespaces/{namespace\_id}

Returns the stored Namespace API resource in the JSON response body.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"><li>example: {{.Account}}</li></ul>
namespace_id	string	path	True	ID of the namespace collection to list

### Response

Status: 200, Returns the stored Namespace API resource in the JSON response body.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>"application/astra-namespace"</li></ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"><li>"1.0"</li><li>"1.1"</li></ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"><li>Conforms to the UUIDv4 Schema</li></ul>

Name	Type	Required	Description
name	string	True	<p>JSON string containing a value indicating the name of the namespace.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>
namespaceState	string	True	<p>JSON string containing a value indicating the state of the namespace.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "discovered" - The namespace has been found in the cluster</li> <li>• "removed" - The namespace has been deleted from the cluster, or the cluster is not managed but there might be resources referring to the namespace</li> </ul>
namespaceStateDetails	array[type_astra_stateDetails]	True	<p>JSON array of JSON objects that lists additional details about why "state" transitioned into "state a", "state b", or "state c".</p> <p>If no details are available, this array will be empty.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum items: 0</li> </ul>
kubernetesLabels	array[type_astra_label]	False	<p>JSON array of JSON objects, each containing a Kubernetes label associated with the namespace.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Kubernetes Label Array Schema</li> </ul>

Name	Type	Required	Description
clusterID	string	True	<p>JSON string containing a globally unique identifier of the cluster that the namespace is contained in.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
systemType	string	False	<p>JSON string that denotes that the namespace is a type of system namespace. This field identifies what type of system namespace, if any, the namespace is (version 1.1 only).</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "kubernetes" - A generic Kubernetes (K8s) system namespace, for example, "kube-system"</li> <li>• "netapp" - A NetApp system namespace, for example, "trident" or "netapp-monitoring"</li> <li>• "openshift" - An OpenShift system namespace, for example, "openshift-monitoring"</li> <li>• "rke" - A Rancher namespace, for example, "cattle-logging"</li> <li>• "other" - Common system namespaces that don't necessarily fit elsewhere, for example, "ingress-nginx", "tekton-system"</li> </ul>



Name	Type	Required	Description
links	array[ <a href="#">links</a> ]	True	<p>JSON array of JSON objects, each indicating a link relationship associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum items: 2</li> </ul>
metadata	<a href="#">type_astra_metadata</a>	True	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema</li> </ul>

## Example response

```
{
  "type": "application/astra-namespace",
  "version": "1.1",
  "id": "2de811a6-ce8f-512c-9c3a-9585ca66de22",
  "name": "kube-system",
  "namespaceState": "discovered",
  "namespaceStateDetails": [
    {
      "type": "https://astra.netapp.io/stateDetails/9",
      "title": "Namespace Discovered",
      "detail": "The namespace was discovered in the indicated managed
cluster"
    }
  ],
  "kubernetesLabels": [
    {
      "name": "app.kubernetes.io/environment",
      "value": "dev"
    }
  ],
  "clusterID": "0f284377-e5dc-4dcd-bacd-3197f2b8a347",
  "systemType": "kubernetes",
  "links": [
    {
      "rel": "canonical",
      "href": "https://www.astra.io/accounts/0b311ae7-d89a-4a11-a52c-
1349ca090415/topology/v1/namespaces/7d451d2f-196e-4234-ae9-
7e2376047e63"
    },
    {
      "rel": "collection",
      "href": "https://www.astra.io/accounts/0b311ae7-d89a-4a11-a52c-
1349ca090415/topology/v1/clouds/e0490197-872e-4de8-9287-
b04a938e801f/clusters/0f284377-e5dc-4dcd-bacd-3197f2b8a347/namespaces"
    }
  ],
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

## Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

## Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

## Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

## Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	

Name	Type	Required	Description
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

### Definitions

## See Definitions

### type\_astra\_stateDetails

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### links

Name	Type	Required	Description
rel	string	True	JSON string containing the type of relation that the link indicates. Defined values are: <ul style="list-style-type: none"><li>"canonical" - The preferred link for accessing the resource</li><li>"collection" - The collection that the resource belongs to</li></ul>
href	string	True	JSON string containing the link. Defined values are:

### type\_astra\_metadata

Client and service-specified metadata associated with the resource.  
Defined values are:

- Conforms to the Astra Metadata Schema

Name	Type	Required	Description
labels	array[type_astra_label]	True	
creationTimestamp	string	True	

Name	Type	Required	Description
modificationTimestamp	string	True	
createdBy	string	True	
modifiedBy	string	False	

invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## List the namespaces for a managed cluster

GET

/accounts/{account\_id}/topology/v1/managedClusters/{managedCluster\_id}/namespaces

Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource  • example: {{.Account}}
managedCluster_id	string	path	True	ID of the containing managedCluster resource

Name	Type	In	Required	Description
include	string	query	False	<p>Indicates which fields should be returned when listing a collection.</p> <p>URL examples:  "include=id",  "include=id,name"</p> <p>OpenAPI examples:  "id"</p> <ul style="list-style-type: none"> <li>example:  id,name,kubernetesLabels</li> </ul>
limit	string	query	False	<p>Indicates the maximum number of resources to return when listing a collection.</p> <p>URL examples:  "limit=2"</p> <p>OpenAPI examples:  "2"</p>



Name	Type	In	Required	Description
filter	string	query	False	<p>Indicates which fields should be matched in order to return a resource when listing a collection.</p> <p>Supported operators are:</p> <ul style="list-style-type: none"> <li>• eq - Equality</li> <li>• lt/gt - Less than/Greater than</li> <li>• lte/gte - Less than or equals to/Greater than or equals to</li> </ul> <p>URL example: "filter=field%20eq%20%27value%27"</p> <p>OpenAPI examples: "field eq 'value'"</p>

## Response

Status: 200, Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

Name	Type	Required	Description
items	array[Any of: <a href="#">namespace_1.1_get_response_body</a> , array[]]	True	
metadata	<a href="#">type_astra_metadata_list</a>	True	

## Example response

```
{
  "type": "application/astra-namespaces",
  "version": "1.1",
  "items": [
    [
      "7d451d2f-196e-4234-ae9-7e2376047e63",
      "kube-system",
      [
        {
          "name": "app.kubernetes.io/environment",
          "value": "dev"
        }
      ]
    ],
    [
      "66b0873b-214f-4ac7-89d8-922432f941eb",
      "jenkins",
      [
        {
          "name": "app.kubernetes.io/environment",
          "value": "dev"
        }
      ]
    ]
  ],
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	

Name	Type	Required	Description
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

## Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

## Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

## Definitions

## See Definitions

### type\_astra\_stateDetails

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### links

Name	Type	Required	Description
rel	string	True	JSON string containing the type of relation that the link indicates. Defined values are: <ul style="list-style-type: none"><li>"canonical" - The preferred link for accessing the resource</li><li>"collection" - The collection that the resource belongs to</li></ul>
href	string	True	JSON string containing the link. Defined values are:

### type\_astra\_metadata

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema

Name	Type	Required	Description
labels	array[type_astra_label]	True	
creationTimestamp	string	True	

Name	Type	Required	Description
modificationTimestamp	string	True	
createdBy	string	True	
modifiedBy	string	False	

#### namespace\_1.1\_get\_response\_body

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"> <li>"application/astra-namespace"</li> </ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>"1.0"</li> <li>"1.1"</li> </ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>Conforms to the UUIDv4 Schema</li> </ul>
name	string	True	JSON string containing a value indicating the name of the namespace. Defined values are: <ul style="list-style-type: none"> <li>Minimum length: 1</li> <li>Maximum length: 255</li> </ul>

Name	Type	Required	Description
namespaceState	string	True	<p>JSON string containing a value indicating the state of the namespace.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "discovered" - The namespace has been found in the cluster</li> <li>• "removed" - The namespace has been deleted from the cluster, or the cluster is not managed but there might be resources referring to the namespace</li> </ul>
namespaceStateDetails	array[ <a href="#">type_astra_stateDetails</a> ]	True	<p>JSON array of JSON objects that lists additional details about why "state" transitioned into "state a", "state b", or "state c".</p> <p>If no details are available, this array will be empty.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum items: 0</li> </ul>
kubernetesLabels	array[ <a href="#">type_astra_label</a> ]	False	<p>JSON array of JSON objects, each containing a Kubernetes label associated with the namespace.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Kubernetes Label Array Schema</li> </ul>



Name	Type	Required	Description
clusterID	string	True	<p>JSON string containing a globally unique identifier of the cluster that the namespace is contained in.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
systemType	string	False	<p>JSON string that denotes that the namespace is a type of system namespace. This field identifies what type of system namespace, if any, the namespace is (version 1.1 only).</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "kubernetes" - A generic Kubernetes (K8s) system namespace, for example, "kube-system"</li> <li>• "netapp" - A NetApp system namespace, for example, "trident" or "netapp-monitoring"</li> <li>• "openshift" - An OpenShift system namespace, for example, "openshift-monitoring"</li> <li>• "rke" - A Rancher namespace, for example, "cattle-logging"</li> <li>• "other" - Common system namespaces that don't necessarily fit elsewhere, for example, "ingress-nginx", "tekton-system"</li> </ul>

Name	Type	Required	Description
links	array[ <a href="#">links</a> ]	True	JSON array of JSON objects, each indicating a link relationship associated with the resource. Defined values are: <ul style="list-style-type: none"> <li>• Minimum items: 2</li> </ul>
metadata	<a href="#">type_astra_metadata</a>	True	Client and service-specified metadata associated with the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema</li> </ul>

#### type\_astra\_metadata\_list

Name	Type	Required	Description
continue	string	False	
count	number	False	
labels	array[ <a href="#">type_astra_label</a> ]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

#### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Retrieve a namespace for a managed cluster

GET

/accounts/{account\_id}/topology/v1/managedClusters/{managedCluster\_id}/namespaces

/ {namespace\_id}

Returns the stored Namespace API resource in the JSON response body.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"><li>example: {{.Account}}</li></ul>
managedCluster_id	string	path	True	ID of the containing managedCluster resource
namespace_id	string	path	True	ID of the namespace collection to list

### Response

Status: 200, Returns the stored Namespace API resource in the JSON response body.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>"application/astra-namespace"</li></ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"><li>"1.0"</li><li>"1.1"</li></ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"><li>Conforms to the UUIDv4 Schema</li></ul>

Name	Type	Required	Description
name	string	True	<p>JSON string containing a value indicating the name of the namespace.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>
namespaceState	string	True	<p>JSON string containing a value indicating the state of the namespace.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "discovered" - The namespace has been found in the cluster</li> <li>• "removed" - The namespace has been deleted from the cluster, or the cluster is not managed but there might be resources referring to the namespace</li> </ul>
namespaceStateDetails	array[type_astra_stateDetails]	True	<p>JSON array of JSON objects that lists additional details about why "state" transitioned into "state a", "state b", or "state c".</p> <p>If no details are available, this array will be empty.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum items: 0</li> </ul>
kubernetesLabels	array[type_astra_label]	False	<p>JSON array of JSON objects, each containing a Kubernetes label associated with the namespace.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Kubernetes Label Array Schema</li> </ul>

Name	Type	Required	Description
clusterID	string	True	<p>JSON string containing a globally unique identifier of the cluster that the namespace is contained in.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
systemType	string	False	<p>JSON string that denotes that the namespace is a type of system namespace. This field identifies what type of system namespace, if any, the namespace is (version 1.1 only).</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "kubernetes" - A generic Kubernetes (K8s) system namespace, for example, "kube-system"</li> <li>• "netapp" - A NetApp system namespace, for example, "trident" or "netapp-monitoring"</li> <li>• "openshift" - An OpenShift system namespace, for example, "openshift-monitoring"</li> <li>• "rke" - A Rancher namespace, for example, "cattle-logging"</li> <li>• "other" - Common system namespaces that don't necessarily fit elsewhere, for example, "ingress-nginx", "tekton-system"</li> </ul>

Name	Type	Required	Description
links	array[ <a href="#">links</a> ]	True	<p>JSON array of JSON objects, each indicating a link relationship associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum items: 2</li> </ul>
metadata	<a href="#">type_astra_metadata</a>	True	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema</li> </ul>

## Example response

```
{
  "type": "application/astra-namespace",
  "version": "1.1",
  "id": "2de811a6-ce8f-512c-9c3a-9585ca66de22",
  "name": "kube-system",
  "namespaceState": "discovered",
  "namespaceStateDetails": [
    {
      "type": "https://astra.netapp.io/stateDetails/9",
      "title": "Namespace Discovered",
      "detail": "The namespace was discovered in the indicated managed
cluster"
    }
  ],
  "kubernetesLabels": [
    {
      "name": "app.kubernetes.io/environment",
      "value": "dev"
    }
  ],
  "clusterID": "0f284377-e5dc-4dcd-bacd-3197f2b8a347",
  "systemType": "kubernetes",
  "links": [
    {
      "rel": "canonical",
      "href": "https://www.astra.io/accounts/0b311ae7-d89a-4a11-a52c-
1349ca090415/topology/v1/namespaces/7d451d2f-196e-4234-ae9-
7e2376047e63"
    },
    {
      "rel": "collection",
      "href": "https://www.astra.io/accounts/0b311ae7-d89a-4a11-a52c-
1349ca090415/topology/v1/clouds/e0490197-872e-4de8-9287-
b04a938e801f/clusters/0f284377-e5dc-4dcd-bacd-3197f2b8a347/namespaces"
    }
  ],
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

## Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters



### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	

Name	Type	Required	Description
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

### Definitions

## See Definitions

### type\_astra\_stateDetails

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### links

Name	Type	Required	Description
rel	string	True	JSON string containing the type of relation that the link indicates. Defined values are: <ul style="list-style-type: none"><li>"canonical" - The preferred link for accessing the resource</li><li>"collection" - The collection that the resource belongs to</li></ul>
href	string	True	JSON string containing the link. Defined values are:

### type\_astra\_metadata

Client and service-specified metadata associated with the resource.  
Defined values are:

- Conforms to the Astra Metadata Schema

Name	Type	Required	Description
labels	array[type_astra_label]	True	
creationTimestamp	string	True	

Name	Type	Required	Description
modificationTimestamp	string	True	
createdBy	string	True	
modifiedBy	string	False	

invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Notification

### Notification overview

The Notification API provides per-user CRUD (Create-Read-Update-Delete) access to events with a notification destination.

### List all notifications

GET /accounts/{account\_id}/core/v1/notifications

Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"> <li>example: <code>{{.Account}}</code></li> </ul>

Name	Type	In	Required	Description
include	string	query	False	<p>Indicates which fields should be returned when listing a collection.</p> <p>URL examples:  "include=id",  "include=id,name"</p> <p>OpenAPI examples:  "id"</p> <ul style="list-style-type: none"> <li>example: id,summary</li> </ul>
limit	string	query	False	<p>Indicates the maximum number of resources to return when listing a collection.</p> <p>URL examples:  "limit=2"</p> <p>OpenAPI examples:  "2"</p> <ul style="list-style-type: none"> <li>example: 4</li> </ul>

Name	Type	In	Required	Description
filter	string	query	False	<p>Indicates which fields should be matched in order to return a resource when listing a collection.</p> <p>Supported operators are:</p> <ul style="list-style-type: none"> <li>• eq - Equality</li> <li>• lt/gt - Less than/Greater than</li> <li>• lte/gte - Less than or equals to/Greater than or equals to</li> </ul> <p>URL example: "filter=field%20eq%20%27value%27"</p> <p>OpenAPI examples: "field eq 'value'"</p>
orderBy	string	query	False	<p>Indicates the sort order of resource when listing a collection.</p> <p>URL examples: "orderBy=name", "orderBy=name%20desc"</p> <p>OpenAPI examples: "name desc"</p>
skip	string	query	False	<p>Indicates the number of resources to skip over when listing a collection.</p> <p>URL examples: "skip=1"</p> <p>OpenAPI examples: "1"</p>

Name	Type	In	Required	Description
count	string	query	False	<p>Indicates if the total number of resources should be returned in the metadata object.</p> <p>URL examples: "count=true"</p> <p>OpenAPI examples: "true"</p> <ul style="list-style-type: none"> <li>• example: true</li> </ul>
continue		query	False	<p>Indicates the token to resume listing from.</p> <p>URL examples: "continue=&lt;continue token="" from="" collection="" metadata=""&gt;"&lt;/continue&gt;</p> <p>OpenAPI examples: "&lt;continue token="" from="" collection="" metadata=""&gt;"&lt;/continue&gt;&amp;lt;/continue&amp;t;</p>

## Response

Status: 200, Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

Name	Type	Required	Description
items	array[Any of: <a href="#">notification_1.3_get_response_body</a> , array[]]	True	
metadata	<a href="#">type_astra_metadata_list</a>	True	

## Example response

```
{
  "type": "application/astra-notifications",
  "version": "1.3",
  "items": [
    [
      "4f8273ee-883d-47f0-a512-9e27b6285f20",
      "Discovering Applications in Cluster"
    ],
    [
      "1cdd26dc-5eb0-4cf4-a0c1-39a9b83720e1",
      "Application Discovered"
    ],
    [
      "275a8c6f-ebf6-4d10-b671-77d1b8c7c0a6",
      "Application Discovery Failed"
    ],
    [
      "4325f971-ca9c-4a52-bc9a-da6ec62e6bfe",
      "Application Discovered"
    ]
  ],
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	



### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	

Name	Type	Required	Description
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't found.",
  "status": "404"
}
```

## Definitions

## See Definitions

data

JSON object containing additional event-specific information.

Name	Type	Required	Description
ttl	number	False	JSON number indicating the number of seconds (since the eventTime) that the event will be retained. This field is only included when an event is automatically deleted after the specified number of seconds. When deleted, if the event has a notification destination, all associated notifications are also deleted. When deleted, if the event has a banner destination, the banner is also removed. The absence of this field (or a value of "0") means that an event will not be automatically deleted.
isAcknowledgeable	string	False	JSON string indicating whether the banner is dismissible. Defined values are: <ul style="list-style-type: none"><li>• "true" - The banner is dismissible</li><li>• "false" - The banner is not dismissible</li></ul>

type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

type\_astra\_metadata

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema

Name	Type	Required	Description
labels	array[type_astra_label]	True	
creationTimestamp	string	True	
modificationTimestamp	string	True	
createdBy	string	True	
modifiedBy	string	False	

notification\_1.3\_get\_response\_body

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>• "application/astra-notification"</li></ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"><li>• "1.0"</li><li>• "1.1"</li><li>• "1.2"</li><li>• "1.3"</li></ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"><li>• Conforms to the UUIDv4 Schema</li></ul>

Name	Type	Required	Description
name	string	True	<p>JSON string containing a dot notation (.) hierarchical name for the event.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 3</li> <li>• Maximum length: 127</li> <li>• Defined regex is: <code>"^[a-z](\.[a-z])+\$"</code></li> </ul>
sequenceCount	number	True	<p>JSON number containing a sequence count.</p> <p>The number is incremented by the system each time a new event is received.</p>
summary	string	True	<p>JSON string containing the short-form (less than 40 characters) summary of the event.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 3</li> <li>• Maximum length: 79</li> </ul>
eventTime	string	True	<p>JSON string containing a timestamp that indicates when an event occurred.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>
source	string	True	<p>JSON string containing the lowercase name of the service generating an event.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 19</li> <li>• Defined regex is: <code>"^[a-z]*\$"</code></li> </ul>

Name	Type	Required	Description
resourceID	string	True	<p>JSON string containing the resource ID associated with an event.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
additionalResourceIDs	array[string]	True	<p>JSON array of JSON strings, each containing a resource ID of an additional resource associated with the event. While the "resourceID" field contains the primary resource associated with this event, this field contains any number of additional resource IDs to be associated with the same events.</p> <p>If no additional resources are associated with the event, the array will be empty.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
resourceType	string	True	<p>JSON string containing the media type of the resource associated with an event.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 4</li> <li>• Maximum length: 79</li> <li>• Defined regex is: <code>"^application/astra-[a-zA-Z]+\$"</code></li> </ul>

Name	Type	Required	Description
correlationID	string	True	<p>JSON string containing a UUIDv4 correlation ID that allows related events to be grouped together.</p> <p>Defined values are:</p> <ul style="list-style-type: none"><li>• Conforms to the Astra Identifier Schema</li></ul>



Name	Type	Required	Description
severity	string	True	<p>JSON string containing one of the following values that indicate the severity of an event. Defined values are:</p> <ul style="list-style-type: none"> <li>• "cleared" - Indicates that a previously reported event describing a condition is no longer active. An event with severity "cleared" will use the same summary and correlation ID to allow it to be matched up.</li> <li>• "indeterminate" - Indicates that the severity cannot be determined.</li> <li>• "informational" - Indicates a change in state that is both expected and normal (not defined in X.733).</li> <li>• "warning" - Indicates the detection of a potential or impending service affecting fault, before any significant effects have been felt.</li> <li>• "critical" - Indicates that a service affecting condition has occurred and immediate corrective action is required. Definitions for "cleared", "indeterminate", "warning" and "critical" are based on definitions in clause 8.1.2.3 of CCITT X.733.</li> </ul>

Name	Type	Required	Description
class	string	True	<p>JSON string containing one of the following values that indicate the class of the event. Defined values are:</p> <ul style="list-style-type: none"> <li>• "system" - The event is related to an internal event or request.</li> <li>• "user" - The event is related to a user-initiated event or request.</li> <li>• "security" - The event is related to a security issue.</li> </ul>
description	string	True	<p>JSON string containing a long-form descriptive text about the event. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 3</li> <li>• Maximum length: 1023</li> </ul>
descriptionURL	string	False	<p>JSON string containing the URL that enables and links a button in the banner to external documentation. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 3</li> <li>• Maximum length: 4095</li> </ul>

Name	Type	Required	Description
correctiveAction	string	False	<p>JSON string containing a long-form descriptive text about what corrective action should be taken in response to the event.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 3</li> <li>• Maximum length: 1023</li> </ul>
correctiveActionURL	string	False	<p>JSON string containing the URL that links a button in the banner to a page within the UI to fix the issue.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 3</li> <li>• Maximum length: 4095</li> </ul>
visibility	array[string]	False	<p>JSON array of JSON strings, each indicating an RBAC role permitted to view the event. Roles are OR-defined together. Optional.</p> <p>If omitted, a user with any RBAC role can view the event.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>

Name	Type	Required	Description
destinations	array[string]	False	<p>JSON array of JSON strings, each indicating an additional destination for the event. These allow a service to provide hints about where an event must be routed in addition to the Activity service's activity log. Optional.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "notification" - The event is marked as a notification, and will be accessible through the notifications API endpoint.</li> <li>• "banner" - The event is marked as a banner.</li> <li>• "support" - The event is marked as a support-related event.</li> </ul>
resourceURI	string	False	<p>JSON string containing the URI associated with the event. Only included for events related to API operations.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 3</li> <li>• Maximum length: 4095</li> </ul>
resourceCollectionURL	array[string]	False	<p>JSON array of JSON strings, each indicating the fully-expanded access URL of the resource associated with the event.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 1023</li> </ul>

Name	Type	Required	Description
resourceMethod	string	False	<p>JSON string containing the HTTP method invoked. Included only for events related to API operations.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "options" - OPTIONS API operation</li> <li>• "post" - POST API operation</li> <li>• "get" - GET API operation</li> <li>• "put" - PUT API operation</li> <li>• "delete" - DELETE API operation</li> </ul>
resourceMethodResult	string	False	<p>JSON string containing the result of the HTTP method invoked. Only included for events related to the API operations.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Defined regex is: <code>"^[1-5][0-9]{2}\$"</code></li> </ul>
userID	string	False	<p>JSON string containing the user ID associated with an event. Only included for events associated with the user-initiated actions.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
accountID	string	False	JSON string containing the account ID associated with an event. Only included for events associated with an account. Defined values are: <ul style="list-style-type: none"> <li>Conforms to the Astra Identifier Schema</li> </ul>
data	<a href="#">data</a>	False	JSON object containing additional event-specific information.
metadata	<a href="#">type_astra_metadata</a>	True	Client and service-specified metadata associated with the resource. Defined values are: <ul style="list-style-type: none"> <li>Conforms to the Astra Metadata Schema</li> </ul>

#### type\_astra\_metadata\_list

Name	Type	Required	Description
continue	string	False	
count	number	False	
labels	array[ <a href="#">type_astra_label</a> ]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

#### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter

Name	Type	Required	Description
reason	string	True	Reason why the query parameter is invalid

## Retrieve a notification

GET /accounts/{account\_id}/core/v1/notifications/{notification\_id}

Returns the stored Notification API resource in the JSON response body.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"> <li>example: <code>{{.Account}}</code></li> </ul>
notification_id	string	path	True	ID of the notification collection to list

### Response

Status: 200, Returns the stored Notification API resource in the JSON response body.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"> <li>"application/astra-notification"</li> </ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>"1.0"</li> <li>"1.1"</li> <li>"1.2"</li> <li>"1.3"</li> </ul>

Name	Type	Required	Description
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the UUIDv4 Schema</li> </ul>
name	string	True	JSON string containing a dot notation (.) hierarchical name for the event. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 3</li> <li>• Maximum length: 127</li> <li>• Defined regex is: <code>"^[a-z](\.[a-z])+\$"</code></li> </ul>
sequenceCount	number	True	JSON number containing a sequence count. The number is incremented by the system each time a new event is received.
summary	string	True	JSON string containing the short-form (less than 40 characters) summary of the event. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 3</li> <li>• Maximum length: 79</li> </ul>
eventTime	string	True	JSON string containing a timestamp that indicates when an event occurred. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>



Name	Type	Required	Description
source	string	True	<p>JSON string containing the lowercase name of the service generating an event.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 19</li> <li>• Defined regex is: <code>"^[a-z-]*\$"</code></li> </ul>
resourceID	string	True	<p>JSON string containing the resource ID associated with an event.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
additionalResourceIDs	array[string]	True	<p>JSON array of JSON strings, each containing a resource ID of an additional resource associated with the event. While the "resourceID" field contains the primary resource associated with this event, this field contains any number of additional resource IDs to be associated with the same events.</p> <p>If no additional resources are associated with the event, the array will be empty.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
resourceType	string	True	<p>JSON string containing the media type of the resource associated with an event.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 4</li> <li>• Maximum length: 79</li> <li>• Defined regex is: <code>"^application/astra-([a-zA-Z])+\$"</code></li> </ul>
correlationID	string	True	<p>JSON string containing a UUIDv4 correlation ID that allows related events to be grouped together.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
severity	string	True	<p>JSON string containing one of the following values that indicate the severity of an event. Defined values are:</p> <ul style="list-style-type: none"> <li>• "cleared" - Indicates that a previously reported event describing a condition is no longer active. An event with severity "cleared" will use the same summary and correlation ID to allow it to be matched up.</li> <li>• "indeterminate" - Indicates that the severity cannot be determined.</li> <li>• "informational" - Indicates a change in state that is both expected and normal (not defined in X.733).</li> <li>• "warning" - Indicates the detection of a potential or impending service affecting fault, before any significant effects have been felt.</li> <li>• "critical" - Indicates that a service affecting condition has occurred and immediate corrective action is required. Definitions for "cleared", "indeterminate", "warning" and "critical" are based on definitions in clause 8.1.2.3 of CCITT X.733.</li> </ul>

Name	Type	Required	Description
class	string	True	<p>JSON string containing one of the following values that indicate the class of the event. Defined values are:</p> <ul style="list-style-type: none"> <li>• "system" - The event is related to an internal event or request.</li> <li>• "user" - The event is related to a user-initiated event or request.</li> <li>• "security" - The event is related to a security issue.</li> </ul>
description	string	True	<p>JSON string containing a long-form descriptive text about the event. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 3</li> <li>• Maximum length: 1023</li> </ul>
descriptionURL	string	False	<p>JSON string containing the URL that enables and links a button in the banner to external documentation. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 3</li> <li>• Maximum length: 4095</li> </ul>
correctiveAction	string	False	<p>JSON string containing a long-form descriptive text about what corrective action should be taken in response to the event. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 3</li> <li>• Maximum length: 1023</li> </ul>

Name	Type	Required	Description
correctiveActionURL	string	False	<p>JSON string containing the URL that links a button in the banner to a page within the UI to fix the issue.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 3</li> <li>• Maximum length: 4095</li> </ul>
visibility	array[string]	False	<p>JSON array of JSON strings, each indicating an RBAC role permitted to view the event. Roles are OR-defined together. Optional.</p> <p>If omitted, a user with any RBAC role can view the event.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>
destinations	array[string]	False	<p>JSON array of JSON strings, each indicating an additional destination for the event. These allow a service to provide hints about where an event must be routed in addition to the Activity service's activity log. Optional.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "notification" - The event is marked as a notification, and will be accessible through the notifications API endpoint.</li> <li>• "banner" - The event is marked as a banner.</li> <li>• "support" - The event is marked as a support-related event.</li> </ul>

Name	Type	Required	Description
resourceURI	string	False	<p>JSON string containing the URI associated with the event. Only included for events related to API operations.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 3</li> <li>• Maximum length: 4095</li> </ul>
resourceCollectionURL	array[string]	False	<p>JSON array of JSON strings, each indicating the fully-expanded access URL of the resource associated with the event.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 1023</li> </ul>
resourceMethod	string	False	<p>JSON string containing the HTTP method invoked. Included only for events related to API operations.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "options" - OPTIONS API operation</li> <li>• "post" - POST API operation</li> <li>• "get" - GET API operation</li> <li>• "put" - PUT API operation</li> <li>• "delete" - DELETE API operation</li> </ul>

Name	Type	Required	Description
resourceMethodResult	string	False	<p>JSON string containing the result of the HTTP method invoked. Only included for events related to the API operations.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Defined regex is: <code>"^[1-5][0-9]{2}\$"</code></li> </ul>
userID	string	False	<p>JSON string containing the user ID associated with an event. Only included for events associated with the user-initiated actions.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
accountID	string	False	<p>JSON string containing the account ID associated with an event. Only included for events associated with an account.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
data	<a href="#">data</a>	False	<p>JSON object containing additional event-specific information.</p>
metadata	<a href="#">type_astra_metadata</a>	True	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema</li> </ul>

## Example response

```
{
  "type": "application/astra-notification",
  "version": "1.3",
  "id": "03c645d6-75f0-59b0-95f2-862ae344ea27",
  "name": "astra.app.discovery.failed",
  "sequenceCount": 48923,
  "summary": "Application Discovery Failed",
  "eventTime": "2020-08-06T12:24:51.846543Z",
  "source": "composite-compute",
  "resourceID": "f670bf11-8850-44bd-b330-815af6186a06",
  "additionalResourceIDs": [
    "84dfef99-b7b2-46d2-9021-0a1a9a5df1d6",
    "abb32003-07b9-49b1-9938-1cf6d2f33566"
  ],
  "resourceType": "application/astra-app",
  "correlationID": "3c603442-cfca-4af9-9f1b-40dde5c7a806",
  "severity": "warning",
  "class": "user",
  "description": "Discovering the application 'mysql' was unsuccessful.
K8s error 442. Application marked in state 'error'.",
  "destinations": [
    "notification"
  ],
  "resourceURI": "/accounts/fdaa655c-15ab-4d34-aa61-
1e9098e67be0/topology/v1/managedClusters/dfd9de2d-6f0b-437b-a737-
c8f7f176cd14/apps/f670bf11-8850-44bd-b330-815af6186a06",
  "resourceCollectionURL": [
    "https://www.astra.io/accounts/fdaa655c-15ab-4d34-aa61-
1e9098e67be0/topology/v1/clouds/0df3f1a0-7203-4c12-aabf-
a7bee6302671/clusters/dfd9de2d-6f0b-437b-a737-
c8f7f176cd14/namespaces/f8b58091-4b9c-4c64-9b40-
018dbaf7c5de/apps/f670bf11-8850-44bd-b330-815af6186a06",
    "https://www.astra.io/accounts/fdaa655c-15ab-4d34-aa61-
1e9098e67be0/topology/v1/clouds/0df3f1a0-7203-4c12-aabf-
a7bee6302671/clusters/dfd9de2d-6f0b-437b-a737-
c8f7f176cd14/namespaces/923708f8-0435-45b5-8c00-
fbdef3ffaf25/apps/f670bf11-8850-44bd-b330-815af6186a06"
  ],
  "userID": "abda967f-cd2c-4237-908e-99266648c553",
  "accountID": "f126d214-bccf-4558-86b4-2137a41e734f",
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
  }
}
```



```
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

## Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

## Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

## Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

## Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	

Name	Type	Required	Description
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

### Definitions

## See Definitions

data

JSON object containing additional event-specific information.

Name	Type	Required	Description
ttl	number	False	JSON number indicating the number of seconds (since the eventTime) that the event will be retained. This field is only included when an event is automatically deleted after the specified number of seconds. When deleted, if the event has a notification destination, all associated notifications are also deleted. When deleted, if the event has a banner destination, the banner is also removed. The absence of this field (or a value of "0") means that an event will not be automatically deleted.
isAcknowledgeable	string	False	JSON string indicating whether the banner is dismissible. Defined values are: <ul style="list-style-type: none"><li>• "true" - The banner is dismissible</li><li>• "false" - The banner is not dismissible</li></ul>

type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

type\_astra\_metadata

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema

Name	Type	Required	Description
labels	array[type_astra_label]	True	
creationTimestamp	string	True	
modificationTimestamp	string	True	
createdBy	string	True	
modifiedBy	string	False	

invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Package

### Package overview

The Package API provides CRUD (Create-Read-Update-Delete) access to package resources in order to represent installable software packages.

### Create a new package

POST /accounts/{account\_id}/core/v1/packages

Indicates desired values for the Package API resource to be created.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"><li>• example: <code>{{.Account}}</code></li></ul>

## Request Body

Indicates desired values for the Package API resource to be created.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>"application/astra-package"</li></ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"><li>"1.0"</li></ul>
packageName	string	True	JSON string containing the package name. Defined values are: <ul style="list-style-type: none"><li>Minimum length: 1</li><li>Maximum length: 31</li></ul> Example values are: <ul style="list-style-type: none"><li>"acc"</li><li>"acs"</li><li>"trident"</li></ul>
packageVersion	string	True	JSON string containing the SemVer of the package. Defined values are: <ul style="list-style-type: none"><li>Conforms to the SemVer Schema</li></ul>
packageType	string	True	JSON string containing the package type, indicating whether this is a full installation package or a patch. Defined values are: <ul style="list-style-type: none"><li>"install"</li><li>"patch"</li></ul>

Name	Type	Required	Description
bundleName	array[string]	False	JSON array of JSON strings containing the name of the bundle that the package is contained in.
severityLevel	string	True	JSON string describing the severity level of this patch/installation. Defined values are: <ul style="list-style-type: none"> <li>"recommended" - Installation is recommended - Default value</li> <li>"critical" - Installation is strongly recommended to address critical bug fixes and/or security patches</li> </ul>
images	array[images]	False	JSON array of JSON objects, each containing a docker image that is part of the package.
artifacts	array[artifacts]	False	JSON array of JSON objects describing the additional artifacts (binaries and others) associated with this package.
files	array[files]	False	JSON array of JSON objects, each representing a non-image artifact associated with this package.
upgradableVersions	upgradableVersions	False	JSON object containing the minimum and maximum versions that can be upgraded to the package version.

Name	Type	Required	Description
dependencies	array[ <a href="#">dependencies</a> ]	False	JSON array of JSON objects describing what minimum version of a given dependency is required for this package to be installed
metadata	<a href="#">type_astra_metadata</a>	False	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels.</li> </ul>



## Example request

```
{
  "type": "application/astra-package",
  "version": "1.0",
  "packageName": "acc",
  "packageVersion": "22.09.1",
  "packageType": "patch",
  "severityLevel": "recommended",
  "images": [
    {
      "imagePath": "/globalcicd/acc",
      "imageName": "storage-provider",
      "imageTag": "1.3.116",
      "imageDigest":
"sha256:2e04d178815537b0ad8c3224e8754e3364456781a161f1be239853dae33deaf
c"
    },
    {
      "imagePath": "/globalcicd/acc",
      "imageName": "storage-backend-metrics",
      "imageTag": "1.3.45",
      "imageDigest":
"sha256:2e04d178815537b0ad8c3224e8754e3364456781a161f1be239853dae33deaf
c"
    },
    {
      "imagePath": "/globalcicd/acc",
      "imageName": "credentials",
      "imageTag": "1.3.45",
      "imageDigest":
"sha256:2e04d178815537b0ad8c322445654e33642da781a161f1be239853dae33deaf
c"
    }
  ],
  "files": [
    {
      "fileName": "astra_control_center_min.yaml",
      "fileIdentifier": "astra_min",
      "fileMediaType": "application/x-yaml",
      "fileContents":
"VGhpcyBpcyBzdXBwb3NlZCB0byBiZSBhIGNvbXBvZXRzZWNzZWQgZmlsZSBjb250ZW50"
    }
  ],
  "dependencies": [
    {
```

```

    "componentName": "acc",
    "componentMinVersion": "22.04.29"
  },
  {
    "componentName": "kubernetes",
    "componentMinVersion": "v1.19.7",
    "componentMaxVersion": "v1.22"
  },
  {
    "componentName": "trident",
    "componentMinVersion": "v21.01.1"
  }
]
}

```

## Response

Status: 201, Returns the newly created package resource in the JSON response body.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"> <li>"application/astra-package"</li> </ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>"1.0"</li> </ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>Conforms to the UUIDv4 Schema</li> </ul>

Name	Type	Required	Description
packageName	string	True	JSON string containing the package name. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 31</li> </ul> Example values are: <ul style="list-style-type: none"> <li>• "acc"</li> <li>• "acs"</li> <li>• "trident"</li> </ul>
packageVersion	string	True	JSON string containing the SemVer of the package. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the SemVer Schema</li> </ul>
packageType	string	True	JSON string containing the package type, indicating whether this is a full installation package or a patch. Defined values are: <ul style="list-style-type: none"> <li>• "install"</li> <li>• "patch"</li> </ul>
bundleName	array[string]	False	JSON array of JSON strings containing the name of the bundle that the package is contained in.

Name	Type	Required	Description
severityLevel	string	True	<p>JSON string describing the severity level of this patch/installation. Defined values are:</p> <ul style="list-style-type: none"> <li>• "recommended" - Installation is recommended - Default value</li> <li>• "critical" - Installation is strongly recommended to address critical bug fixes and/or security patches</li> </ul>
packageState	string	True	<p>JSON string containing a value indicating the operational state of the package. After verification of the package and after import, the state will indicate "complete". Otherwise, the state will indicate "incomplete". Defined values are:</p> <ul style="list-style-type: none"> <li>• "verifying" - The package is in the process of being validated</li> <li>• "corrupt" - The package is corrupt</li> <li>• "incomplete" - The package is missing elements</li> <li>• "available" - All elements associated with the package are available and the package is ready for use</li> </ul>

Name	Type	Required	Description
packageStateTransitions	array[type_astra_stateTransitions]	True	<p>JSON array of JSON objects, each representing the set of permitted state transitions from a given defined state.</p> <p>Each JSON object contains the fields "from" and "to", where the "from" value is the name of a state and the "to" value is an array of permitted destination states.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the State Transition Schema</li> </ul>
packageStateDetails	array[type_astra_stateDetails]	True	<p>JSON array of JSON objects that lists additional details about the current "state".</p> <p>If no details are available, this array will be empty.</p> <ul style="list-style-type: none"> <li>• Minimum Items: 0</li> </ul>
images	array[images]	False	<p>JSON array of JSON objects, each containing a docker image that is part of the package.</p>
artifacts	array[artifacts]	False	<p>JSON array of JSON objects describing the additional artifacts (binaries and others) associated with this package.</p>
files	array[files]	False	<p>JSON array of JSON objects, each representing a non-image artifact associated with this package.</p>

Name	Type	Required	Description
upgradableVersions	<a href="#">upgradableVersions</a>	False	JSON object containing the minimum and maximum versions that can be upgraded to the package version.
dependencies	array[ <a href="#">dependencies</a> ]	False	JSON array of JSON objects describing what minimum version of a given dependency is required for this package to be installed
metadata	<a href="#">type_astra_metadata</a>	True	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels.</li> </ul>

## Example response

```
{
  "type": "application/astra-package",
  "version": "1.0",
  "id": "54edc2b3-18c5-5371-904b-ebcd04d88bdc",
  "packageName": "acc",
  "packageVersion": "22.09.1",
  "packageType": "patch",
  "packageState": "available",
  "packageStateTransitions": [
    {
      "from": "verifying",
      "to": [
        "corrupt",
        "incomplete",
        "available"
      ]
    },
    {
      "from": "corrupt",
      "to": [
        "incomplete",
        "available"
      ]
    },
    {
      "from": "incomplete",
      "to": [
        "corrupt",
        "available"
      ]
    },
    {
      "from": "available",
      "to": [
        "corrupt",
        "available"
      ]
    }
  ],
  "packageStateDetails": [],
  "severityLevel": "recommended",
  "images": [
    {
      "imagePath": "/globalcicd/acc",

```

```

    "imageName": "storage-provider",
    "imageTag": "1.3.116",
    "imageDigest":
"sha256:2e04d178815537b0ad8c3224e8754e33642da781a161f1be239853dae33deaf
c"
  },
  {
    "imagePath": "/globalcid/acc",
    "imageName": "storage-backend-metrics",
    "imageTag": "1.3.45",
    "imageDigest":
"sha256:2e04d178815537b0ad8c3224e8754e33642da781a161f1be239853dae33deaf
c"
  },
  {
    "imagePath": "/globalcid/acc",
    "imageName": "credentials",
    "imageTag": "1.3.45",
    "imageDigest":
"sha256:2e04d178815537b0ad8c3224e8754e33642da781a161f1be239853dae33deaf
c"
  }
],
"files": [
  {
    "fileName": "astra_control_center_min.yaml",
    "fileIdentifier": "astra_min",
    "fileMediaType": "application/x-yaml",
    "fileContents":
"VGhpcyBpcyBzdXBwb3NlZCB0byBiZSBhIGNvbXBvZXRzZXNzZWQgZmlsZSBjb250ZW50"
  }
],
"dependencies": [
  {
    "componentName": "acc",
    "componentMinVersion": "22.04.29"
  },
  {
    "componentName": "kubernetes",
    "componentMinVersion": "v1.19.7",
    "componentMaxVersion": "v1.20"
  },
  {
    "componentName": "trident",
    "componentMinVersion": "v21.01.1"
  }
]

```



```

    ],
    "metadata": {
      "labels": [],
      "creationTimestamp": "2022-10-06T20:58:16.305662Z",
      "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
      "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
    }
  }
}

```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```

{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}

```

## Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	

Name	Type	Required	Description
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 409, Conflict

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

### Example response

```
{
  "type": "https://astra.netapp.io/problems/10",
  "title": "JSON resource conflict",
  "detail": "The request body JSON contains a field that conflicts with an idempotent value.",
  "status": "409"
}
```

## Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

## Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

## Definitions

## See Definitions

### dependsOnImages

Name	Type	Required	Description
imagePath	string	True	JSON string containing the path to this docker image. It should not contain the name of the registry, only the absolute path from root to image. Example: /globalcid/acc Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 1</li><li>• Maximum length: 1023</li></ul>
imageName	string	True	JSON string containing the docker image name. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 1</li><li>• Maximum length: 63</li></ul>
imageTag	string	True	JSON string representing the tag/version of this image. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 1</li><li>• Maximum length: 31</li></ul>

### images

Name	Type	Required	Description
imageName	string	True	JSON string containing the docker image name. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 1</li><li>• Maximum length: 63</li></ul>

Name	Type	Required	Description
imagePath	string	True	JSON string containing the path to this docker image. It should not contain the name of the registry, only the absolute path from root to image. Example: /globalcid/acc Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 1023</li> </ul>
imageTag	string	True	JSON string representing the tag/version of this image. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 31</li> </ul>
imageDigest	string	True	JSON string representing the digest of this image. Defined values are: <ul style="list-style-type: none"> <li>• Defined regex is: <code>"^(sha256:)[0-9a-f]{64}\$"</code></li> </ul>
dependsOnImages	array[ <a href="#">dependsOnImages</a> ]	False	JSON array of JSON objects describing the images required to install/upgrade the current image.

dependsOnComponents

Name	Type	Required	Description
componentName	string	True	JSON string describing the name of the component. Defined values are: <ul style="list-style-type: none"> <li>• "acc"</li> <li>• "acs"</li> <li>• "trident"</li> <li>• "kubernetes"</li> </ul>
versions	array[string]	True	JSON array of JSON strings defining the component version required to install the current image.

artifacts

Name	Type	Required	Description
artifactName	string	True	JSON string containing the file name. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>
artifactIdentifier	string	True	JSON string containing an identifier for this file. Between versions of the same package type, the file name might change but the identifier usually stays the same. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 511</li> </ul>

Name	Type	Required	Description
artifactPath	string	True	JSON string containing the path to this artifact from the root of a known Astra Control Center Data Store/location. Example: /vmware/1.0/ Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 1023</li> </ul>
artifactVersion	string	False	JSON string containing the version of that artifact, if provided. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the SemVer Schema</li> <li>• Minimum length: 1</li> <li>• Maximum length: 31</li> </ul>
dependsOnComponents	array[ <a href="#">dependsOnComponents</a> ]	False	JSON array of JSON objects describing the installed components required to install/upgrade the current image.

files

Name	Type	Required	Description
fileName	string	True	JSON string containing the file name. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>



Name	Type	Required	Description
fileIdentifier	string	True	<p>JSON string containing an identifier of this file. Between versions of the same package type, the file name might change but the identifier usually stays the same. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 511</li> </ul>
fileMediaType	string	True	<p>JSON string containing the file media-type. Defined values are any media type defined by <a href="#">IANA</a>. In addition, application/x-yaml or application/x-yaml for yaml files is supported.</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 211</li> </ul>
fileContents	string	True	<p>JSON string containing the file content. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Base64 Schema <a href="#">FIXME</a> - How do we specify that this is compressed? What algorithm ,etc?</li> </ul>

#### upgradableVersions

JSON object containing the minimum and maximum versions that can be upgraded to the package version.

Name	Type	Required	Description
minVersion	string	False	JSON string describing the minimum version that can be upgraded to the package version. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the SemVer Schema</li> </ul>
maxVersion	string	False	JSON string describing the maximum version that can be upgraded to the package version. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the SemVer Schema</li> </ul>

dependencies

Name	Type	Required	Description
componentName	string	True	JSON string describing the name of the component. Defined values are: <ul style="list-style-type: none"> <li>• "acc"</li> <li>• "acs"</li> <li>• "trident"</li> <li>• "kubernetes"</li> </ul>
componentMinVersion	string	False	JSON string describing the minimum version required of that component. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the SemVer Schema</li> </ul>

Name	Type	Required	Description
componentMaxVersion	string	False	JSON string describing the maximum version required of that component. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the SemVer Schema</li> </ul>

#### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

#### type\_astra\_metadata

Client and service-specified metadata associated with the resource.  
Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.

Name	Type	Required	Description
labels	array[ <a href="#">type_astra_label</a> ]	True	
creationTimestamp	string	True	
modificationTimestamp	string	True	
createdBy	string	True	
modifiedBy	string	False	

#### type\_astra\_stateTransitions

Name	Type	Required	Description
from	string	True	
to	array[string]	True	

#### type\_astra\_stateDetails

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	

## invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## invalidFields

Name	Type	Required	Description
name	string	True	Name of the invalid request body field
reason	string	True	Reason why the request body field is invalid

## List all packages

GET /accounts/{account\_id}/core/v1/packages

Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"><li>example: {{.Account}}</li></ul>

Name	Type	In	Required	Description
filter	string	query	False	<p>Indicates which fields should be matched in order to return a resource when listing a collection.</p> <p>Supported operators are:</p> <ul style="list-style-type: none"> <li>• eq - Equality</li> <li>• lt/gt - Less than/Greater than</li> <li>• lte/gte - Less than or equals to/Greater than or equals to</li> </ul> <p>URL example: "filter=field%20eq%20%27value%27"</p> <p>OpenAPI examples: "field eq 'value'"</p>
orderBy	string	query	False	<p>Indicates the sort order of resource when listing a collection.</p> <p>URL examples: "orderBy=name", "orderBy=name%20desc"</p> <p>OpenAPI examples: "name desc"</p>

Name	Type	In	Required	Description
include	string	query	False	<p>Indicates which fields should be returned when listing a collection.</p> <p>URL examples: "include=id", "include=id,name"</p> <p>OpenAPI examples: "id"</p> <ul style="list-style-type: none"> <li>example: id,packageName ,packageVersion ,softwareType</li> </ul>
limit	string	query	False	<p>Indicates the maximum number of resources to return when listing a collection.</p> <p>URL examples: "limit=2"</p> <p>OpenAPI examples: "2"</p>

## Response

Status: 200, Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

Name	Type	Required	Description
items	array[Any of: <a href="#">package_1.0_get_response_body</a> , array[]]	True	
metadata	<a href="#">type_astra_metadata_list</a>	True	

## Example response

```
{
  "type": "application/astra-packages",
  "version": "1.0",
  "items": [
    [
      "e280ff62-be35-4f31-a31b-a210a1ad1b33",
      "acc",
      "22.01.0",
      "install"
    ],
    [
      "e8507dad-d33f-44b3-9c15-ec55ba6f6473",
      "acc",
      "22.01.1",
      "patch"
    ]
  ],
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

## Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

## Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

## Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	



Name	Type	Required	Description
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't found.",
  "status": "404"
}
```

## Definitions

## See Definitions

### type\_astra\_stateTransitions

Name	Type	Required	Description
from	string	True	
to	array[string]	True	

### type\_astra\_stateDetails

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	

### dependsOnImages

Name	Type	Required	Description
imagePath	string	True	JSON string containing the path to this docker image. It should not contain the name of the registry, only the absolute path from root to image. Example: /globalcid/acc Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 1</li><li>• Maximum length: 1023</li></ul>
imageName	string	True	JSON string containing the docker image name. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 1</li><li>• Maximum length: 63</li></ul>
imageTag	string	True	JSON string representing the tag/version of this image. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 1</li><li>• Maximum length: 31</li></ul>

## images

Name	Type	Required	Description
imageName	string	True	JSON string containing the docker image name. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>
imagePath	string	True	JSON string containing the path to this docker image. It should not contain the name of the registry, only the absolute path from root to image. Example: /globalcid/acc Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 1023</li> </ul>
imageTag	string	True	JSON string representing the tag/version of this image. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 31</li> </ul>
imageDigest	string	True	JSON string representing the digest of this image. Defined values are: <ul style="list-style-type: none"> <li>• Defined regex is: <code>"^(sha256:)[0-9a-f]{64}\$"</code></li> </ul>
dependsOnImages	array[ <a href="#">dependsOnImages</a> ]	False	JSON array of JSON objects describing the images required to install/upgrade the current image.

## dependsOnComponents

Name	Type	Required	Description
componentName	string	True	JSON string describing the name of the component. Defined values are: <ul style="list-style-type: none"> <li>• "acc"</li> <li>• "acs"</li> <li>• "trident"</li> <li>• "kubernetes"</li> </ul>
versions	array[string]	True	JSON array of JSON strings defining the component version required to install the current image.

artifacts

Name	Type	Required	Description
artifactName	string	True	JSON string containing the file name. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>
artifactIdentifier	string	True	JSON string containing an identifier for this file. Between versions of the same package type, the file name might change but the identifier usually stays the same. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 511</li> </ul>

Name	Type	Required	Description
artifactPath	string	True	JSON string containing the path to this artifact from the root of a known Astra Control Center Data Store/location. Example: /vmware/1.0/ Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 1023</li> </ul>
artifactVersion	string	False	JSON string containing the version of that artifact, if provided. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the SemVer Schema</li> <li>• Minimum length: 1</li> <li>• Maximum length: 31</li> </ul>
dependsOnComponents	array[dependsOnComponents]	False	JSON array of JSON objects describing the installed components required to install/upgrade the current image.

#### files

Name	Type	Required	Description
fileName	string	True	JSON string containing the file name. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>

Name	Type	Required	Description
fileIdentifier	string	True	<p>JSON string containing an identifier of this file. Between versions of the same package type, the file name might change but the identifier usually stays the same. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 511</li> </ul>
fileMediaType	string	True	<p>JSON string containing the file media-type. Defined values are any media type defined by <a href="#">IANA</a>. In addition, application/x-yaml or application/x-yaml for yaml files is supported.</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 211</li> </ul>
fileContents	string	True	<p>JSON string containing the file content. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Base64 Schema FIXME - How do we specify that this is compressed? What algorithm ,etc?</li> </ul>

#### upgradableVersions

JSON object containing the minimum and maximum versions that can be upgraded to the package version.

Name	Type	Required	Description
minVersion	string	False	JSON string describing the minimum version that can be upgraded to the package version. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the SemVer Schema</li> </ul>
maxVersion	string	False	JSON string describing the maximum version that can be upgraded to the package version. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the SemVer Schema</li> </ul>

dependencies

Name	Type	Required	Description
componentName	string	True	JSON string describing the name of the component. Defined values are: <ul style="list-style-type: none"> <li>• "acc"</li> <li>• "acs"</li> <li>• "trident"</li> <li>• "kubernetes"</li> </ul>
componentMinVersion	string	False	JSON string describing the minimum version required of that component. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the SemVer Schema</li> </ul>



Name	Type	Required	Description
componentMaxVersion	string	False	JSON string describing the maximum version required of that component. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the SemVer Schema</li> </ul>

#### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

#### type\_astra\_metadata

Client and service-specified metadata associated with the resource.  
Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.

Name	Type	Required	Description
labels	array[ <a href="#">type_astra_label</a> ]	True	
creationTimestamp	string	True	
modificationTimestamp	string	True	
createdBy	string	True	
modifiedBy	string	False	

#### package\_1.0\_get\_response\_body

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "application/astra-package"</li> </ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "1.0"</li> </ul>

Name	Type	Required	Description
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the UUIDv4 Schema</li> </ul>
packageName	string	True	JSON string containing the package name. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 31</li> </ul> Example values are: <ul style="list-style-type: none"> <li>• "acc"</li> <li>• "acs"</li> <li>• "trident"</li> </ul>
packageVersion	string	True	JSON string containing the SemVer of the package. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the SemVer Schema</li> </ul>
packageType	string	True	JSON string containing the package type, indicating whether this is a full installation package or a patch. Defined values are: <ul style="list-style-type: none"> <li>• "install"</li> <li>• "patch"</li> </ul>
bundleName	array[string]	False	JSON array of JSON strings containing the name of the bundle that the package is contained in.

Name	Type	Required	Description
severityLevel	string	True	<p>JSON string describing the severity level of this patch/installation. Defined values are:</p> <ul style="list-style-type: none"> <li>• "recommended" - Installation is recommended - Default value</li> <li>• "critical" - Installation is strongly recommended to address critical bug fixes and/or security patches</li> </ul>
packageState	string	True	<p>JSON string containing a value indicating the operational state of the package. After verification of the package and after import, the state will indicate "complete". Otherwise, the state will indicate "incomplete". Defined values are:</p> <ul style="list-style-type: none"> <li>• "verifying" - The package is in the process of being validated</li> <li>• "corrupt" - The package is corrupt</li> <li>• "incomplete" - The package is missing elements</li> <li>• "available" - All elements associated with the package are available and the package is ready for use</li> </ul>

Name	Type	Required	Description
packageStateTransitions	array[type_astra_stateTransitions]	True	<p>JSON array of JSON objects, each representing the set of permitted state transitions from a given defined state. Each JSON object contains the fields "from" and "to", where the "from" value is the name of a state and the "to" value is an array of permitted destination states.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the State Transition Schema</li> </ul>
packageStateDetails	array[type_astra_stateDetails]	True	<p>JSON array of JSON objects that lists additional details about the current "state". If no details are available, this array will be empty.</p> <ul style="list-style-type: none"> <li>• Minimum Items: 0</li> </ul>
images	array[images]	False	<p>JSON array of JSON objects, each containing a docker image that is part of the package.</p>
artifacts	array[artifacts]	False	<p>JSON array of JSON objects describing the additional artifacts (binaries and others) associated with this package.</p>
files	array[files]	False	<p>JSON array of JSON objects, each representing a non-image artifact associated with this package.</p>

Name	Type	Required	Description
upgradableVersions	<a href="#">upgradableVersions</a>	False	JSON object containing the minimum and maximum versions that can be upgraded to the package version.
dependencies	array[ <a href="#">dependencies</a> ]	False	JSON array of JSON objects describing what minimum version of a given dependency is required for this package to be installed
metadata	<a href="#">type_astra_metadata</a>	True	Client and service-specified metadata associated with the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels.</li> </ul>

#### type\_astra\_metadata\_list

Name	Type	Required	Description
continue	string	False	
count	number	False	
labels	array[ <a href="#">type_astra_label</a> ]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

#### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter

Name	Type	Required	Description
reason	string	True	Reason why the query parameter is invalid

## Retrieve a package

GET /accounts/{account\_id}/core/v1/packages/{package\_id}

Returns the stored Package API resource in the JSON response body.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"> <li>example: <code>{{.Account}}</code></li> </ul>
package_id	string	path	True	ID of the package collection to list

### Response

Status: 200, Returns the stored Package API resource in the JSON response body.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"> <li>"application/astra-package"</li> </ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>"1.0"</li> </ul>

Name	Type	Required	Description
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the UUIDv4 Schema</li> </ul>
packageName	string	True	JSON string containing the package name. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 31</li> </ul> Example values are: <ul style="list-style-type: none"> <li>• "acc"</li> <li>• "acs"</li> <li>• "trident"</li> </ul>
packageVersion	string	True	JSON string containing the SemVer of the package. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the SemVer Schema</li> </ul>
packageType	string	True	JSON string containing the package type, indicating whether this is a full installation package or a patch. Defined values are: <ul style="list-style-type: none"> <li>• "install"</li> <li>• "patch"</li> </ul>
bundleName	array[string]	False	JSON array of JSON strings containing the name of the bundle that the package is contained in.

Name	Type	Required	Description
severityLevel	string	True	<p>JSON string describing the severity level of this patch/installation. Defined values are:</p> <ul style="list-style-type: none"> <li>• "recommended" - Installation is recommended - Default value</li> <li>• "critical" - Installation is strongly recommended to address critical bug fixes and/or security patches</li> </ul>
packageState	string	True	<p>JSON string containing a value indicating the operational state of the package. After verification of the package and after import, the state will indicate "complete". Otherwise, the state will indicate "incomplete". Defined values are:</p> <ul style="list-style-type: none"> <li>• "verifying" - The package is in the process of being validated</li> <li>• "corrupt" - The package is corrupt</li> <li>• "incomplete" - The package is missing elements</li> <li>• "available" - All elements associated with the package are available and the package is ready for use</li> </ul>



Name	Type	Required	Description
packageStateTransitions	array[type_astra_stateTransitions]	True	<p>JSON array of JSON objects, each representing the set of permitted state transitions from a given defined state.</p> <p>Each JSON object contains the fields "from" and "to", where the "from" value is the name of a state and the "to" value is an array of permitted destination states.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the State Transition Schema</li> </ul>
packageStateDetails	array[type_astra_stateDetails]	True	<p>JSON array of JSON objects that lists additional details about the current "state".</p> <p>If no details are available, this array will be empty.</p> <ul style="list-style-type: none"> <li>• Minimum Items: 0</li> </ul>
images	array[images]	False	<p>JSON array of JSON objects, each containing a docker image that is part of the package.</p>
artifacts	array[artifacts]	False	<p>JSON array of JSON objects describing the additional artifacts (binaries and others) associated with this package.</p>
files	array[files]	False	<p>JSON array of JSON objects, each representing a non-image artifact associated with this package.</p>

Name	Type	Required	Description
upgradableVersions	<a href="#">upgradableVersions</a>	False	JSON object containing the minimum and maximum versions that can be upgraded to the package version.
dependencies	array[ <a href="#">dependencies</a> ]	False	JSON array of JSON objects describing what minimum version of a given dependency is required for this package to be installed
metadata	<a href="#">type_astra_metadata</a>	True	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels.</li> </ul>

## Example response

```
{
  "type": "application/astra-package",
  "version": "1.0",
  "id": "54edc2b3-18c5-5371-904b-ebcd04d88bdc",
  "packageName": "acc",
  "packageVersion": "22.09.1",
  "packageType": "patch",
  "packageState": "available",
  "packageStateTransitions": [
    {
      "from": "verifying",
      "to": [
        "corrupt",
        "incomplete",
        "available"
      ]
    },
    {
      "from": "corrupt",
      "to": [
        "incomplete",
        "available"
      ]
    },
    {
      "from": "incomplete",
      "to": [
        "corrupt",
        "available"
      ]
    },
    {
      "from": "available",
      "to": [
        "corrupt",
        "available"
      ]
    }
  ],
  "packageStateDetails": [],
  "severityLevel": "recommended",
  "images": [
    {
      "imagePath": "/globalcicd/acc",

```

```

    "imageName": "storage-provider",
    "imageTag": "1.3.116",
    "imageDigest":
"sha256:2e04d178815537b0ad8c3224e8754e33642da781a161f1be239853dae33deaf
c"
  },
  {
    "imagePath": "/globalcid/acc",
    "imageName": "storage-backend-metrics",
    "imageTag": "1.3.45",
    "imageDigest":
"sha256:2e04d178815537b0ad8c3224e8754e33642da781a161f1be239853dae33deaf
c"
  },
  {
    "imagePath": "/globalcid/acc",
    "imageName": "credentials",
    "imageTag": "1.3.45",
    "imageDigest":
"sha256:2e04d178815537b0ad8c3224e8754e33642da781a161f1be239853dae33deaf
c"
  }
],
"files": [
  {
    "fileName": "astra_control_center_min.yaml",
    "fileIdentifier": "astra_min",
    "fileMediaType": "application/x-yaml",
    "fileContents":
"VGhpcyBpcyBzdXBwb3NlZCB0byBiZSBhIGNvbXBvZXRzZXNzZWQgZmlsZSBjb250ZW50"
  }
],
"dependencies": [
  {
    "componentName": "acc",
    "componentMinVersion": "22.04.29"
  },
  {
    "componentName": "kubernetes",
    "componentMinVersion": "v1.19.7",
    "componentMaxVersion": "v1.20"
  },
  {
    "componentName": "trident",
    "componentMinVersion": "v21.01.1"
  }
]

```

```

    ],
    "metadata": {
      "labels": [],
      "creationTimestamp": "2022-10-06T20:58:16.305662Z",
      "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
      "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
    }
  }
}

```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```

{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}

```

## Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	

Name	Type	Required	Description
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

### Definitions

## See Definitions

### type\_astra\_stateTransitions

Name	Type	Required	Description
from	string	True	
to	array[string]	True	

### type\_astra\_stateDetails

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	

### dependsOnImages

Name	Type	Required	Description
imagePath	string	True	JSON string containing the path to this docker image. It should not contain the name of the registry, only the absolute path from root to image. Example: /globalcid/acc Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 1</li><li>• Maximum length: 1023</li></ul>
imageName	string	True	JSON string containing the docker image name. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 1</li><li>• Maximum length: 63</li></ul>
imageTag	string	True	JSON string representing the tag/version of this image. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 1</li><li>• Maximum length: 31</li></ul>



## images

Name	Type	Required	Description
imageName	string	True	JSON string containing the docker image name. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>
imagePath	string	True	JSON string containing the path to this docker image. It should not contain the name of the registry, only the absolute path from root to image. Example: /globalcid/acc Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 1023</li> </ul>
imageTag	string	True	JSON string representing the tag/version of this image. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 31</li> </ul>
imageDigest	string	True	JSON string representing the digest of this image. Defined values are: <ul style="list-style-type: none"> <li>• Defined regex is: <code>"^(sha256:)[0-9a-f]{64}\$"</code></li> </ul>
dependsOnImages	array[ <a href="#">dependsOnImages</a> ]	False	JSON array of JSON objects describing the images required to install/upgrade the current image.

## dependsOnComponents

Name	Type	Required	Description
componentName	string	True	JSON string describing the name of the component. Defined values are: <ul style="list-style-type: none"> <li>• "acc"</li> <li>• "acs"</li> <li>• "trident"</li> <li>• "kubernetes"</li> </ul>
versions	array[string]	True	JSON array of JSON strings defining the component version required to install the current image.

artifacts

Name	Type	Required	Description
artifactName	string	True	JSON string containing the file name. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>
artifactIdentifier	string	True	JSON string containing an identifier for this file. Between versions of the same package type, the file name might change but the identifier usually stays the same. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 511</li> </ul>

Name	Type	Required	Description
artifactPath	string	True	JSON string containing the path to this artifact from the root of a known Astra Control Center Data Store/location. Example: /vmware/1.0/ Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 1023</li> </ul>
artifactVersion	string	False	JSON string containing the version of that artifact, if provided. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the SemVer Schema</li> <li>• Minimum length: 1</li> <li>• Maximum length: 31</li> </ul>
dependsOnComponents	array[ <a href="#">dependsOnComponents</a> ]	False	JSON array of JSON objects describing the installed components required to install/upgrade the current image.

#### files

Name	Type	Required	Description
fileName	string	True	JSON string containing the file name. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>

Name	Type	Required	Description
fileIdentifier	string	True	<p>JSON string containing an identifier of this file. Between versions of the same package type, the file name might change but the identifier usually stays the same. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 511</li> </ul>
fileMediaType	string	True	<p>JSON string containing the file media-type. Defined values are any media type defined by <a href="#">IANA</a>. In addition, application/x-yaml or application/x-yaml for yaml files is supported.</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 211</li> </ul>
fileContents	string	True	<p>JSON string containing the file content. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Base64 Schema FIXME - How do we specify that this is compressed? What algorithm ,etc?</li> </ul>

#### upgradableVersions

JSON object containing the minimum and maximum versions that can be upgraded to the package version.

Name	Type	Required	Description
minVersion	string	False	JSON string describing the minimum version that can be upgraded to the package version. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the SemVer Schema</li> </ul>
maxVersion	string	False	JSON string describing the maximum version that can be upgraded to the package version. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the SemVer Schema</li> </ul>

dependencies

Name	Type	Required	Description
componentName	string	True	JSON string describing the name of the component. Defined values are: <ul style="list-style-type: none"> <li>• "acc"</li> <li>• "acs"</li> <li>• "trident"</li> <li>• "kubernetes"</li> </ul>
componentMinVersion	string	False	JSON string describing the minimum version required of that component. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the SemVer Schema</li> </ul>

Name	Type	Required	Description
componentMaxVersion	string	False	JSON string describing the maximum version required of that component. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the SemVer Schema</li> </ul>

#### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

#### type\_astra\_metadata

Client and service-specified metadata associated with the resource.  
Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.

Name	Type	Required	Description
labels	array[type_astra_label]	True	
creationTimestamp	string	True	
modificationTimestamp	string	True	
createdBy	string	True	
modifiedBy	string	False	

#### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Delete a package

DELETE /accounts/{account\_id}/core/v1/packages/{package\_id}

Removes the specified Package API resource.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"><li>example: {{.Account}}</li></ul>
package_id	string	path	True	ID of the package collection to list

### Response

Status: 204, Indicates if the package resource was deleted.

### Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	



## Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

## Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example error response

```
{
  "type": "https://astra.netapp.io/problems/1",
  "title": "Resource not found",
  "detail": "The resource specified in the request URI wasn't found.",
  "status": "404"
}
```

## Definitions

## See Definitions

invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Role binding

### Role binding overview

The Role Binding API provides CRUD (Create-Read-Update-Delete) access to role binding resources in order to describe the relationships between the user-account pairs, or group-account pairs, along with the sets of permissions they are granted (roles).

### Create a new role binding for a group

POST /accounts/{account\_id}/core/v1/groups/{group\_id}/roleBindings

Indicates desired values for the Role Binding API resource to be created.

#### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"><li>example: {{.Account}}</li></ul>
group_id	string	path	True	ID of the containing group resource

#### Request Body

Indicates desired values for the Role Binding API resource to be created.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"> <li>"application/astra-roleBinding"</li> </ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>"1.0"</li> <li>"1.1"</li> </ul>
userID	string	False	JSON string containing a user resource ID. Defined values are: <ul style="list-style-type: none"> <li>Conforms to the Astra Identifier Schema If not specified on create, a nil UUID will be used. Only userID or groupID can be specified on create.</li> </ul>
groupID	string	False	JSON string containing a group resource ID. Defined values are: <ul style="list-style-type: none"> <li>Conforms to the Astra Identifier Schema If not specified on create, a nil UUID will be used. Only userID or groupID can be specified on create.</li> </ul>
accountID	string	True	JSON string containing the ID of an account resource. For create, this must match the account ID in the request URI. Defined values are: <ul style="list-style-type: none"> <li>Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
role	string	True	JSON string containing one of the four defined roles. Defined values are: <ul style="list-style-type: none"><li>• "viewer"</li><li>• "member"</li><li>• "admin"</li><li>• "owner"</li></ul>

Name	Type	Required	Description
roleConstraints	array[string]	False	<p>JSON array of JSON strings specifying the scope of the role assignment. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to Astra Role Constraints Schema If not specified on create, the value will be set to an array of size 1 containing string "*" representing "full scope". If not specified on update, the value will be preserved without modification. An empty array represents "no scope". Examples: <ul style="list-style-type: none"> <li>• = Allow access to any resource: "roleConstraints": ["*"]</li> <li>• = deny access to all resources: "roleConstraints": []</li> <li>• = Allow access to a specific namespace resource only: "roleConstraints": [ "namespaces:id='6fa2f917-f730-41b8-9c15-17f531843b31'" ]</li> <li>• = Allow access to a specific namespace and everything under it: "roleConstraints": [ "namespaces:id='6fa2f917-f730-41b8-9c15-17f531843b31'.*' " ]</li> <li>• = Allow access to all namespaces labelled "dev" in any cluster in any cloud, and everything under them: "roleConstraints": [ "namespaces:kubernetesLabels='dev.example.com'" ]</li> </ul> </li> </ul>

Name	Type	Required	Description
metadata	<a href="#">type_astra_metadata_update</a>	False	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</li> </ul>

### Example request

```
{
  "type": "application/astra-roleBinding",
  "version": "1.1",
  "userID": "00000000-0000-0000-0000-000000000000",
  "groupID": "6f7f5bb3-1320-4861-bd8a-d3a4106d36b1",
  "accountID": "9fd87309-067f-48c9-a331-527796c14cf3",
  "role": "viewer",
  "roleConstraints": [
    "*"
  ]
}
```

### Response

Status: 201, Returns the newly created roleBinding resource in the JSON response body.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"> <li>"application/astra-roleBinding"</li> </ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>"1.0"</li> <li>"1.1"</li> </ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>Conforms to the UUIDv4 Schema</li> </ul>
principalType	string	True	JSON string representing the type of the principal this binding is associated with. Defined values are: <ul style="list-style-type: none"> <li>"user"</li> <li>"group"</li> </ul> For principalType "user", a non-nil user ID is required. For principalType "group", a non-nil group ID is required.
userID	string	True	JSON string containing a user resource ID. Defined values are: <ul style="list-style-type: none"> <li>Conforms to the Astra Identifier Schema If not specified on create, a nil UUID will be used. Only userID or groupID can be specified on create.</li> </ul>

Name	Type	Required	Description
groupID	string	True	<p>JSON string containing a group resource ID. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema If not specified on create, a nil UUID will be used. Only userID or groupID can be specified on create.</li> </ul>
accountID	string	True	<p>JSON string containing the ID of an account resource. For create, this must match the account ID in the request URI. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
role	string	True	<p>JSON string containing one of the four defined roles. Defined values are:</p> <ul style="list-style-type: none"> <li>• "viewer"</li> <li>• "member"</li> <li>• "admin"</li> <li>• "owner"</li> </ul>



Name	Type	Required	Description
roleConstraints	array[string]	False	<p>JSON array of JSON strings specifying the scope of the role assignment. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to Astra Role Constraints Schema If not specified on create, the value will be set to an array of size 1 containing string "*" representing "full scope". If not specified on update, the value will be preserved without modification. An empty array represents "no scope". Examples: <ul style="list-style-type: none"> <li>• = Allow access to any resource: "roleConstraints": ["*"]</li> <li>• = deny access to all resources: "roleConstraints": []</li> <li>• = Allow access to a specific namespace resource only: "roleConstraints": [ "namespaces:id='6fa2f917-f730-41b8-9c15-17f531843b31'" ]</li> <li>• = Allow access to a specific namespace and everything under it: "roleConstraints": [ "namespaces:id='6fa2f917-f730-41b8-9c15-17f531843b31'.*' " ]</li> <li>• = Allow access to all namespaces labelled "dev" in any cluster in any cloud, and everything under them: "roleConstraints": [ "namespaces:kubernetesLabels='dev.example.com'" ]</li> </ul> </li> </ul>

Name	Type	Required	Description
metadata	<a href="#">type_astra_metadata_update</a>	True	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</li> </ul>

### Example response

```
{
  "type": "application/astra-roleBinding",
  "version": "1.1",
  "id": "a198f052-5cd7-59d3-9f27-9ea32a21fbca",
  "principalType": "group",
  "userID": "00000000-0000-0000-0000-000000000000",
  "groupID": "6f7f5bb3-1320-4861-bd8a-d3a4106d36b1",
  "accountID": "9fd87309-067f-48c9-a331-527796c14cf3",
  "role": "viewer",
  "roleConstraints": [
    "*"
  ],
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

### Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

## Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

## Response

Status: 409, Conflict

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

## Example response

```
{
  "type": "https://astra.netapp.io/problems/10",
  "title": "JSON resource conflict",
  "detail": "The request body JSON contains a field that conflicts with an idempotent value.",
  "status": "409"
}
```

## Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

## Definitions

### See Definitions

type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[type_astra_label]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

invalidFields

Name	Type	Required	Description
name	string	True	Name of the invalid request body field
reason	string	True	Reason why the request body field is invalid

## List the role bindings for a group

GET /accounts/{account\_id}/core/v1/groups/{group\_id}/roleBindings

Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"><li>example: {{.Account}}</li></ul>
group_id	string	path	True	ID of the containing group resource
include	string	query	False	Indicates which fields should be returned when listing a collection.  URL examples: "include=id", "include=id,name"  OpenAPI examples: "id" <ul style="list-style-type: none"><li>example: accountID,userI D,role</li></ul>
limit	string	query	False	Indicates the maximum number of resources to return when listing a collection.  URL examples: "limit=2"  OpenAPI examples: "2"

Name	Type	In	Required	Description
filter	string	query	False	<p>Indicates which fields should be matched in order to return a resource when listing a collection.</p> <p>Supported operators are:</p> <ul style="list-style-type: none"> <li>• eq - Equality</li> <li>• lt/gt - Less than/Greater than</li> <li>• lte/gte - Less than or equals to/Greater than or equals to</li> </ul> <p>URL example: "filter=field%20eq%20%27value%27"</p> <p>OpenAPI examples: "field eq 'value'"</p>
orderBy	string	query	False	<p>Indicates the sort order of resource when listing a collection.</p> <p>URL examples: "orderBy=name", "orderBy=name%20desc"</p> <p>OpenAPI examples: "name desc"</p>
skip	string	query	False	<p>Indicates the number of resources to skip over when listing a collection.</p> <p>URL examples: "skip=1"</p> <p>OpenAPI examples: "1"</p>



Name	Type	In	Required	Description
count	string	query	False	Indicates if the total number of resources should be returned in the metadata object.  URL examples: "count=true"  OpenAPI examples: "true"
continue		query	False	Indicates the token to resume listing from.  URL examples: "continue=<continue token="" from="" collection="" metadata="">"</continue>  OpenAPI examples: "<continue token="" from="" collection="" metadata="">"</continue>&lt;/continue&gt;"

## Response

Status: 200, Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

Name	Type	Required	Description
items	array[Any of: <a href="#">roleBinding_1.1_get_response_body</a> , array[]]	True	
metadata	<a href="#">type_astra_metadata_list</a>	True	

## Example response

```
{
  "type": "application/astra-roleBindings",
  "version": "1.1",
  "items": [
    [
      "9fd87309-067f-48c9-a331-527796c14cf3",
      "4c27d25a-9edb-4e85-9438-48dc8e917231",
      "viewer"
    ],
    [
      "9fd87309-067f-48c9-a331-527796c14cf3",
      "dc40a13f-e9b3-4cf5-900f-58de32174390",
      "owner"
    ],
    [
      "9fd87309-067f-48c9-a331-527796c14cf3",
      "c38abd8d-7dae-4659-8382-2e74a58738ba",
      "owner"
    ]
  ],
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	

Name	Type	Required	Description
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't found.",
  "status": "404"
}
```

**Definitions**

## See Definitions

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[type_astra_label]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

### roleBinding\_1.1\_get\_response\_body

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>• "application/astra-roleBinding"</li></ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"><li>• "1.0"</li><li>• "1.1"</li></ul>

Name	Type	Required	Description
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the UUIDv4 Schema</li> </ul>
principalType	string	True	JSON string representing the type of the principal this binding is associated with. Defined values are: <ul style="list-style-type: none"> <li>• "user"</li> <li>• "group"</li> </ul> For principalType "user", a non-nil user ID is required. For principalType "group", a non-nil group ID is required.
userID	string	True	JSON string containing a user resource ID. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul> If not specified on create, a nil UUID will be used. Only userID or groupID can be specified on create.
groupID	string	True	JSON string containing a group resource ID. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul> If not specified on create, a nil UUID will be used. Only userID or groupID can be specified on create.

Name	Type	Required	Description
accountID	string	True	JSON string containing the ID of an account resource. For create, this must match the account ID in the request URI. Defined values are: <ul style="list-style-type: none"><li>• Conforms to the Astra Identifier Schema</li></ul>
role	string	True	JSON string containing one of the four defined roles. Defined values are: <ul style="list-style-type: none"><li>• "viewer"</li><li>• "member"</li><li>• "admin"</li><li>• "owner"</li></ul>



Name	Type	Required	Description
roleConstraints	array[string]	False	<p>JSON array of JSON strings specifying the scope of the role assignment. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to Astra Role Constraints Schema If not specified on create, the value will be set to an array of size 1 containing string "*" representing "full scope". If not specified on update, the value will be preserved without modification. An empty array represents "no scope". Examples: <ul style="list-style-type: none"> <li>• = Allow access to any resource: "roleConstraints": ["*"]</li> <li>• = deny access to all resources: "roleConstraints": []</li> <li>• = Allow access to a specific namespace resource only: "roleConstraints": [ "namespaces:id='6fa2f917-f730-41b8-9c15-17f531843b31'" ]</li> <li>• = Allow access to a specific namespace and everything under it: "roleConstraints": [ "namespaces:id='6fa2f917-f730-41b8-9c15-17f531843b31'.*" ]</li> <li>• = Allow access to all namespaces labelled "dev" in any cluster in any cloud, and everything under</li> </ul> </li> </ul>

Name	Type	Required	Description
metadata	<a href="#">type_astra_metadata_update</a>	True	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>Conforms to the Astra Metadata Schema</li> </ul> <p>If not specified on create, a metadata object will be created with no labels.</p> <p>If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</p>

#### type\_astra\_metadata\_list

Name	Type	Required	Description
continue	string	False	
count	number	False	
labels	array[ <a href="#">type_astra_label</a> ]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

#### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Retrieve a role binding for a group

GET

/accounts/{account\_id}/core/v1/groups/{group\_id}/roleBindings/{roleBinding\_id}

Returns the stored Role Binding API resource in the JSON response body.

If the request is against /accounts/{account\_id}/core/v1/users/{user\_id}/roleBindings endpoint, only roleBinding resources where the user ID matches the user ID in the request URL will be permitted to be read.

If the request is against /accounts/{account\_id}/core/v1/groups/{group\_id}/roleBindings, only roleBinding resources where the group ID matches the group ID in the request URL will be permitted to be read.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"><li>example: <code>{{.Account}}</code></li></ul>
group_id	string	path	True	ID of the containing group resource
roleBinding_id	string	path	True	ID of the roleBinding collection to list

### Response

Status: 200

Returns the stored Role Binding API resource in the JSON response body.

If the request is against /accounts/{account\_id}/core/v1/users/{user\_id}/roleBindings endpoint, only roleBinding resources where the user ID matches the user ID in the request URL will be permitted to be read.

If the request is against /accounts/{account\_id}/core/v1/groups/{group\_id}/roleBindings, only roleBinding resources where the group ID matches the group ID in the request URL will be permitted to be read.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>"application/astra-roleBinding"</li></ul>

Name	Type	Required	Description
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "1.0"</li> <li>• "1.1"</li> </ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the UUIDv4 Schema</li> </ul>
principalType	string	True	JSON string representing the type of the principal this binding is associated with. Defined values are: <ul style="list-style-type: none"> <li>• "user"</li> <li>• "group"</li> </ul> For principalType "user", a non-nil user ID is required. For principalType "group", a non-nil group ID is required.
userID	string	True	JSON string containing a user resource ID. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul> If not specified on create, a nil UUID will be used. Only userID or groupID can be specified on create.

Name	Type	Required	Description
groupID	string	True	<p>JSON string containing a group resource ID.            Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema              If not specified on create, a nil UUID will be used.              Only userID or groupID can be specified on create.</li> </ul>
accountID	string	True	<p>JSON string containing the ID of an account resource.            For create, this must match the account ID in the request URI.            Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
role	string	True	<p>JSON string containing one of the four defined roles.            Defined values are:</p> <ul style="list-style-type: none"> <li>• "viewer"</li> <li>• "member"</li> <li>• "admin"</li> <li>• "owner"</li> </ul>

Name	Type	Required	Description
roleConstraints	array[string]	False	<p>JSON array of JSON strings specifying the scope of the role assignment. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to Astra Role Constraints Schema If not specified on create, the value will be set to an array of size 1 containing string "*" representing "full scope". If not specified on update, the value will be preserved without modification. An empty array represents "no scope". Examples: <ul style="list-style-type: none"> <li>• = Allow access to any resource: "roleConstraints": ["*"]</li> <li>• = deny access to all resources: "roleConstraints": []</li> <li>• = Allow access to a specific namespace resource only: "roleConstraints": [ "namespaces:id='6fa2f917-f730-41b8-9c15-17f531843b31'" ]</li> <li>• = Allow access to a specific namespace and everything under it: "roleConstraints": [ "namespaces:id='6fa2f917-f730-41b8-9c15-17f531843b31'.*' " ]</li> <li>• = Allow access to all namespaces labelled "dev" in any cluster in any cloud, and everything under them: "roleConstraints": [ "namespaces:kubernetesLabels='dev.examp</li> </ul> </li> </ul>

Name	Type	Required	Description
metadata	<a href="#">type_astra_metadata_update</a>	True	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</li> </ul>

### Example response

```
{
  "type": "application/astra-roleBinding",
  "version": "1.1",
  "id": "a198f052-5cd7-59d3-9f27-9ea32a21fbca",
  "principalType": "user",
  "userID": "4c27d25a-9edb-4e85-9438-48dc8e917231",
  "groupID": "00000000-0000-0000-0000-000000000000",
  "accountID": "9fd87309-067f-48c9-a331-527796c14cf3",
  "role": "viewer",
  "roleConstraints": [
    "*"
  ],
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

### Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters



## Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

## Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

## Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	

Name	Type	Required	Description
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

### Definitions

## See Definitions

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[type_astra_label]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Modify a role binding for a group

PUT /accounts/{account\_id}/core/v1/groups/{group\_id}/roleBindings/{roleBinding\_id}

Replaces the entire stored resource with the supplied JSON request body while preserving key values that are not user-modifiable.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource  • example: {{.Account}}
group_id	string	path	True	ID of the containing group resource
roleBinding_id	string	path	True	ID of the roleBinding collection to list

### Request Body

Replaces the entire stored resource with the supplied JSON request body while preserving key values that are not user-modifiable.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are:  • "application/astra-roleBinding"
version	string	True	Version of the resource. Defined values are:  • "1.0" • "1.1"
id	string	False	Globally unique identifier of the resource. Defined values are:  • Conforms to the UUIDv4 Schema

Name	Type	Required	Description
userID	string	False	<p>JSON string containing a user resource ID. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema If not specified on create, a nil UUID will be used. Only userID or groupID can be specified on create.</li> </ul>
groupID	string	False	<p>JSON string containing a group resource ID. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema If not specified on create, a nil UUID will be used. Only userID or groupID can be specified on create.</li> </ul>
accountID	string	False	<p>JSON string containing the ID of an account resource. For create, this must match the account ID in the request URI. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
role	string	True	<p>JSON string containing one of the four defined roles. Defined values are:</p> <ul style="list-style-type: none"> <li>• "viewer"</li> <li>• "member"</li> <li>• "admin"</li> <li>• "owner"</li> </ul>

Name	Type	Required	Description
roleConstraints	array[string]	False	<p>JSON array of JSON strings specifying the scope of the role assignment. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to Astra Role Constraints Schema If not specified on create, the value will be set to an array of size 1 containing string "*" representing "full scope". If not specified on update, the value will be preserved without modification. An empty array represents "no scope". Examples: <ul style="list-style-type: none"> <li>• = Allow access to any resource: "roleConstraints": ["*"]</li> <li>• = deny access to all resources: "roleConstraints": []</li> <li>• = Allow access to a specific namespace resource only: "roleConstraints": [ "namespaces:id='6fa2f917-f730-41b8-9c15-17f531843b31'" ]</li> <li>• = Allow access to a specific namespace and everything under it: "roleConstraints": [ "namespaces:id='6fa2f917-f730-41b8-9c15-17f531843b31'.*" ]</li> <li>• = Allow access to all namespaces labelled "dev" in any cluster in any cloud, and everything under them: "roleConstraints": [ "namespaces:kubernetesLabels='dev.examp</li> </ul> </li> </ul>

Name	Type	Required	Description
metadata	<a href="#">type_astra_metadata_update</a>	False	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>Conforms to the Astra Metadata Schema</li> </ul> <p>If not specified on create, a metadata object will be created with no labels.</p> <p>If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</p>

### Example request

```
{
  "type": "application/astra-roleBinding",
  "version": "1.1",
  "role": "member",
  "roleConstraints": [
    "namespaces:id='c832e1dc-d7c3-464e-9c62-47bf91c46ce8'"
  ]
}
```

### Response

Status: 204, Indicates if the roleBinding resource was updated.

### Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	

Name	Type	Required	Description
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```



## Response

Status: 409, Conflict

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

## Example response

```
{
  "type": "https://astra.netapp.io/problems/10",
  "title": "JSON resource conflict",
  "detail": "The request body JSON contains a field that conflicts with an idempotent value.",
  "status": "409"
}
```

## Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

## Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example error response

```
{
  "type": "https://astra.netapp.io/problems/1",
  "title": "Resource not found",
  "detail": "The resource specified in the request URI wasn't found.",
  "status": "404"
}
```

## Definitions

## See Definitions

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[type_astra_label]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

### invalidFields

Name	Type	Required	Description
name	string	True	Name of the invalid request body field
reason	string	True	Reason why the request body field is invalid

## Delete a role binding for a group

DELETE

/accounts/{account\_id}/core/v1/groups/{group\_id}/roleBindings/{roleBinding\_id}

Removes the specified Role Binding API resource.

### Side Effects

- Deleting the last role-binding associated with a user with authProvider as 'local', or 'cloud-central' (not ldap) triggers the deletion of the user.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"><li>example: {{.Account}}</li></ul>
group_id	string	path	True	ID of the containing group resource
roleBinding_id	string	path	True	ID of the roleBinding collection to list

### Response

Status: 204, Indicates if the roleBinding resource was deleted.

### Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	

Name	Type	Required	Description
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/1",
  "title": "Resource not found",
  "detail": "The resource specified in the request URI wasn't found.",
  "status": "404"
}
```

### Definitions

## See Definitions

invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Create a new role binding

POST /accounts/{account\_id}/core/v1/roleBindings

Indicates desired values for the Role Binding API resource to be created.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"><li>example: {{.Account}}</li></ul>

### Request Body

Indicates desired values for the Role Binding API resource to be created.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>"application/astra-roleBinding"</li></ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"><li>"1.0"</li><li>"1.1"</li></ul>

Name	Type	Required	Description
userID	string	False	<p>JSON string containing a user resource ID. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema If not specified on create, a nil UUID will be used. Only userID or groupID can be specified on create.</li> </ul>
groupID	string	False	<p>JSON string containing a group resource ID. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema If not specified on create, a nil UUID will be used. Only userID or groupID can be specified on create.</li> </ul>
accountID	string	True	<p>JSON string containing the ID of an account resource. For create, this must match the account ID in the request URI. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
role	string	True	<p>JSON string containing one of the four defined roles. Defined values are:</p> <ul style="list-style-type: none"> <li>• "viewer"</li> <li>• "member"</li> <li>• "admin"</li> <li>• "owner"</li> </ul>



Name	Type	Required	Description
roleConstraints	array[string]	False	<p>JSON array of JSON strings specifying the scope of the role assignment. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to Astra Role Constraints Schema If not specified on create, the value will be set to an array of size 1 containing string "*" representing "full scope". If not specified on update, the value will be preserved without modification. An empty array represents "no scope". Examples: <ul style="list-style-type: none"> <li>• = Allow access to any resource: "roleConstraints": ["*"]</li> <li>• = deny access to all resources: "roleConstraints": []</li> <li>• = Allow access to a specific namespace resource only: "roleConstraints": [ "namespaces:id='6fa2f917-f730-41b8-9c15-17f531843b31'" ]</li> <li>• = Allow access to a specific namespace and everything under it: "roleConstraints": [ "namespaces:id='6fa2f917-f730-41b8-9c15-17f531843b31'.*" ]</li> <li>• = Allow access to all namespaces labelled "dev" in any cluster in any cloud, and everything under them: "roleConstraints": [ "namespaces:kubernetesLabels='dev.example.com'" ]</li> </ul> </li> </ul>

Name	Type	Required	Description
metadata	<a href="#">type_astra_metadata_update</a>	False	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</li> </ul>

### Example request

```
{
  "type": "application/astra-roleBinding",
  "version": "1.1",
  "userID": "4c27d25a-9edb-4e85-9438-48dc8e917231",
  "accountID": "9fd87309-067f-48c9-a331-527796c14cf3",
  "role": "viewer",
  "roleConstraints": [
    "*"
  ]
}
```

### Response

Status: 201, Returns the newly created roleBinding resource in the JSON response body.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"> <li>"application/astra-roleBinding"</li> </ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>"1.0"</li> <li>"1.1"</li> </ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>Conforms to the UUIDv4 Schema</li> </ul>
principalType	string	True	JSON string representing the type of the principal this binding is associated with. Defined values are: <ul style="list-style-type: none"> <li>"user"</li> <li>"group"</li> </ul> For principalType "user", a non-nil user ID is required. For principalType "group", a non-nil group ID is required.
userID	string	True	JSON string containing a user resource ID. Defined values are: <ul style="list-style-type: none"> <li>Conforms to the Astra Identifier Schema If not specified on create, a nil UUID will be used. Only userID or groupID can be specified on create.</li> </ul>

Name	Type	Required	Description
groupID	string	True	<p>JSON string containing a group resource ID. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema If not specified on create, a nil UUID will be used. Only userID or groupID can be specified on create.</li> </ul>
accountID	string	True	<p>JSON string containing the ID of an account resource. For create, this must match the account ID in the request URI. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
role	string	True	<p>JSON string containing one of the four defined roles. Defined values are:</p> <ul style="list-style-type: none"> <li>• "viewer"</li> <li>• "member"</li> <li>• "admin"</li> <li>• "owner"</li> </ul>

Name	Type	Required	Description
roleConstraints	array[string]	False	<p>JSON array of JSON strings specifying the scope of the role assignment. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to Astra Role Constraints Schema If not specified on create, the value will be set to an array of size 1 containing string "*" representing "full scope". If not specified on update, the value will be preserved without modification. An empty array represents "no scope". Examples: <ul style="list-style-type: none"> <li>• = Allow access to any resource: "roleConstraints": ["*"]</li> <li>• = deny access to all resources: "roleConstraints": []</li> <li>• = Allow access to a specific namespace resource only: "roleConstraints": [ "namespaces:id='6fa2f917-f730-41b8-9c15-17f531843b31'" ]</li> <li>• = Allow access to a specific namespace and everything under it: "roleConstraints": [ "namespaces:id='6fa2f917-f730-41b8-9c15-17f531843b31'.*" ]</li> <li>• = Allow access to all namespaces labelled "dev" in any cluster in any cloud, and everything under them: "roleConstraints": [ "namespaces:kubernetesLabels='dev.example.com'" ]</li> </ul> </li> </ul>

Name	Type	Required	Description
metadata	<a href="#">type_astra_metadata_update</a>	True	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</li> </ul>

### Example response

```
{
  "type": "application/astra-roleBinding",
  "version": "1.1",
  "id": "a198f052-5cd7-59d3-9f27-9ea32a21fbca",
  "principalType": "user",
  "userID": "4c27d25a-9edb-4e85-9438-48dc8e917231",
  "groupID": "00000000-0000-0000-0000-000000000000",
  "accountID": "9fd87309-067f-48c9-a331-527796c14cf3",
  "role": "viewer",
  "roleConstraints": [
    "*"
  ],
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

### Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

## Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

## Response

Status: 409, Conflict

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

## Example response

```
{
  "type": "https://astra.netapp.io/problems/10",
  "title": "JSON resource conflict",
  "detail": "The request body JSON contains a field that conflicts with an idempotent value.",
  "status": "409"
}
```

## Response

Status: 403, Forbidden



Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

## Definitions

### See Definitions

type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[type_astra_label]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

invalidFields

Name	Type	Required	Description
name	string	True	Name of the invalid request body field
reason	string	True	Reason why the request body field is invalid

## List all role bindings

GET /accounts/{account\_id}/core/v1/roleBindings

Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"><li>example: {{.Account}}</li></ul>
include	string	query	False	Indicates which fields should be returned when listing a collection.  URL examples: "include=id", "include=id,name"  OpenAPI examples: "id" <ul style="list-style-type: none"><li>example: accountID,userI D,role</li></ul>
limit	string	query	False	Indicates the maximum number of resources to return when listing a collection.  URL examples: "limit=2"  OpenAPI examples: "2"

Name	Type	In	Required	Description
filter	string	query	False	<p>Indicates which fields should be matched in order to return a resource when listing a collection.</p> <p>Supported operators are:</p> <ul style="list-style-type: none"> <li>• eq - Equality</li> <li>• lt/gt - Less than/Greater than</li> <li>• lte/gte - Less than or equals to/Greater than or equals to</li> </ul> <p>URL example: "filter=field%20eq%20%27value%27"</p> <p>OpenAPI examples: "field eq 'value'"</p>
orderBy	string	query	False	<p>Indicates the sort order of resource when listing a collection.</p> <p>URL examples: "orderBy=name", "orderBy=name%20desc"</p> <p>OpenAPI examples: "name desc"</p>
skip	string	query	False	<p>Indicates the number of resources to skip over when listing a collection.</p> <p>URL examples: "skip=1"</p> <p>OpenAPI examples: "1"</p>

Name	Type	In	Required	Description
count	string	query	False	Indicates if the total number of resources should be returned in the metadata object.  URL examples: "count=true"  OpenAPI examples: "true"
continue		query	False	Indicates the token to resume listing from.  URL examples: "continue=<continue token="" from="" collection="" metadata="">"</continue>  OpenAPI examples: "<continue token="" from="" collection="" metadata="">"</continue>&lt;/continue&gt;"

## Response

Status: 200, Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

Name	Type	Required	Description
items	array[Any of: <a href="#">roleBinding_1.1_get_response_body</a> , array[]]	True	
metadata	<a href="#">type_astra_metadata_list</a>	True	

## Example response

```
{
  "type": "application/astra-roleBindings",
  "version": "1.1",
  "items": [
    [
      "9fd87309-067f-48c9-a331-527796c14cf3",
      "4c27d25a-9edb-4e85-9438-48dc8e917231",
      "viewer"
    ],
    [
      "9fd87309-067f-48c9-a331-527796c14cf3",
      "dc40a13f-e9b3-4cf5-900f-58de32174390",
      "owner"
    ],
    [
      "9fd87309-067f-48c9-a331-527796c14cf3",
      "c38abd8d-7dae-4659-8382-2e74a58738ba",
      "owner"
    ]
  ],
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	

Name	Type	Required	Description
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't found.",
  "status": "404"
}
```



**Definitions**

## See Definitions

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[type_astra_label]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

### roleBinding\_1.1\_get\_response\_body

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>• "application/astra-roleBinding"</li></ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"><li>• "1.0"</li><li>• "1.1"</li></ul>

Name	Type	Required	Description
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the UUIDv4 Schema</li> </ul>
principalType	string	True	JSON string representing the type of the principal this binding is associated with. Defined values are: <ul style="list-style-type: none"> <li>• "user"</li> <li>• "group"</li> </ul> For principalType "user", a non-nil user ID is required. For principalType "group", a non-nil group ID is required.
userID	string	True	JSON string containing a user resource ID. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul> If not specified on create, a nil UUID will be used. Only userID or groupID can be specified on create.
groupID	string	True	JSON string containing a group resource ID. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul> If not specified on create, a nil UUID will be used. Only userID or groupID can be specified on create.

Name	Type	Required	Description
accountID	string	True	<p>JSON string containing the ID of an account resource.</p> <p>For create, this must match the account ID in the request URI.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
role	string	True	<p>JSON string containing one of the four defined roles.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "viewer"</li> <li>• "member"</li> <li>• "admin"</li> <li>• "owner"</li> </ul>

Name	Type	Required	Description
roleConstraints	array[string]	False	<p>JSON array of JSON strings specifying the scope of the role assignment. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to Astra Role Constraints Schema If not specified on create, the value will be set to an array of size 1 containing string "*" representing "full scope". If not specified on update, the value will be preserved without modification. An empty array represents "no scope". Examples: <ul style="list-style-type: none"> <li>• = Allow access to any resource: "roleConstraints": ["*"]</li> <li>• = deny access to all resources: "roleConstraints": []</li> <li>• = Allow access to a specific namespace resource only: "roleConstraints": [ "namespaces:id='6fa2f917-f730-41b8-9c15-17f531843b31'" ]</li> <li>• = Allow access to a specific namespace and everything under it: "roleConstraints": [ "namespaces:id='6fa2f917-f730-41b8-9c15-17f531843b31'.*" ]</li> <li>• = Allow access to all namespaces labelled "dev" in any cluster in any cloud, and everything under</li> </ul> </li> </ul>

Name	Type	Required	Description
metadata	<a href="#">type_astra_metadata_update</a>	True	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>Conforms to the Astra Metadata Schema</li> </ul> <p>If not specified on create, a metadata object will be created with no labels.</p> <p>If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</p>

#### type\_astra\_metadata\_list

Name	Type	Required	Description
continue	string	False	
count	number	False	
labels	array[ <a href="#">type_astra_label</a> ]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

#### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Retrieve a role binding

GET /accounts/{account\_id}/core/v1/roleBindings/{roleBinding\_id}

Returns the stored Role Binding API resource in the JSON response body.

If the request is against /accounts/{account\_id}/core/v1/users/{user\_id}/roleBindings endpoint, only roleBinding resources where the user ID matches the user ID in the request URL will be permitted to be read.

If the request is against /accounts/{account\_id}/core/v1/groups/{group\_id}/roleBindings, only roleBinding resources where the group ID matches the group ID in the request URL will be permitted to be read.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"><li>example: {{.Account}}</li></ul>
roleBinding_id	string	path	True	ID of the roleBinding collection to list

### Response

Status: 200

Returns the stored Role Binding API resource in the JSON response body.

If the request is against /accounts/{account\_id}/core/v1/users/{user\_id}/roleBindings endpoint, only roleBinding resources where the user ID matches the user ID in the request URL will be permitted to be read.

If the request is against /accounts/{account\_id}/core/v1/groups/{group\_id}/roleBindings, only roleBinding resources where the group ID matches the group ID in the request URL will be permitted to be read.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>"application/astra-roleBinding"</li></ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"><li>"1.0"</li><li>"1.1"</li></ul>

Name	Type	Required	Description
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the UUIDv4 Schema</li> </ul>
principalType	string	True	JSON string representing the type of the principal this binding is associated with. Defined values are: <ul style="list-style-type: none"> <li>• "user"</li> <li>• "group"</li> </ul> For principalType "user", a non-nil user ID is required. For principalType "group", a non-nil group ID is required.
userID	string	True	JSON string containing a user resource ID. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul> If not specified on create, a nil UUID will be used. Only userID or groupID can be specified on create.
groupID	string	True	JSON string containing a group resource ID. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul> If not specified on create, a nil UUID will be used. Only userID or groupID can be specified on create.



Name	Type	Required	Description
accountID	string	True	<p>JSON string containing the ID of an account resource.</p> <p>For create, this must match the account ID in the request URI.</p> <p>Defined values are:</p> <ul style="list-style-type: none"><li>• Conforms to the Astra Identifier Schema</li></ul>
role	string	True	<p>JSON string containing one of the four defined roles.</p> <p>Defined values are:</p> <ul style="list-style-type: none"><li>• "viewer"</li><li>• "member"</li><li>• "admin"</li><li>• "owner"</li></ul>

Name	Type	Required	Description
roleConstraints	array[string]	False	<p>JSON array of JSON strings specifying the scope of the role assignment. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to Astra Role Constraints Schema If not specified on create, the value will be set to an array of size 1 containing string "*" representing "full scope". If not specified on update, the value will be preserved without modification. An empty array represents "no scope". Examples: <ul style="list-style-type: none"> <li>• = Allow access to any resource: "roleConstraints": ["*"]</li> <li>• = deny access to all resources: "roleConstraints": []</li> <li>• = Allow access to a specific namespace resource only: "roleConstraints": [ "namespaces:id='6fa2f917-f730-41b8-9c15-17f531843b31'" ]</li> <li>• = Allow access to a specific namespace and everything under it: "roleConstraints": [ "namespaces:id='6fa2f917-f730-41b8-9c15-17f531843b31'.*' " ]</li> <li>• = Allow access to all namespaces labelled "dev" in any cluster in any cloud, and everything under them: "roleConstraints": [ "namespaces:kubernetesLabels='dev.examp</li> </ul> </li> </ul>

Name	Type	Required	Description
metadata	<a href="#">type_astra_metadata_update</a>	True	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</li> </ul>

### Example response

```
{
  "type": "application/astra-roleBinding",
  "version": "1.1",
  "id": "a198f052-5cd7-59d3-9f27-9ea32a21fbca",
  "principalType": "user",
  "userID": "4c27d25a-9edb-4e85-9438-48dc8e917231",
  "groupID": "00000000-0000-0000-0000-000000000000",
  "accountID": "9fd87309-067f-48c9-a331-527796c14cf3",
  "role": "viewer",
  "roleConstraints": [
    "*"
  ],
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

### Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	

Name	Type	Required	Description
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

### Definitions

## See Definitions

type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[type_astra_label]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Modify a role binding

PUT /accounts/{account\_id}/core/v1/roleBindings/{roleBinding\_id}

Replaces the entire stored resource with the supplied JSON request body while preserving key values that are not user-modifiable.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"> <li>example: <code>{{.Account}}</code></li> </ul>
roleBinding_id	string	path	True	ID of the roleBinding collection to list

## Request Body

Replaces the entire stored resource with the supplied JSON request body while preserving key values that are not user-modifiable.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"> <li>"application/astra-roleBinding"</li> </ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>"1.0"</li> <li>"1.1"</li> </ul>
id	string	False	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>Conforms to the UUIDv4 Schema</li> </ul>
userID	string	False	JSON string containing a user resource ID. Defined values are: <ul style="list-style-type: none"> <li>Conforms to the Astra Identifier Schema If not specified on create, a nil UUID will be used. Only userID or groupID can be specified on create.</li> </ul>



Name	Type	Required	Description
groupID	string	False	<p>JSON string containing a group resource ID. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema If not specified on create, a nil UUID will be used. Only userID or groupID can be specified on create.</li> </ul>
accountID	string	False	<p>JSON string containing the ID of an account resource. For create, this must match the account ID in the request URI. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
role	string	True	<p>JSON string containing one of the four defined roles. Defined values are:</p> <ul style="list-style-type: none"> <li>• "viewer"</li> <li>• "member"</li> <li>• "admin"</li> <li>• "owner"</li> </ul>

Name	Type	Required	Description
roleConstraints	array[string]	False	<p>JSON array of JSON strings specifying the scope of the role assignment. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to Astra Role Constraints Schema If not specified on create, the value will be set to an array of size 1 containing string "*" representing "full scope". If not specified on update, the value will be preserved without modification. An empty array represents "no scope". Examples: <ul style="list-style-type: none"> <li>• = Allow access to any resource: "roleConstraints": ["*"]</li> <li>• = deny access to all resources: "roleConstraints": []</li> <li>• = Allow access to a specific namespace resource only: "roleConstraints": [ "namespaces:id='6fa2f917-f730-41b8-9c15-17f531843b31'" ]</li> <li>• = Allow access to a specific namespace and everything under it: "roleConstraints": [ "namespaces:id='6fa2f917-f730-41b8-9c15-17f531843b31'.*' " ]</li> <li>• = Allow access to all namespaces labelled "dev" in any cluster in any cloud, and everything under them: "roleConstraints": [ "namespaces:kubernetesLabels='dev.examp</li> </ul> </li> </ul>

Name	Type	Required	Description
metadata	<a href="#">type_astra_metadata_update</a>	False	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>Conforms to the Astra Metadata Schema</li> </ul> <p>If not specified on create, a metadata object will be created with no labels.</p> <p>If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</p>

### Example request

```
{
  "type": "application/astra-roleBinding",
  "version": "1.1",
  "role": "member",
  "roleConstraints": [
    "namespaces:id='c832e1dc-d7c3-464e-9c62-47bf91c46ce8'"
  ]
}
```

### Response

Status: 204, Indicates if the roleBinding resource was updated.

### Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	

Name	Type	Required	Description
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

## Response

Status: 409, Conflict

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

## Example response

```
{
  "type": "https://astra.netapp.io/problems/10",
  "title": "JSON resource conflict",
  "detail": "The request body JSON contains a field that conflicts with an idempotent value.",
  "status": "409"
}
```

## Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

## Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example error response

```
{
  "type": "https://astra.netapp.io/problems/1",
  "title": "Resource not found",
  "detail": "The resource specified in the request URI wasn't found.",
  "status": "404"
}
```

## Definitions

## See Definitions

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[type_astra_label]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

### invalidFields

Name	Type	Required	Description
name	string	True	Name of the invalid request body field
reason	string	True	Reason why the request body field is invalid

## Delete a role binding

DELETE /accounts/{account\_id}/core/v1/roleBindings/{roleBinding\_id}

Removes the specified Role Binding API resource.

### Side Effects

- Deleting the last role-binding associated with a user with authProvider as 'local', or 'cloud-central' (not ldap) triggers the deletion of the user.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource  • example: {{.Account}}
roleBinding_id	string	path	True	ID of the roleBinding collection to list

### Response

Status: 204, Indicates if the roleBinding resource was deleted.

### Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	



### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	

Name	Type	Required	Description
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/1",
  "title": "Resource not found",
  "detail": "The resource specified in the request URI wasn't found.",
  "status": "404"
}
```

### Definitions

## See Definitions

invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Create a new role binding for a user

POST /accounts/{account\_id}/core/v1/users/{user\_id}/roleBindings

Indicates desired values for the Role Binding API resource to be created.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"><li>example: {{.Account}}</li></ul>
user_id	string	path	True	ID of the containing user resource

### Request Body

Indicates desired values for the Role Binding API resource to be created.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>"application/astra-roleBinding"</li></ul>

Name	Type	Required	Description
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "1.0"</li> <li>• "1.1"</li> </ul>
userID	string	False	JSON string containing a user resource ID. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema If not specified on create, a nil UUID will be used. Only userID or groupID can be specified on create.</li> </ul>
groupID	string	False	JSON string containing a group resource ID. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema If not specified on create, a nil UUID will be used. Only userID or groupID can be specified on create.</li> </ul>
accountID	string	True	JSON string containing the ID of an account resource. For create, this must match the account ID in the request URI. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
role	string	True	JSON string containing one of the four defined roles. Defined values are: <ul style="list-style-type: none"><li>• "viewer"</li><li>• "member"</li><li>• "admin"</li><li>• "owner"</li></ul>

Name	Type	Required	Description
roleConstraints	array[string]	False	<p>JSON array of JSON strings specifying the scope of the role assignment. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to Astra Role Constraints Schema If not specified on create, the value will be set to an array of size 1 containing string "*" representing "full scope". If not specified on update, the value will be preserved without modification. An empty array represents "no scope". Examples: <ul style="list-style-type: none"> <li>• = Allow access to any resource: "roleConstraints": ["*"]</li> <li>• = deny access to all resources: "roleConstraints": []</li> <li>• = Allow access to a specific namespace resource only: "roleConstraints": [ "namespaces:id='6fa2f917-f730-41b8-9c15-17f531843b31'" ]</li> <li>• = Allow access to a specific namespace and everything under it: "roleConstraints": [ "namespaces:id='6fa2f917-f730-41b8-9c15-17f531843b31'.*" ]</li> <li>• = Allow access to all namespaces labelled "dev" in any cluster in any cloud, and everything under them: "roleConstraints": [ "namespaces:kubernetesLabels='dev.examp</li> </ul> </li> </ul>

Name	Type	Required	Description
metadata	<a href="#">type_astra_metadata_update</a>	False	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</li> </ul>

### Example request

```
{
  "type": "application/astra-roleBinding",
  "version": "1.1",
  "userID": "4c27d25a-9edb-4e85-9438-48dc8e917231",
  "accountID": "9fd87309-067f-48c9-a331-527796c14cf3",
  "role": "viewer",
  "roleConstraints": [
    "*"
  ]
}
```

### Response

Status: 201, Returns the newly created roleBinding resource in the JSON response body.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"> <li>"application/astra-roleBinding"</li> </ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>"1.0"</li> <li>"1.1"</li> </ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>Conforms to the UUIDv4 Schema</li> </ul>
principalType	string	True	JSON string representing the type of the principal this binding is associated with. Defined values are: <ul style="list-style-type: none"> <li>"user"</li> <li>"group"</li> </ul> For principalType "user", a non-nil user ID is required. For principalType "group", a non-nil group ID is required.
userID	string	True	JSON string containing a user resource ID. Defined values are: <ul style="list-style-type: none"> <li>Conforms to the Astra Identifier Schema If not specified on create, a nil UUID will be used. Only userID or groupID can be specified on create.</li> </ul>



Name	Type	Required	Description
groupID	string	True	<p>JSON string containing a group resource ID. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema If not specified on create, a nil UUID will be used. Only userID or groupID can be specified on create.</li> </ul>
accountID	string	True	<p>JSON string containing the ID of an account resource. For create, this must match the account ID in the request URI. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
role	string	True	<p>JSON string containing one of the four defined roles. Defined values are:</p> <ul style="list-style-type: none"> <li>• "viewer"</li> <li>• "member"</li> <li>• "admin"</li> <li>• "owner"</li> </ul>

Name	Type	Required	Description
roleConstraints	array[string]	False	<p>JSON array of JSON strings specifying the scope of the role assignment. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to Astra Role Constraints Schema If not specified on create, the value will be set to an array of size 1 containing string "*" representing "full scope". If not specified on update, the value will be preserved without modification. An empty array represents "no scope". Examples: <ul style="list-style-type: none"> <li>• = Allow access to any resource: "roleConstraints": ["*"]</li> <li>• = deny access to all resources: "roleConstraints": []</li> <li>• = Allow access to a specific namespace resource only: "roleConstraints": [ "namespaces:id='6fa2f917-f730-41b8-9c15-17f531843b31'" ]</li> <li>• = Allow access to a specific namespace and everything under it: "roleConstraints": [ "namespaces:id='6fa2f917-f730-41b8-9c15-17f531843b31'.*' " ]</li> <li>• = Allow access to all namespaces labelled "dev" in any cluster in any cloud, and everything under them: "roleConstraints": [ "namespaces:kubernetesLabels='dev.examp</li> </ul> </li> </ul>

Name	Type	Required	Description
metadata	<a href="#">type_astra_metadata_update</a>	True	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</li> </ul>

### Example response

```
{
  "type": "application/astra-roleBinding",
  "version": "1.1",
  "id": "a198f052-5cd7-59d3-9f27-9ea32a21fbca",
  "principalType": "user",
  "userID": "4c27d25a-9edb-4e85-9438-48dc8e917231",
  "groupID": "00000000-0000-0000-0000-000000000000",
  "accountID": "9fd87309-067f-48c9-a331-527796c14cf3",
  "role": "viewer",
  "roleConstraints": [
    "*"
  ],
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

### Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 409, Conflict

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

### Example response

```
{
  "type": "https://astra.netapp.io/problems/10",
  "title": "JSON resource conflict",
  "detail": "The request body JSON contains a field that conflicts with an idempotent value.",
  "status": "409"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

## Definitions

### See Definitions

type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[type_astra_label]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

invalidFields

Name	Type	Required	Description
name	string	True	Name of the invalid request body field
reason	string	True	Reason why the request body field is invalid

## List the role bindings for a user

GET /accounts/{account\_id}/core/v1/users/{user\_id}/roleBindings

Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"><li>example: {{.Account}}</li></ul>
user_id	string	path	True	ID of the containing user resource
include	string	query	False	Indicates which fields should be returned when listing a collection.  URL examples: "include=id", "include=id,name"  OpenAPI examples: "id" <ul style="list-style-type: none"><li>example: accountID,userID,role</li></ul>
limit	string	query	False	Indicates the maximum number of resources to return when listing a collection.  URL examples: "limit=2"  OpenAPI examples: "2"



Name	Type	In	Required	Description
filter	string	query	False	<p>Indicates which fields should be matched in order to return a resource when listing a collection.</p> <p>Supported operators are:</p> <ul style="list-style-type: none"> <li>• eq - Equality</li> <li>• lt/gt - Less than/Greater than</li> <li>• lte/gte - Less than or equals to/Greater than or equals to</li> </ul> <p>URL example: "filter=field%20eq%20%27value%27"</p> <p>OpenAPI examples: "field eq 'value'"</p>
orderBy	string	query	False	<p>Indicates the sort order of resource when listing a collection.</p> <p>URL examples: "orderBy=name", "orderBy=name%20desc"</p> <p>OpenAPI examples: "name desc"</p>
skip	string	query	False	<p>Indicates the number of resources to skip over when listing a collection.</p> <p>URL examples: "skip=1"</p> <p>OpenAPI examples: "1"</p>

Name	Type	In	Required	Description
count	string	query	False	Indicates if the total number of resources should be returned in the metadata object.  URL examples: "count=true"  OpenAPI examples: "true"
continue		query	False	Indicates the token to resume listing from.  URL examples: "continue=<continue token="" from="" collection="" metadata="">"</continue>  OpenAPI examples: "<continue token="" from="" collection="" metadata="">"</continue>&lt;/continue&gt;"

## Response

Status: 200, Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

Name	Type	Required	Description
items	array[Any of: <a href="#">roleBinding_1.1_get_response_body</a> , array[]]	True	
metadata	<a href="#">type_astra_metadata_list</a>	True	

## Example response

```
{
  "type": "application/astra-roleBindings",
  "version": "1.1",
  "items": [
    [
      "9fd87309-067f-48c9-a331-527796c14cf3",
      "4c27d25a-9edb-4e85-9438-48dc8e917231",
      "viewer"
    ],
    [
      "9fd87309-067f-48c9-a331-527796c14cf3",
      "dc40a13f-e9b3-4cf5-900f-58de32174390",
      "owner"
    ],
    [
      "9fd87309-067f-48c9-a331-527796c14cf3",
      "c38abd8d-7dae-4659-8382-2e74a58738ba",
      "owner"
    ]
  ],
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	

Name	Type	Required	Description
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't found.",
  "status": "404"
}
```

**Definitions**

## See Definitions

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[type_astra_label]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

### roleBinding\_1.1\_get\_response\_body

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>• "application/astra-roleBinding"</li></ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"><li>• "1.0"</li><li>• "1.1"</li></ul>

Name	Type	Required	Description
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the UUIDv4 Schema</li> </ul>
principalType	string	True	JSON string representing the type of the principal this binding is associated with. Defined values are: <ul style="list-style-type: none"> <li>• "user"</li> <li>• "group"</li> </ul> For principalType "user", a non-nil user ID is required. For principalType "group", a non-nil group ID is required.
userID	string	True	JSON string containing a user resource ID. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul> If not specified on create, a nil UUID will be used. Only userID or groupID can be specified on create.
groupID	string	True	JSON string containing a group resource ID. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul> If not specified on create, a nil UUID will be used. Only userID or groupID can be specified on create.



Name	Type	Required	Description
accountID	string	True	JSON string containing the ID of an account resource. For create, this must match the account ID in the request URI. Defined values are: <ul style="list-style-type: none"><li>• Conforms to the Astra Identifier Schema</li></ul>
role	string	True	JSON string containing one of the four defined roles. Defined values are: <ul style="list-style-type: none"><li>• "viewer"</li><li>• "member"</li><li>• "admin"</li><li>• "owner"</li></ul>

Name	Type	Required	Description
roleConstraints	array[string]	False	<p>JSON array of JSON strings specifying the scope of the role assignment. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to Astra Role Constraints Schema If not specified on create, the value will be set to an array of size 1 containing string "*" representing "full scope". If not specified on update, the value will be preserved without modification. An empty array represents "no scope". Examples: <ul style="list-style-type: none"> <li>• = Allow access to any resource: "roleConstraints": ["*"]</li> <li>• = deny access to all resources: "roleConstraints": []</li> <li>• = Allow access to a specific namespace resource only: "roleConstraints": [ "namespaces:id='6fa2f917-f730-41b8-9c15-17f531843b31'" ]</li> <li>• = Allow access to a specific namespace and everything under it: "roleConstraints": [ "namespaces:id='6fa2f917-f730-41b8-9c15-17f531843b31'.*" ]</li> <li>• = Allow access to all namespaces labelled "dev" in any cluster in any cloud, and everything under</li> </ul> </li> </ul>

Name	Type	Required	Description
metadata	<a href="#">type_astra_metadata_update</a>	True	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>Conforms to the Astra Metadata Schema</li> </ul> <p>If not specified on create, a metadata object will be created with no labels.</p> <p>If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</p>

#### type\_astra\_metadata\_list

Name	Type	Required	Description
continue	string	False	
count	number	False	
labels	array[ <a href="#">type_astra_label</a> ]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

#### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Retrieve a role binding for a user

GET /accounts/{account\_id}/core/v1/users/{user\_id}/roleBindings/{roleBinding\_id}

Returns the stored Role Binding API resource in the JSON response body.

If the request is against /accounts/{account\_id}/core/v1/users/{user\_id}/roleBindings endpoint, only roleBinding resources where the user ID matches the user ID in the request URL will be permitted to be read.

If the request is against /accounts/{account\_id}/core/v1/groups/{group\_id}/roleBindings, only roleBinding resources where the group ID matches the group ID in the request URL will be permitted to be read.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"><li>example: {{.Account}}</li></ul>
user_id	string	path	True	ID of the containing user resource
roleBinding_id	string	path	True	ID of the roleBinding collection to list

### Response

Status: 200

Returns the stored Role Binding API resource in the JSON response body.

If the request is against /accounts/{account\_id}/core/v1/users/{user\_id}/roleBindings endpoint, only roleBinding resources where the user ID matches the user ID in the request URL will be permitted to be read.

If the request is against /accounts/{account\_id}/core/v1/groups/{group\_id}/roleBindings, only roleBinding resources where the group ID matches the group ID in the request URL will be permitted to be read.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>"application/astra-roleBinding"</li></ul>

Name	Type	Required	Description
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "1.0"</li> <li>• "1.1"</li> </ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the UUIDv4 Schema</li> </ul>
principalType	string	True	JSON string representing the type of the principal this binding is associated with. Defined values are: <ul style="list-style-type: none"> <li>• "user"</li> <li>• "group"</li> </ul> For principalType "user", a non-nil user ID is required. For principalType "group", a non-nil group ID is required.
userID	string	True	JSON string containing a user resource ID. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul> If not specified on create, a nil UUID will be used. Only userID or groupID can be specified on create.

Name	Type	Required	Description
groupID	string	True	<p>JSON string containing a group resource ID. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema If not specified on create, a nil UUID will be used. Only userID or groupID can be specified on create.</li> </ul>
accountID	string	True	<p>JSON string containing the ID of an account resource. For create, this must match the account ID in the request URI. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
role	string	True	<p>JSON string containing one of the four defined roles. Defined values are:</p> <ul style="list-style-type: none"> <li>• "viewer"</li> <li>• "member"</li> <li>• "admin"</li> <li>• "owner"</li> </ul>

Name	Type	Required	Description
roleConstraints	array[string]	False	<p>JSON array of JSON strings specifying the scope of the role assignment. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to Astra Role Constraints Schema If not specified on create, the value will be set to an array of size 1 containing string "*" representing "full scope". If not specified on update, the value will be preserved without modification. An empty array represents "no scope". Examples: <ul style="list-style-type: none"> <li>• = Allow access to any resource: "roleConstraints": ["*"]</li> <li>• = deny access to all resources: "roleConstraints": []</li> <li>• = Allow access to a specific namespace resource only: "roleConstraints": [ "namespaces:id='6fa2f917-f730-41b8-9c15-17f531843b31'" ]</li> <li>• = Allow access to a specific namespace and everything under it: "roleConstraints": [ "namespaces:id='6fa2f917-f730-41b8-9c15-17f531843b31'.*' " ]</li> <li>• = Allow access to all namespaces labelled "dev" in any cluster in any cloud, and everything under them: "roleConstraints": [ "namespaces:kubernetesLabels='dev.example'" ]</li> </ul> </li> </ul>

Name	Type	Required	Description
metadata	<a href="#">type_astra_metadata_update</a>	True	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>Conforms to the Astra Metadata Schema</li> </ul> <p>If not specified on create, a metadata object will be created with no labels.</p> <p>If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</p>

### Example response

```
{
  "type": "application/astra-roleBinding",
  "version": "1.1",
  "id": "a198f052-5cd7-59d3-9f27-9ea32a21fbca",
  "principalType": "user",
  "userID": "4c27d25a-9edb-4e85-9438-48dc8e917231",
  "groupID": "00000000-0000-0000-0000-000000000000",
  "accountID": "9fd87309-067f-48c9-a331-527796c14cf3",
  "role": "viewer",
  "roleConstraints": [
    "*"
  ],
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

### Response



Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	

Name	Type	Required	Description
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

### Definitions

## See Definitions

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[type_astra_label]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Modify a role binding for a user

PUT /accounts/{account\_id}/core/v1/users/{user\_id}/roleBindings/{roleBinding\_id}

Replaces the entire stored resource with the supplied JSON request body while preserving key values that are not user-modifiable.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource  • example: {{.Account}}
user_id	string	path	True	ID of the containing user resource
roleBinding_id	string	path	True	ID of the roleBinding collection to list

### Request Body

Replaces the entire stored resource with the supplied JSON request body while preserving key values that are not user-modifiable.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are:  • "application/astra-roleBinding"
version	string	True	Version of the resource. Defined values are:  • "1.0" • "1.1"
id	string	False	Globally unique identifier of the resource. Defined values are:  • Conforms to the UUIDv4 Schema

Name	Type	Required	Description
userID	string	False	<p>JSON string containing a user resource ID. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema If not specified on create, a nil UUID will be used. Only userID or groupID can be specified on create.</li> </ul>
groupID	string	False	<p>JSON string containing a group resource ID. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema If not specified on create, a nil UUID will be used. Only userID or groupID can be specified on create.</li> </ul>
accountID	string	False	<p>JSON string containing the ID of an account resource. For create, this must match the account ID in the request URI. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
role	string	True	<p>JSON string containing one of the four defined roles. Defined values are:</p> <ul style="list-style-type: none"> <li>• "viewer"</li> <li>• "member"</li> <li>• "admin"</li> <li>• "owner"</li> </ul>

Name	Type	Required	Description
roleConstraints	array[string]	False	<p>JSON array of JSON strings specifying the scope of the role assignment. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to Astra Role Constraints Schema If not specified on create, the value will be set to an array of size 1 containing string "*" representing "full scope". If not specified on update, the value will be preserved without modification. An empty array represents "no scope". Examples: <ul style="list-style-type: none"> <li>• = Allow access to any resource: "roleConstraints": ["*"]</li> <li>• = deny access to all resources: "roleConstraints": []</li> <li>• = Allow access to a specific namespace resource only: "roleConstraints": [ "namespaces:id='6fa2f917-f730-41b8-9c15-17f531843b31'" ]</li> <li>• = Allow access to a specific namespace and everything under it: "roleConstraints": [ "namespaces:id='6fa2f917-f730-41b8-9c15-17f531843b31'.*" ]</li> <li>• = Allow access to all namespaces labelled "dev" in any cluster in any cloud, and everything under them: "roleConstraints": [ "namespaces:kubernetesLabels='dev.example.com'" ]</li> </ul> </li> </ul>

Name	Type	Required	Description
metadata	<a href="#">type_astra_metadata_update</a>	False	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</li> </ul>

### Example request

```
{
  "type": "application/astra-roleBinding",
  "version": "1.1",
  "role": "member",
  "roleConstraints": [
    "namespaces:id='c832e1dc-d7c3-464e-9c62-47bf91c46ce8'"
  ]
}
```

### Response

Status: 204, Indicates if the roleBinding resource was updated.

### Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	



Name	Type	Required	Description
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

## Response

Status: 409, Conflict

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

## Example response

```
{
  "type": "https://astra.netapp.io/problems/10",
  "title": "JSON resource conflict",
  "detail": "The request body JSON contains a field that conflicts with an idempotent value.",
  "status": "409"
}
```

## Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

## Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example error response

```
{
  "type": "https://astra.netapp.io/problems/1",
  "title": "Resource not found",
  "detail": "The resource specified in the request URI wasn't found.",
  "status": "404"
}
```

## Definitions

## See Definitions

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[type_astra_label]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

### invalidFields

Name	Type	Required	Description
name	string	True	Name of the invalid request body field
reason	string	True	Reason why the request body field is invalid

## Delete a role binding for a user

DELETE

/accounts/{account\_id}/core/v1/users/{user\_id}/roleBindings/{roleBinding\_id}

Removes the specified Role Binding API resource.

### Side Effects

- Deleting the last role-binding associated with a user with authProvider as 'local', or 'cloud-central' (not ldap) triggers the deletion of the user.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"><li>example: <code>{{.Account}}</code></li></ul>
user_id	string	path	True	ID of the containing user resource
roleBinding_id	string	path	True	ID of the roleBinding collection to list

### Response

Status: 204, Indicates if the roleBinding resource was deleted.

### Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	

Name	Type	Required	Description
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/1",
  "title": "Resource not found",
  "detail": "The resource specified in the request URI wasn't found.",
  "status": "404"
}
```

### Definitions

## See Definitions

invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

# Schedule

## Schedule overview

The Schedule API provides CRUD (Create-Read-Update-Delete) access to schedule resources that allow various scheduled data protection operations to be defined.

## Create a new schedule for an app

POST /accounts/{account\_id}/k8s/v1/apps/{app\_id}/schedules

Indicates desired values for the Schedule API resource to be created.

## Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"><li>example: <code>{{.Account}}</code></li></ul>
app_id	string	path	True	ID of the containing app resource

## Request Body

Indicates desired values for the Schedule API resource to be created.



Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "application/astra-schedule"</li> </ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "1.0"</li> <li>• "1.1"</li> <li>• "1.2"</li> <li>• "1.3"</li> </ul>
name	string	True	JSON string containing a name of the schedule. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>
enabled	string	False	JSON string indicating if a schedule is active. Defined values are: <ul style="list-style-type: none"> <li>• "true" - The schedule is active</li> <li>• "false" - The schedule is not active</li> </ul> If not specified, the default value is "true".
granularity	string	True	JSON string indicating the granularity of the schedule. Defined values are: <ul style="list-style-type: none"> <li>• "hourly"</li> <li>• "daily"</li> <li>• "weekly"</li> <li>• "monthly"</li> <li>• "custom"</li> </ul>

Name	Type	Required	Description
minute	string	False	<p>JSON string containing a numeric value indicating the minute of the hour (0 - 59) to execute the schedule.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Defined regex is: <code>"^[0-9][1-5][0-9]\$"            This field is present if granularity is set to "hourly", "daily", "weekly", or "monthly".            It will be returned with value "0" for custom schedules.</code></li> </ul>
hour	string	False	<p>JSON string containing a numeric value indicating the hour of the day (0 - 23) to execute the schedule.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Defined regex is: <code>"^[0-9][1][0-9][2][0-3]\$"            This field is present if granularity is set to "daily", "weekly", or "monthly".</code></li> </ul>
dayOfWeek	string	False	<p>JSON string containing a numeric value indicating the day of the week (0-7) to execute the schedule.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Defined regex is: <code>"^[0-7]\$"            This field is only present if granularity is set to "weekly".</code></li> </ul>

Name	Type	Required	Description
dayOfMonth	string	False	<p>JSON string containing a numeric value indicating the day of the month (1-31) to execute the schedule.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Defined regex is: <code>"^[1-9] [1-2][0-9] [3][0-1]\$"</code> This field is only present if granularity is set to "monthly".</li> </ul>
recurrenceRule	string	False	<p>JSON string containing an RFC-5545 Section 3.8.5.3. Recurrence Rule. For the DTSTART parameter, only UTC timestamps (denoted by the "Z" suffix) are supported, and only timestamps before the current time are supported.</p> <p>For the RECUR rule parts, "FREQ" and "INTERVAL" are the only rule parts supported.</p> <p>For the FREQ rule part, "MINUTELY" and "HOURLY" are the only values supported.</p> <p>This field is only present if granularity is set to "custom".</p>
snapshotRetention	string	True	<p>JSON string containing a positive numeric value indicating how many snapshots to retain. Zero indicates that snapshots should be deleted after taking a backup.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> <li>• Defined regex is: <code>"^(0 ([1-9][0-9]*))\$"</code></li> </ul>

Name	Type	Required	Description
backupRetention	string	True	<p>JSON string containing a positive numeric value indicating how many backups to retain. Zero indicates that no backups should be created.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> <li>• Defined regex is: <code>"^(0 ([1-9][0-9]*)\$"</code></li> </ul>
bucketID	string	False	<p>JSON string containing an optional bucket ID indicating where the backup must be stored on create. If not specified, a system-selected bucket will be used.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
replicate	string	False	<p>JSON string indicating if the schedule should trigger AppMirror replication for each snapshot. Only takes effect if the application has an AppMirror relationship defined.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - The schedule triggers AppMirror replication</li> <li>• "false" - The schedule does not trigger AppMirror replication If not specified, the default value is "false".</li> </ul>

Name	Type	Required	Description
metadata	<a href="#">type_astra_metadata_update</a>	False	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</li> </ul>

### Example request

```
{
  "type": "application/astra-schedule",
  "version": "1.3",
  "name": "Backup Schedule",
  "enabled": "true",
  "granularity": "monthly",
  "minute": "0",
  "hour": "0",
  "dayOfMonth": "1",
  "snapshotRetention": "12",
  "backupRetention": "12"
}
```

### Response

Status: 201, Returns the newly created schedule resource in the JSON response body.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "application/astra-schedule"</li> </ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "1.0"</li> <li>• "1.1"</li> <li>• "1.2"</li> <li>• "1.3"</li> </ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the UUIDv4 Schema</li> </ul>
name	string	True	JSON string containing a name of the schedule. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>
enabled	string	True	JSON string indicating if a schedule is active. Defined values are: <ul style="list-style-type: none"> <li>• "true" - The schedule is active</li> <li>• "false" - The schedule is not active</li> </ul> If not specified, the default value is "true".

Name	Type	Required	Description
granularity	string	True	<p>JSON string indicating the granularity of the schedule.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "hourly"</li> <li>• "daily"</li> <li>• "weekly"</li> <li>• "monthly"</li> <li>• "custom"</li> </ul>
minute	string	True	<p>JSON string containing a numeric value indicating the minute of the hour (0 - 59) to execute the schedule.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Defined regex is: <code>"^[0-9][1-5][0-9]\$"</code> This field is present if granularity is set to "hourly", "daily", "weekly", or "monthly". It will be returned with value "0" for custom schedules.</li> </ul>
hour	string	False	<p>JSON string containing a numeric value indicating the hour of the day (0 - 23) to execute the schedule.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Defined regex is: <code>"^[0-9][1][0-9][2][0-3]\$"</code> This field is present if granularity is set to "daily", "weekly", or "monthly".</li> </ul>

Name	Type	Required	Description
dayOfWeek	string	False	<p>JSON string containing a numeric value indicating the day of the week (0-7) to execute the schedule. Defined values are:</p> <ul style="list-style-type: none"> <li>• Defined regex is: "[0-7]\$" <p>This field is only present if granularity is set to "weekly".</p> </li> </ul>
dayOfMonth	string	False	<p>JSON string containing a numeric value indicating the day of the month (1-31) to execute the schedule. Defined values are:</p> <ul style="list-style-type: none"> <li>• Defined regex is: "[1-9] [1-2][0-9] [3][0-1]\$" <p>This field is only present if granularity is set to "monthly".</p> </li> </ul>
recurrenceRule	string	False	<p>JSON string containing an RFC-5545 Section 3.8.5.3. Recurrence Rule. For the DTSTART parameter, only UTC timestamps (denoted by the "Z" suffix) are supported, and only timestamps before the current time are supported. For the RECUR rule parts, "FREQ" and "INTERVAL" are the only rule parts supported. For the FREQ rule part, "MINUTELY" and "HOURLY" are the only values supported. This field is only present if granularity is set to "custom".</p>



Name	Type	Required	Description
snapshotRetention	string	True	<p>JSON string containing a positive numeric value indicating how many snapshots to retain. Zero indicates that snapshots should be deleted after taking a backup.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> <li>• Defined regex is: <code>"^(0 ([1-9][0-9]*))\$"</code></li> </ul>
backupRetention	string	True	<p>JSON string containing a positive numeric value indicating how many backups to retain. Zero indicates that no backups should be created.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> <li>• Defined regex is: <code>"^(0 ([1-9][0-9]*))\$"</code></li> </ul>
bucketID	string	False	<p>JSON string containing an optional bucket ID indicating where the backup must be stored on create. If not specified, a system-selected bucket will be used.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
replicate	string	False	<p>JSON string indicating if the schedule should trigger AppMirror replication for each snapshot. Only takes effect if the application has an AppMirror relationship defined.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - The schedule triggers AppMirror replication</li> <li>• "false" - The schedule does not trigger AppMirror replication</li> </ul> <p>If not specified, the default value is "false".</p>
metadata	type_astra_metadata_update	True	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema</li> </ul> <p>If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</p>

## Example response

```
{
  "type": "application/astra-schedule",
  "version": "1.3",
  "id": "49cbc480-5f7d-51e2-8f30-52b9a83a03b1",
  "name": "Backup Schedule",
  "enabled": "true",
  "granularity": "monthly",
  "minute": "0",
  "hour": "0",
  "dayOfMonth": "1",
  "snapshotRetention": "12",
  "backupRetention": "12",
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 409, Conflict

Name	Type	Required	Description
type	string	True	

Name	Type	Required	Description
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

### Example response

```
{
  "type": "https://astra.netapp.io/problems/10",
  "title": "JSON resource conflict",
  "detail": "The request body JSON contains a field that conflicts with an idempotent value.",
  "status": "409"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

## Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

## Definitions

## See Definitions

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[type_astra_label]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

### invalidFields

Name	Type	Required	Description
name	string	True	Name of the invalid request body field
reason	string	True	Reason why the request body field is invalid

## List the schedules for an app

GET /accounts/{account\_id}/k8s/v1/apps/{app\_id}/schedules

Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"><li>example: {{.Account}}</li></ul>
app_id	string	path	True	ID of the containing app resource
include	string	query	False	Indicates which fields should be returned when listing a collection.  URL examples: "include=id", "include=id,name"  OpenAPI examples: "id" <ul style="list-style-type: none"><li>example: id,name,granularity</li></ul>
limit	string	query	False	Indicates the maximum number of resources to return when listing a collection.  URL examples: "limit=2"  OpenAPI examples: "2"

### Response



Status: 200, Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

Name	Type	Required	Description
items	array[Any of: <a href="#">schedule_1.3_get_response_body</a> , array[]]	True	
metadata	<a href="#">type_astra_metadata_list</a>	True	

### Example response

```
{
  "type": "application/astra-schedules",
  "version": "1.3",
  "items": [
    [
      "0d6d20d6-8b7c-498a-b57b-5734210c209a",
      "Backup Schedule",
      "monthly"
    ]
  ],
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

### Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	

Name	Type	Required	Description
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't found.",
  "status": "404"
}
```

## Definitions

## See Definitions

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[type_astra_label]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

### schedule\_1.3\_get\_response\_body

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>• "application/astra-schedule"</li></ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"><li>• "1.0"</li><li>• "1.1"</li><li>• "1.2"</li><li>• "1.3"</li></ul>

Name	Type	Required	Description
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the UUIDv4 Schema</li> </ul>
name	string	True	JSON string containing a name of the schedule. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>
enabled	string	True	JSON string indicating if a schedule is active. Defined values are: <ul style="list-style-type: none"> <li>• "true" - The schedule is active</li> <li>• "false" - The schedule is not active</li> </ul> If not specified, the default value is "true".
granularity	string	True	JSON string indicating the granularity of the schedule. Defined values are: <ul style="list-style-type: none"> <li>• "hourly"</li> <li>• "daily"</li> <li>• "weekly"</li> <li>• "monthly"</li> <li>• "custom"</li> </ul>

Name	Type	Required	Description
minute	string	True	<p>JSON string containing a numeric value indicating the minute of the hour (0 - 59) to execute the schedule.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Defined regex is: <code>"^[0-9][1-5][0-9]\$"            This field is present if granularity is set to "hourly", "daily", "weekly", or "monthly". It will be returned with value "0" for custom schedules.</code></li> </ul>
hour	string	False	<p>JSON string containing a numeric value indicating the hour of the day (0 - 23) to execute the schedule.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Defined regex is: <code>"^[0-9][1][0-9][2][0-3]\$"            This field is present if granularity is set to "daily", "weekly", or "monthly".</code></li> </ul>
dayOfWeek	string	False	<p>JSON string containing a numeric value indicating the day of the week (0-7) to execute the schedule.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Defined regex is: <code>"^[0-7]\$"            This field is only present if granularity is set to "weekly".</code></li> </ul>

Name	Type	Required	Description
dayOfMonth	string	False	<p>JSON string containing a numeric value indicating the day of the month (1-31) to execute the schedule.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>Defined regex is: <code>"^[1-9][1-2][0-9][3][0-1]\$"            This field is only present if granularity is set to "monthly".</code></li> </ul>
recurrenceRule	string	False	<p>JSON string containing an RFC-5545 Section 3.8.5.3. Recurrence Rule.</p> <p>For the DTSTART parameter, only UTC timestamps (denoted by the "Z" suffix) are supported, and only timestamps before the current time are supported.</p> <p>For the RECUR rule parts, "FREQ" and "INTERVAL" are the only rule parts supported.</p> <p>For the FREQ rule part, "MINUTELY" and "HOURLY" are the only values supported.</p> <p>This field is only present if granularity is set to "custom".</p>



Name	Type	Required	Description
snapshotRetention	string	True	<p>JSON string containing a positive numeric value indicating how many snapshots to retain. Zero indicates that snapshots should be deleted after taking a backup.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> <li>• Defined regex is: <code>"^(0 ([1-9][0-9]*))\$"</code></li> </ul>
backupRetention	string	True	<p>JSON string containing a positive numeric value indicating how many backups to retain. Zero indicates that no backups should be created.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> <li>• Defined regex is: <code>"^(0 ([1-9][0-9]*))\$"</code></li> </ul>
bucketID	string	False	<p>JSON string containing an optional bucket ID indicating where the backup must be stored on create. If not specified, a system-selected bucket will be used.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
replicate	string	False	<p>JSON string indicating if the schedule should trigger AppMirror replication for each snapshot. Only takes effect if the application has an AppMirror relationship defined. Defined values are:</p> <ul style="list-style-type: none"> <li>"true" - The schedule triggers AppMirror replication</li> <li>"false" - The schedule does not trigger AppMirror replication If not specified, the default value is "false".</li> </ul>
metadata	<a href="#">type_astra_metadata_update</a>	True	<p>Client and service-specified metadata associated with the resource. Defined values are:</p> <ul style="list-style-type: none"> <li>Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</li> </ul>

type\_astra\_metadata\_list

Name	Type	Required	Description
continue	string	False	
count	number	False	

Name	Type	Required	Description
labels	array[type_astra_label]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

#### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Retrieve a schedule

GET /accounts/{account\_id}/k8s/v1/apps/{app\_id}/schedules/{schedule\_id}

Returns the stored Schedule API resource in the JSON response body.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource  • example: {{.Account}}
app_id	string	path	True	ID of the containing app resource
schedule_id	string	path	True	ID of the schedule collection to list

### Response

Status: 200, Returns the stored Schedule API resource in the JSON response body.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "application/astra-schedule"</li> </ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "1.0"</li> <li>• "1.1"</li> <li>• "1.2"</li> <li>• "1.3"</li> </ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the UUIDv4 Schema</li> </ul>
name	string	True	JSON string containing a name of the schedule. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>
enabled	string	True	JSON string indicating if a schedule is active. Defined values are: <ul style="list-style-type: none"> <li>• "true" - The schedule is active</li> <li>• "false" - The schedule is not active</li> </ul> If not specified, the default value is "true".

Name	Type	Required	Description
granularity	string	True	<p>JSON string indicating the granularity of the schedule.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "hourly"</li> <li>• "daily"</li> <li>• "weekly"</li> <li>• "monthly"</li> <li>• "custom"</li> </ul>
minute	string	True	<p>JSON string containing a numeric value indicating the minute of the hour (0 - 59) to execute the schedule.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Defined regex is: <code>"^[0-9][1-5][0-9]\$"</code> This field is present if granularity is set to "hourly", "daily", "weekly", or "monthly". It will be returned with value "0" for custom schedules.</li> </ul>
hour	string	False	<p>JSON string containing a numeric value indicating the hour of the day (0 - 23) to execute the schedule.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Defined regex is: <code>"^[0-9][1][0-9][2][0-3]\$"</code> This field is present if granularity is set to "daily", "weekly", or "monthly".</li> </ul>

Name	Type	Required	Description
dayOfWeek	string	False	<p>JSON string containing a numeric value indicating the day of the week (0-7) to execute the schedule. Defined values are:</p> <ul style="list-style-type: none"> <li>• Defined regex is: "[0-7]\$" <p>This field is only present if granularity is set to "weekly".</p> </li> </ul>
dayOfMonth	string	False	<p>JSON string containing a numeric value indicating the day of the month (1-31) to execute the schedule. Defined values are:</p> <ul style="list-style-type: none"> <li>• Defined regex is: "[1-9] [1-2][0-9] [3][0-1]\$" <p>This field is only present if granularity is set to "monthly".</p> </li> </ul>
recurrenceRule	string	False	<p>JSON string containing an RFC-5545 Section 3.8.5.3. Recurrence Rule. For the DTSTART parameter, only UTC timestamps (denoted by the "Z" suffix) are supported, and only timestamps before the current time are supported. For the RECUR rule parts, "FREQ" and "INTERVAL" are the only rule parts supported. For the FREQ rule part, "MINUTELY" and "HOURLY" are the only values supported. This field is only present if granularity is set to "custom".</p>

Name	Type	Required	Description
snapshotRetention	string	True	<p>JSON string containing a positive numeric value indicating how many snapshots to retain. Zero indicates that snapshots should be deleted after taking a backup.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> <li>• Defined regex is: <code>"^(0 ([1-9][0-9]*))\$"</code></li> </ul>
backupRetention	string	True	<p>JSON string containing a positive numeric value indicating how many backups to retain. Zero indicates that no backups should be created.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> <li>• Defined regex is: <code>"^(0 ([1-9][0-9]*))\$"</code></li> </ul>
bucketID	string	False	<p>JSON string containing an optional bucket ID indicating where the backup must be stored on create. If not specified, a system-selected bucket will be used.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
replicate	string	False	<p>JSON string indicating if the schedule should trigger AppMirror replication for each snapshot. Only takes effect if the application has an AppMirror relationship defined. Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - The schedule triggers AppMirror replication</li> <li>• "false" - The schedule does not trigger AppMirror replication. If not specified, the default value is "false".</li> </ul>
metadata	type_astra_metadata_update	True	<p>Client and service-specified metadata associated with the resource. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema. If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</li> </ul>



## Example response

```
{
  "type": "application/astra-schedule",
  "version": "1.3",
  "id": "49cbc480-5f7d-51e2-8f30-52b9a83a03b1",
  "name": "Backup Schedule",
  "enabled": "true",
  "granularity": "monthly",
  "minute": "0",
  "hour": "0",
  "dayOfMonth": "1",
  "snapshotRetention": "12",
  "backupRetention": "12",
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	

Name	Type	Required	Description
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't found.",
  "status": "404"
}
```

## Definitions

### See Definitions

type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[type_astra_label]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Modify a schedule

PUT /accounts/{account\_id}/k8s/v1/apps/{app\_id}/schedules/{schedule\_id}

Replaces the entire stored resource with the supplied JSON request body while preserving key values that are not user-modifiable.

## Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"><li>example: {{.Account}}</li></ul>
app_id	string	path	True	ID of the containing app resource
schedule_id	string	path	True	ID of the schedule collection to list

## Request Body

Replaces the entire stored resource with the supplied JSON request body while preserving key values that are not user-modifiable.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>"application/astra-schedule"</li></ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"><li>"1.0"</li><li>"1.1"</li><li>"1.2"</li><li>"1.3"</li></ul>
id	string	False	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"><li>Conforms to the UUIDv4 Schema</li></ul>

Name	Type	Required	Description
name	string	False	<p>JSON string containing a name of the schedule.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>
enabled	string	False	<p>JSON string indicating if a schedule is active.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - The schedule is active</li> <li>• "false" - The schedule is not active</li> </ul> <p>If not specified, the default value is "true".</p>
granularity	string	False	<p>JSON string indicating the granularity of the schedule.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "hourly"</li> <li>• "daily"</li> <li>• "weekly"</li> <li>• "monthly"</li> <li>• "custom"</li> </ul>
minute	string	False	<p>JSON string containing a numeric value indicating the minute of the hour (0 - 59) to execute the schedule.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Defined regex is: <code>"^[0-9][1-5][0-9]\$"</code></li> </ul> <p>This field is present if granularity is set to "hourly", "daily", "weekly", or "monthly". It will be returned with value "0" for custom schedules.</p>

Name	Type	Required	Description
hour	string	False	<p>JSON string containing a numeric value indicating the hour of the day (0 - 23) to execute the schedule.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Defined regex is: <code>"^[0-9][1][0-9][2][0-3]\$"</code> This field is present if granularity is set to "daily", "weekly", or "monthly".</li> </ul>
dayOfWeek	string	False	<p>JSON string containing a numeric value indicating the day of the week (0-7) to execute the schedule.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Defined regex is: <code>"^[0-7]\$"</code> This field is only present if granularity is set to "weekly".</li> </ul>
dayOfMonth	string	False	<p>JSON string containing a numeric value indicating the day of the month (1-31) to execute the schedule.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Defined regex is: <code>"^[1-9][1-2][0-9][3][0-1]\$"</code> This field is only present if granularity is set to "monthly".</li> </ul>

Name	Type	Required	Description
recurrenceRule	string	False	<p>JSON string containing an RFC-5545 Section 3.8.5.3. Recurrence Rule. For the DTSTART parameter, only UTC timestamps (denoted by the "Z" suffix) are supported, and only timestamps before the current time are supported.</p> <p>For the RECUR rule parts, "FREQ" and "INTERVAL" are the only rule parts supported.</p> <p>For the FREQ rule part, "MINUTELY" and "HOURLY" are the only values supported.</p> <p>This field is only present if granularity is set to "custom".</p>
snapshotRetention	string	True	<p>JSON string containing a positive numeric value indicating how many snapshots to retain. Zero indicates that snapshots should be deleted after taking a backup.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> <li>• Defined regex is: <code>"^(0 ([1-9][0-9]*))\$"</code></li> </ul>
backupRetention	string	True	<p>JSON string containing a positive numeric value indicating how many backups to retain. Zero indicates that no backups should be created.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> <li>• Defined regex is: <code>"^(0 ([1-9][0-9]*))\$"</code></li> </ul>



Name	Type	Required	Description
bucketID	string	False	<p>JSON string containing an optional bucket ID indicating where the backup must be stored on create. If not specified, a system-selected bucket will be used.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
replicate	string	False	<p>JSON string indicating if the schedule should trigger AppMirror replication for each snapshot. Only takes effect if the application has an AppMirror relationship defined.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - The schedule triggers AppMirror replication</li> <li>• "false" - The schedule does not trigger AppMirror replication</li> </ul> <p>If not specified, the default value is "false".</p>

Name	Type	Required	Description
metadata	<a href="#">type_astra_metadata_update</a>	False	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</li> </ul>

### Example request

```
{
  "type": "application/astra-schedule",
  "version": "1.3",
  "granularity": "daily",
  "minute": "0",
  "hour": "0",
  "snapshotRetention": "12",
  "backupRetention": "12"
}
```

### Response

Status: 204, Indicates if the schedule resource was updated.

### Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	

Name	Type	Required	Description
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

## Response

Status: 409, Conflict

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

## Example response

```
{
  "type": "https://astra.netapp.io/problems/10",
  "title": "JSON resource conflict",
  "detail": "The request body JSON contains a field that conflicts with an idempotent value.",
  "status": "409"
}
```

## Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

## Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example error response

```
{
  "type": "https://astra.netapp.io/problems/1",
  "title": "Resource not found",
  "detail": "The resource specified in the request URI wasn't found.",
  "status": "404"
}
```

## Definitions

## See Definitions

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[type_astra_label]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

### invalidFields

Name	Type	Required	Description
name	string	True	Name of the invalid request body field
reason	string	True	Reason why the request body field is invalid

## Delete a schedule

DELETE /accounts/{account\_id}/k8s/v1/apps/{app\_id}/schedules/{schedule\_id}

Removes the specified Schedule API resource.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"><li>example: {{.Account}}</li></ul>
app_id	string	path	True	ID of the containing app resource
schedule_id	string	path	True	ID of the schedule collection to list

### Response

Status: 204, Indicates if the schedule resource was deleted.

### Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	



Name	Type	Required	Description
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/1",
  "title": "Resource not found",
  "detail": "The resource specified in the request URI wasn't found.",
  "status": "404"
}
```

### Definitions

## See Definitions

invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

# Setting

## Setting overview

An account setting is a collection of key/value pairs that are important for a known feature in an Astra account. The following table provides important information about an account setting.

## List all settings

GET /accounts/{account\_id}/core/v1/settings

Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

## Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"><li>example: {{.Account}}</li></ul>
include	string	query	False	Indicates which fields should be returned when listing a collection.  URL examples: "include=id", "include=id,name"  OpenAPI examples: "id"

Name	Type	In	Required	Description
limit	string	query	False	<p>Indicates the maximum number of resources to return when listing a collection.</p> <p>URL examples: "limit=2"</p> <p>OpenAPI examples: "2"</p>
filter	string	query	False	<p>Indicates which fields should be matched in order to return a resource when listing a collection.</p> <p>Supported operators are:</p> <ul style="list-style-type: none"> <li>• eq - Equality</li> <li>• lt/gt - Less than/Greater than</li> <li>• lte/gte - Less than or equals to/Greater than or equals to</li> </ul> <p>URL example: "filter=field%20eq%20%27value%27"</p> <p>OpenAPI examples: "field eq 'value'"</p>
count	string	query	False	<p>Indicates if the total number of resources should be returned in the metadata object.</p> <p>URL examples: "count=true"</p> <p>OpenAPI examples: "true"</p>

Name	Type	In	Required	Description
orderBy	string	query	False	Indicates the sort order of resource when listing a collection.  URL examples: "orderBy=name", "orderBy=name%20desc"  OpenAPI examples: "name desc"
skip	string	query	False	Indicates the number of resources to skip over when listing a collection.  URL examples: "skip=1"  OpenAPI examples: "1"

## Response

Status: 200, Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

Name	Type	Required	Description
items	array[Any of: <a href="#">setting_1.0_get_response_body</a> , array[]]	True	
metadata	<a href="#">type_astra_metadata_list</a>	True	

## Example response

```
{
  "type": "application/astra-settings",
  "version": "1.0",
  "items": [
    {
      "type": "application/astra-setting",
      "version": "1.0",
      "id": "5da0a2ed-c51d-4d91-8b98-ed3aa8a88cc5",
      "name": "astra.account.smtp",
      "currentConfig": {
        "credential": "",
        "isEnabled": "false",
        "port": 587,
        "relayServer": "smtp.sendgrid.net"
      },
      "configSchema": {
        "$schema": "http://json-schema.org/draft-07/schema#",
        "title": "astra.account.smtp",
        "type": "object",
        "properties": {
          "credential": {
            "type": "string",
            "description": "The credential ID for SMTP authentication."
          },
          "isEnabled": {
            "type": "string",
            "description": "This property determines if this setting is
enabled or not."
          },
          "port": {
            "type": "integer",
            "description": "The SMTP port. For an unencrypted or a TLS
connection, use port 25, 2525, or 587."
          },
          "relayServer": {
            "type": "string",
            "description": "This setting is sometimes referred to as
the external SMTP server or the SMTP relay."
          }
        },
        "additionalProperties": false,
        "required": [
          "relayServer",
          "port",
```

```

        "isEnabled"
      ]
    },
    "state": "valid",
    "stateUnready": [],
    "metadata": {
      "labels": [],
      "creationTimestamp": "2021-06-04T20:14:52Z",
      "modificationTimestamp": "2021-06-04T20:14:52Z",
      "createdBy": "c9550bbb-e70b-4578-8504-07397f875bcb",
      "modifiedBy": "65e1571b-1b46-4f05-95b0-7d7f5a93da6a"
    }
  }
],
"metadata": {
  "labels": [],
  "creationTimestamp": "2022-10-06T20:58:16.305662Z",
  "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
  "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
}
}

```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	

Name	Type	Required	Description
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't found.",
  "status": "404"
}
```



**Definitions**

## See Definitions

### type\_json

JSON object containing keys and values that make up the current configuration for this setting. The contents of this object must conform to the JSON Schema contained in the configSchema field. Default values are supplied by the configmap. After defaults are changed by the user, they will not be overwritten.

### type\_json

JSON object containing keys and values that make up the requested configuration for this setting. The contents of this object must conform to the JSON schema contained in the configSchema field. The object does not exist until specified. When specified, this triggers the feature service to notify the corresponding service to request that the desired configuration can be applied. The corresponding service can then perform validation and apply the desired configuration to the current configuration.

### properties

### type\_json\_schema

JSON object containing the JSON schema for the config property in this resource. Must conform to JSON Schema Draft 7.

If config values are present in the resource, validation against the indicated configSchema is mandatory. As a common convention, configurations are recommended to have an "isEnabled" field, when appropriate. The "isEnabled" field contains a value that indicates whether the setting is turned on ("true") or off ("false").

Name	Type	Required	Description
\$schema	string	True	
type	string	True	
properties	<a href="#">properties</a>	True	
additionalProperties	boolean	True	
required	array[string]	True	

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource. Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[type_astra_label]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

setting\_1.0\_get\_response\_body

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"> <li>"application/astra-setting"</li> </ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>"1.0"</li> </ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>Conforms to the UUIDv4 Schema</li> </ul>

Name	Type	Required	Description
name	string	True	<p>JSON string containing a name for the setting, in hierarchal dot notation (.).</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> <li>• This string is internally validated to prevent XSS, Unicode, directory traversal, and SQL-injection attacks. This value is specified by the configmap that is loaded at runtime and cannot be updated by the user.</li> </ul>
currentConfig	type_json	True	<p>JSON object containing keys and values that make up the current configuration for this setting.</p> <p>The contents of this object must conform to the JSON Schema contained in the configSchema field. Default values are supplied by the configmap. After defaults are changed by the user, they will not be overwritten.</p>

Name	Type	Required	Description
desiredConfig	type_json	False	<p>JSON object containing keys and values that make up the requested configuration for this setting.</p> <p>The contents of this object must conform to the JSON schema contained in the configSchema field.</p> <p>The object does not exist until specified. When specified, this triggers the feature service to notify the corresponding service to request that the desired configuration can be applied. The corresponding service can then perform validation and apply the desired configuration to the current configuration.</p>
configSchema	type_json_schema	True	<p>JSON object containing the JSON schema for the config property in this resource. Must conform to JSON Schema Draft 7.</p> <p>If config values are present in the resource, validation against the indicated configSchema is mandatory.</p> <p>As a common convention, configurations are recommended to have an "isEnabled" field, when appropriate. The "isEnabled" field contains a value that indicates whether the setting is turned on ("true") or off ("false").</p>

Name	Type	Required	Description
state	string	True	<p>JSON string containing a value indicating the operational state of the application.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>"valid" - The current configuration matches the desired config.</li> <li>"pending" - The desired configuration is being applied.</li> <li>"error" - The desired configuration cannot be applied.</li> </ul>
stateUnready	array[string]	True	<p>JSON array of JSON strings, each indicating a reason why the setting was not successfully applied.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>Minimum length: 1</li> <li>Maximum length: 127</li> </ul>
metadata	<a href="#">type_astra_metadata_update</a>	True	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>Conforms to the Astra Metadata Schema</li> </ul> <p>If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</p>

[type\\_astra\\_metadata\\_list](#)

Name	Type	Required	Description
continue	string	False	
count	number	False	
labels	array[type_astra_label]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

#### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Retrieve a setting

GET /accounts/{account\_id}/core/v1/settings/{setting\_id}

Returns the stored Setting API resource in the JSON response body.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource  • example: {{.Account}}
setting_id	string	path	True	ID of the setting collection to list

### Response

Status: 200, Returns the stored Setting API resource in the JSON response body.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "application/astra-setting"</li> </ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "1.0"</li> </ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the UUIDv4 Schema</li> </ul>
name	string	True	JSON string containing a name for the setting, in hierarchal dot notation (.). Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> <li>• This string is internally validated to prevent XSS, Unicode, directory traversal, and SQL-injection attacks.</li> </ul> <p>This value is specified by the configmap that is loaded at runtime and cannot be updated by the user.</p>



Name	Type	Required	Description
currentConfig	type_json	True	<p>JSON object containing keys and values that make up the current configuration for this setting.</p> <p>The contents of this object must conform to the JSON Schema contained in the configSchema field. Default values are supplied by the configmap. After defaults are changed by the user, they will not be overwritten.</p>
desiredConfig	type_json	False	<p>JSON object containing keys and values that make up the requested configuration for this setting.</p> <p>The contents of this object must conform to the JSON schema contained in the configSchema field. The object does not exist until specified. When specified, this triggers the feature service to notify the corresponding service to request that the desired configuration can be applied. The corresponding service can then perform validation and apply the desired configuration to the current configuration.</p>

Name	Type	Required	Description
configSchema	type_json_schema	True	<p>JSON object containing the JSON schema for the config property in this resource. Must conform to JSON Schema Draft 7. If config values are present in the resource, validation against the indicated configSchema is mandatory.</p> <p>As a common convention, configurations are recommended to have an "isEnabled" field, when appropriate. The "isEnabled" field contains a value that indicates whether the setting is turned on ("true") or off ("false").</p>
state	string	True	<p>JSON string containing a value indicating the operational state of the application.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "valid" - The current configuration matches the desired config.</li> <li>• "pending" - The desired configuration is being applied.</li> <li>• "error" - The desired configuration cannot be applied.</li> </ul>
stateUnready	array[string]	True	<p>JSON array of JSON strings, each indicating a reason why the setting was not successfully applied.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 127</li> </ul>

Name	Type	Required	Description
metadata	type_astra_metadata_update	True	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</li> </ul>

## Example response

```
{
  "type": "application/astra-setting",
  "version": "1.0",
  "id": "7d490413-446b-5f86-8818-744e1c10a6c6",
  "name": "astra.account.smtp",
  "currentConfig": {
    "credential": "",
    "isEnabled": "false",
    "port": 587,
    "relayServer": "smtp.sendgrid.net"
  },
  "configSchema": {
    "$schema": "http://json-schema.org/draft-07/schema#",
    "title": "astra.account.smtp",
    "type": "object",
    "properties": {
      "credential": {
        "type": "string",
        "description": "The credential ID for SMTP authentication."
      },
      "isEnabled": {
        "type": "string",
        "description": "This property determines if this setting is
enabled or not."
      },
      "port": {
        "type": "integer",
        "description": "The SMTP port. For an unencrypted or a TLS
connection, use port 25, 2525, or 587."
      },
      "relayServer": {
        "type": "string",
        "description": "This setting is sometimes referred to as the
external SMTP server or the SMTP relay."
      }
    },
    "additionalProperties": false,
    "required": [
      "relayServer",
      "port",
      "isEnabled"
    ]
  },
  "state": "valid",
}
```

```
"stateUnready": [],
"metadata": {
  "labels": [],
  "creationTimestamp": "2022-10-06T20:58:16.305662Z",
  "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
  "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
}
}
```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

## Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	

Name	Type	Required	Description
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

### Definitions

## See Definitions

### type\_json

JSON object containing keys and values that make up the current configuration for this setting. The contents of this object must conform to the JSON Schema contained in the configSchema field. Default values are supplied by the configmap. After defaults are changed by the user, they will not be overwritten.

### type\_json

JSON object containing keys and values that make up the requested configuration for this setting. The contents of this object must conform to the JSON schema contained in the configSchema field. The object does not exist until specified. When specified, this triggers the feature service to notify the corresponding service to request that the desired configuration can be applied. The corresponding service can then perform validation and apply the desired configuration to the current configuration.

### properties

### type\_json\_schema

JSON object containing the JSON schema for the config property in this resource. Must conform to JSON Schema Draft 7.

If config values are present in the resource, validation against the indicated configSchema is mandatory. As a common convention, configurations are recommended to have an "isEnabled" field, when appropriate. The "isEnabled" field contains a value that indicates whether the setting is turned on ("true") or off ("false").

Name	Type	Required	Description
\$schema	string	True	
type	string	True	
properties	<a href="#">properties</a>	True	
additionalProperties	boolean	True	
required	array[string]	True	

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource. Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.



Name	Type	Required	Description
labels	array[type_astra_label]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

#### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Modify a setting

PUT /accounts/{account\_id}/core/v1/settings/{setting\_id}

Replaces the entire stored resource with the supplied JSON request body while preserving key values that are not user-modifiable.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"> <li>example: <code>{{.Account}}</code></li> </ul>
setting_id	string	path	True	ID of the setting collection to list

### Request Body

Replaces the entire stored resource with the supplied JSON request body while preserving key values that are not user-modifiable.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"> <li>"application/astra-setting"</li> </ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>"1.0"</li> </ul>
id	string	False	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>Conforms to the UUIDv4 Schema</li> </ul>
name	string	False	JSON string containing a name for the setting, in hierarchal dot notation (.). Defined values are: <ul style="list-style-type: none"> <li>Minimum length: 1</li> <li>Maximum length: 63</li> <li>This string is internally validated to prevent XSS, Unicode, directory traversal, and SQL-injection attacks.</li> </ul> <p>This value is specified by the configmap that is loaded at runtime and cannot be updated by the user.</p>

Name	Type	Required	Description
currentConfig	type_json	False	<p>JSON object containing keys and values that make up the current configuration for this setting.</p> <p>The contents of this object must conform to the JSON Schema contained in the configSchema field. Default values are supplied by the configmap. After defaults are changed by the user, they will not be overwritten.</p>
desiredConfig	type_json	False	<p>JSON object containing keys and values that make up the requested configuration for this setting.</p> <p>The contents of this object must conform to the JSON schema contained in the configSchema field. The object does not exist until specified. When specified, this triggers the feature service to notify the corresponding service to request that the desired configuration can be applied. The corresponding service can then perform validation and apply the desired configuration to the current configuration.</p>

Name	Type	Required	Description
configSchema	type_json_schema	False	<p>JSON object containing the JSON schema for the config property in this resource. Must conform to JSON Schema Draft 7. If config values are present in the resource, validation against the indicated configSchema is mandatory.</p> <p>As a common convention, configurations are recommended to have an "isEnabled" field, when appropriate. The "isEnabled" field contains a value that indicates whether the setting is turned on ("true") or off ("false").</p>
state	string	False	<p>JSON string containing a value indicating the operational state of the application.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "valid" - The current configuration matches the desired config.</li> <li>• "pending" - The desired configuration is being applied.</li> <li>• "error" - The desired configuration cannot be applied.</li> </ul>
stateUnready	array[string]	False	<p>JSON array of JSON strings, each indicating a reason why the setting was not successfully applied.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 127</li> </ul>

Name	Type	Required	Description
metadata	<a href="#">type_astra_metadata_update</a>	False	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>Conforms to the Astra Metadata Schema. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</li> </ul>

### Example request

```
{
  "type": "application/astra-setting",
  "version": "1.0",
  "desiredConfig": {
    "credential": "e3d2ea77-398e-49be-85fd-ec66d9426a06",
    "port": 587,
    "relayServer": "<a href="
http://smtp.sendgrid.net>smtp.sendgrid.net</a>",
    "isEnabled": "true"
  }
}
```

### Response

Status: 204, Indicates if the setting resource was updated.

### Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	

Name	Type	Required	Description
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

## Response

Status: 409, Conflict

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

## Example response

```
{
  "type": "https://astra.netapp.io/problems/10",
  "title": "JSON resource conflict",
  "detail": "The request body JSON contains a field that conflicts with an idempotent value.",
  "status": "409"
}
```

## Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

## Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

## Definitions



## See Definitions

### type\_json

JSON object containing keys and values that make up the current configuration for this setting. The contents of this object must conform to the JSON Schema contained in the configSchema field. Default values are supplied by the configmap. After defaults are changed by the user, they will not be overwritten.

### type\_json

JSON object containing keys and values that make up the requested configuration for this setting. The contents of this object must conform to the JSON schema contained in the configSchema field. The object does not exist until specified. When specified, this triggers the feature service to notify the corresponding service to request that the desired configuration can be applied. The corresponding service can then perform validation and apply the desired configuration to the current configuration.

### properties

### type\_json\_schema

JSON object containing the JSON schema for the config property in this resource. Must conform to JSON Schema Draft 7.

If config values are present in the resource, validation against the indicated configSchema is mandatory. As a common convention, configurations are recommended to have an "isEnabled" field, when appropriate. The "isEnabled" field contains a value that indicates whether the setting is turned on ("true") or off ("false").

Name	Type	Required	Description
\$schema	string	True	
type	string	True	
properties	<a href="#">properties</a>	True	
additionalProperties	boolean	True	
required	array[string]	True	

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource. Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[type_astra_label]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

#### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

#### invalidFields

Name	Type	Required	Description
name	string	True	Name of the invalid request body field
reason	string	True	Reason why the request body field is invalid

## Storage backend

### Storage backend overview

The Storage Backend API provides CRUD (Create-Read-Update-Delete) access to representations of providers of storage services (storage backends) that can be used by managed clusters and applications.

### Create a new storage backend

POST /accounts/{account\_id}/topology/v1/storageBackends

Indicates desired values for the Storage Backend API resource to be created.

#### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"> <li>example: <code>{{.Account}}</code></li> </ul>

### Request Body

Indicates desired values for the Storage Backend API resource to be created.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"> <li>"application/astra-storageBackend"</li> </ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>"1.0"</li> <li>"1.1"</li> <li>"1.2"</li> </ul>
backendName	string	False	JSON string containing a user-specified name for the storage backend. Defined values are: <ul style="list-style-type: none"> <li>Minimum length: 1</li> <li>Maximum length: 63</li> </ul>
backendType	string	True	JSON string containing a value indicating the type of the storage backend being represented. Defined values are: <ul style="list-style-type: none"> <li>"ontap" - The storage backend represents a NetApp ONTAP system</li> <li>enum: ["ontap"]</li> <li>example: ontap</li> </ul>

Name	Type	Required	Description
backendVersion	string	False	<p>JSON string containing a value indicating the version of the storage backend being represented.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>
backendCredentialsName	string	False	<p>JSON string containing a value indicating the name of one or more credential resources used for the storage backend. Allows for credential rotation where multiple credential objects have the same name.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>
metadata	type_astra_metadata_update	False	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</li> </ul>

## Example request

```
{
  "type": "application/astra-storageBackend",
  "version": "1.2",
  "backendName": "st1-45",
  "backendType": "ontap",
  "backendCredentialsName": "st1-45-cred"
}
```

## Response

Status: 201, Returns the newly created storageBackend resource in the JSON response body.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>"application/astra-storageBackend"</li></ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"><li>"1.0"</li><li>"1.1"</li><li>"1.2"</li></ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"><li>Conforms to the UUIDv4 Schema</li></ul>
backendName	string	True	JSON string containing a user-specified name for the storage backend. Defined values are: <ul style="list-style-type: none"><li>Minimum length: 1</li><li>Maximum length: 63</li></ul>

Name	Type	Required	Description
backendType	string	True	<p>JSON string containing a value indicating the type of the storage backend being represented. Defined values are:</p> <ul style="list-style-type: none"> <li>• "ontap" - The storage backend represents a NetApp ONTAP system</li> <li>• enum: ["ontap"]</li> <li>• example: ontap</li> </ul>
backendVersion	string	True	<p>JSON string containing a value indicating the version of the storage backend being represented. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>
backendCredentialsName	string	True	<p>JSON string containing a value indicating the name of one or more credential resources used for the storage backend. Allows for credential rotation where multiple credential objects have the same name. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>
configVersion	string	False	<p>JSON string containing a value indicating the active configuration to be used by the storage backend. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>

Name	Type	Required	Description
state	string	True	<p>JSON string containing a value indicating the operational state of the storage backend. Defined values are:</p> <ul style="list-style-type: none"> <li>• "discovered" - The storage backend has been discovered from a managed cluster</li> <li>• "running" - The storage backend is running normally</li> <li>• "unknown" - The state of the storage backend cannot be determined</li> <li>• "failed" - The storage backend is in an unavailable state</li> </ul>
stateDesired	string	False	<p>JSON string containing a value indicating the desired operational state of the storage backend. Defined values are:</p> <ul style="list-style-type: none"> <li>• "running" - The storage backend will be in a normal running state</li> </ul>
stateUnready	array[string]	True	<p>JSON array of JSON strings, each indicating a reason why a storage backend is unable to transition to "running", why it has transitioned to "failed" or "unknown", and/or why it is at risk of transitioning to "failed". Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 127</li> </ul>

Name	Type	Required	Description
managedState	string	True	<p>JSON string containing a value indicating the management state of the storage backend.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "pending" - The storage backend is scheduled to be discovered or added</li> <li>• "unmanaged" - The storage backend is in a "discovered" state, is not under management, and is eligible for management</li> <li>• "managed" - The storage backend is in a "running" or "unknown" state and is under management</li> </ul>
managedStateUnready	array[string]	True	<p>JSON array of JSON strings, each indicating a reason why the storage backend is ineligible to be managed.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 127</li> </ul>



Name	Type	Required	Description
healthState	string	False	<p>JSON string containing a value indicating the health state of the storage backend.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "indeterminate" - The health of the resource cannot be determined (for example, due to lack of connectivity)</li> <li>• "normal" - The resource has no known issues and can provide services in accordance with the interface specification</li> <li>• "warning" - The resource has known issues that do not prevent it providing services in accordance with the interface specification</li> <li>• "critical" - The resource has known issues that prevent it from providing services in accordance with the interface specification</li> </ul>
healthStateUnready	array[string]	False	<p>JSON array of JSON strings, each indicating a reason why a storage backend is not in a normal health state.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 127</li> </ul>

Name	Type	Required	Description
protectionState	string	True	<p>JSON string containing a value indicating the protection state of the storage backend.  "unknown" for ONTAP.  Defined values are:</p> <ul style="list-style-type: none"> <li>• "protected" - The storage backend has a protection policy defined and is in conformance with that policy</li> <li>• "partial" - The storage backend has a protection policy defined but is out of conformance with that policy</li> <li>• "none" - The storage backend is not protected</li> <li>• "unknown" - The storage backend protection policy conformance cannot be determined</li> <li>• enum: ["protected", "partial", "none", "unknown"]</li> <li>• example: protected</li> </ul>
protectionStateUnready	array[string]	True	<p>JSON array of JSON strings, each indicating a reason why a protection policy is out of conformance.  Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 127</li> </ul>

Name	Type	Required	Description
ontap	ontap	False	<p>JSON object containing specific information related to ONTAP clusters.</p> <ul style="list-style-type: none"> <li>• additionalProperties: false</li> </ul>
metadata	type_astra_metadata_update	True	<p>Client and service-specified metadata associated with the resource. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</li> </ul>

## Example response

```
{
  "type": "application/astra-storageBackend",
  "version": "1.2",
  "id": "ad238443-2bc7-54f5-bd7f-5d1668377cd7",
  "backendName": "st1-45",
  "backendType": "ontap",
  "backendVersion": "9.8",
  "backendCredentialsName": "st1-45-cred",
  "state": "running",
  "stateUnready": [],
  "managedState": "managed",
  "managedStateUnready": [],
  "protectionState": "unknown",
  "protectionStateUnready": [
    "Waiting for storage backend discovery"
  ],
  "ontap": {
    "backendManagementIP": "10.193.179.105",
    "managementIPs": [
      "10.193.188.110",
      "10.193.179.105",
      "10.193.179.106"
    ]
  },
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	

Name	Type	Required	Description
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 409, Conflict

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

### Example response

```
{
  "type": "https://astra.netapp.io/problems/10",
  "title": "JSON resource conflict",
  "detail": "The request body JSON contains a field that conflicts with an idempotent value.",
  "status": "409"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

## Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

## Definitions

## See Definitions

type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[type_astra_label]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

ontap

JSON object containing specific information related to ONTAP clusters.

Name	Type	Required	Description
backendManagementIP	string	False	JSON string containing the IP address used to connect to this ONTAP cluster.



Name	Type	Required	Description
managementIPs	array[string]	False	JSON array of JSON strings containing the list of all possible management IPs used to connect to this ONTAP cluster. This is used to correlate backends detected through Trident and storage backends in Astra.  <ul style="list-style-type: none"> <li>• uniqueItems: 1</li> </ul>

#### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

#### invalidFields

Name	Type	Required	Description
name	string	True	Name of the invalid request body field
reason	string	True	Reason why the request body field is invalid

## List all storage backends

GET /accounts/{account\_id}/topology/v1/storageBackends

Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"> <li>example: <code>{{.Account}}</code></li> </ul>
include	string	query	False	Indicates which fields should be returned when listing a collection. <p>URL examples: "include=id", "include=id,name"</p> <p>OpenAPI examples: "id"</p> <ul style="list-style-type: none"> <li>example: <code>id,name,state</code></li> </ul>
limit	string	query	False	Indicates the maximum number of resources to return when listing a collection. <p>URL examples: "limit=2"</p> <p>OpenAPI examples: "2"</p>

## Response

Status: 200, Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

Name	Type	Required	Description
items	array[ <a href="#">Any of: storageBackend_1.2_get_response_body, array[]</a> ]	True	
metadata	<a href="#">type_astra_metadata_list</a>	True	

## Example response

```
{
  "type": "application/astra-storageBackends",
  "version": "1.2",
  "items": [
    [
      "d6ee1e51-d65f-415a-a3d4-6d7fa8b64943",
      "st1-45",
      "running"
    ],
    [
      "a5c508b7-aacd-4d19-9455-53c0d183ab4e",
      "st2-67",
      "discovered"
    ]
  ],
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	

Name	Type	Required	Description
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't found.",
  "status": "404"
}
```

**Definitions**

## See Definitions

ontap

JSON object containing specific information related to ONTAP clusters.

Name	Type	Required	Description
backendManagementIP	string	False	JSON string containing the IP address used to connect to this ONTAP cluster.
managementIPs	array[string]	False	JSON array of JSON strings containing the list of all possible management IPs used to connect to this ONTAP cluster. This is used to correlate backends detected through Trident and storage backends in Astra. <ul style="list-style-type: none"><li>• uniqueItems: 1</li></ul>

type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[ <a href="#">type_astra_label</a> ]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	

Name	Type	Required	Description
modifiedBy	string	False	

#### storageBackend\_1.2\_get\_response\_body

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"> <li>"application/astra-storageBackend"</li> </ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>"1.0"</li> <li>"1.1"</li> <li>"1.2"</li> </ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>Conforms to the UUIDv4 Schema</li> </ul>
backendName	string	True	JSON string containing a user-specified name for the storage backend. Defined values are: <ul style="list-style-type: none"> <li>Minimum length: 1</li> <li>Maximum length: 63</li> </ul>
backendType	string	True	JSON string containing a value indicating the type of the storage backend being represented. Defined values are: <ul style="list-style-type: none"> <li>"ontap" - The storage backend represents a NetApp ONTAP system</li> <li>enum: ["ontap"]</li> <li>example: ontap</li> </ul>



Name	Type	Required	Description
backendVersion	string	True	<p>JSON string containing a value indicating the version of the storage backend being represented.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>
backendCredentialsName	string	True	<p>JSON string containing a value indicating the name of one or more credential resources used for the storage backend. Allows for credential rotation where multiple credential objects have the same name.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>
configVersion	string	False	<p>JSON string containing a value indicating the active configuration to be used by the storage backend.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>

Name	Type	Required	Description
state	string	True	<p>JSON string containing a value indicating the operational state of the storage backend. Defined values are:</p> <ul style="list-style-type: none"> <li>• "discovered" - The storage backend has been discovered from a managed cluster</li> <li>• "running" - The storage backend is running normally</li> <li>• "unknown" - The state of the storage backend cannot be determined</li> <li>• "failed" - The storage backend is in an unavailable state</li> </ul>
stateDesired	string	False	<p>JSON string containing a value indicating the desired operational state of the storage backend. Defined values are:</p> <ul style="list-style-type: none"> <li>• "running" - The storage backend will be in a normal running state</li> </ul>
stateUnready	array[string]	True	<p>JSON array of JSON strings, each indicating a reason why a storage backend is unable to transition to "running", why it has transitioned to "failed" or "unknown", and/or why it is at risk of transitioning to "failed". Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 127</li> </ul>

Name	Type	Required	Description
managedState	string	True	<p>JSON string containing a value indicating the management state of the storage backend. Defined values are:</p> <ul style="list-style-type: none"> <li>• "pending" - The storage backend is scheduled to be discovered or added</li> <li>• "unmanaged" - The storage backend is in a "discovered" state, is not under management, and is eligible for management</li> <li>• "managed" - The storage backend is in a "running" or "unknown" state and is under management</li> </ul>
managedStateUnready	array[string]	True	<p>JSON array of JSON strings, each indicating a reason why the storage backend is ineligible to be managed. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 127</li> </ul>

Name	Type	Required	Description
healthState	string	False	<p>JSON string containing a value indicating the health state of the storage backend. Defined values are:</p> <ul style="list-style-type: none"> <li>• "indeterminate" - The health of the resource cannot be determined (for example, due to lack of connectivity)</li> <li>• "normal" - The resource has no known issues and can provide services in accordance with the interface specification</li> <li>• "warning" - The resource has known issues that do not prevent it providing services in accordance with the interface specification</li> <li>• "critical" - The resource has known issues that prevent it from providing services in accordance with the interface specification</li> </ul>
healthStateUnready	array[string]	False	<p>JSON array of JSON strings, each indicating a reason why a storage backend is not in a normal health state. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 127</li> </ul>

Name	Type	Required	Description
protectionState	string	True	<p>JSON string containing a value indicating the protection state of the storage backend.  "unknown" for ONTAP.  Defined values are:</p> <ul style="list-style-type: none"> <li>• "protected" - The storage backend has a protection policy defined and is in conformance with that policy</li> <li>• "partial" - The storage backend has a protection policy defined but is out of conformance with that policy</li> <li>• "none" - The storage backend is not protected</li> <li>• "unknown" - The storage backend protection policy conformance cannot be determined</li> <li>• enum: ["protected", "partial", "none", "unknown"]</li> <li>• example: protected</li> </ul>
protectionStateUnready	array[string]	True	<p>JSON array of JSON strings, each indicating a reason why a protection policy is out of conformance.  Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 127</li> </ul>

Name	Type	Required	Description
ontap	ontap	False	JSON object containing specific information related to ONTAP clusters.  <ul style="list-style-type: none"> <li>additionalProperties: false</li> </ul>
metadata	type_astra_metadata_update	True	Client and service-specified metadata associated with the resource. Defined values are:  <ul style="list-style-type: none"> <li>Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</li> </ul>

#### type\_astra\_metadata\_list

Name	Type	Required	Description
continue	string	False	
count	number	False	
labels	array[type_astra_label]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

#### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Retrieve a storage backend

GET /accounts/{account\_id}/topology/v1/storageBackends/{storageBackend\_id}

Returns the stored Storage Backend API resource in the JSON response body.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"> <li>example: <code>{{.Account}}</code></li> </ul>
storageBackend_id	string	path	True	ID of the storageBackend collection to list

### Response

Status: 200, Returns the stored Storage Backend API resource in the JSON response body.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"> <li>"application/astra-storageBackend"</li> </ul>

Name	Type	Required	Description
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "1.0"</li> <li>• "1.1"</li> <li>• "1.2"</li> </ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the UUIDv4 Schema</li> </ul>
backendName	string	True	JSON string containing a user-specified name for the storage backend. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>
backendType	string	True	JSON string containing a value indicating the type of the storage backend being represented. Defined values are: <ul style="list-style-type: none"> <li>• "ontap" - The storage backend represents a NetApp ONTAP system</li> <li>• enum: ["ontap"]</li> <li>• example: ontap</li> </ul>
backendVersion	string	True	JSON string containing a value indicating the version of the storage backend being represented. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>



Name	Type	Required	Description
backendCredentialsName	string	True	<p>JSON string containing a value indicating the name of one or more credential resources used for the storage backend. Allows for credential rotation where multiple credential objects have the same name.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>
configVersion	string	False	<p>JSON string containing a value indicating the active configuration to be used by the storage backend.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>
state	string	True	<p>JSON string containing a value indicating the operational state of the storage backend.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "discovered" - The storage backend has been discovered from a managed cluster</li> <li>• "running" - The storage backend is running normally</li> <li>• "unknown" - The state of the storage backend cannot be determined</li> <li>• "failed" - The storage backend is in an unavailable state</li> </ul>

Name	Type	Required	Description
stateDesired	string	False	<p>JSON string containing a value indicating the desired operational state of the storage backend. Defined values are:</p> <ul style="list-style-type: none"> <li>• "running" - The storage backend will be in a normal running state</li> </ul>
stateUnready	array[string]	True	<p>JSON array of JSON strings, each indicating a reason why a storage backend is unable to transition to "running", why it has transitioned to "failed" or "unknown", and/or why it is at risk of transitioning to "failed". Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 127</li> </ul>
managedState	string	True	<p>JSON string containing a value indicating the management state of the storage backend. Defined values are:</p> <ul style="list-style-type: none"> <li>• "pending" - The storage backend is scheduled to be discovered or added</li> <li>• "unmanaged" - The storage backend is in a "discovered" state, is not under management, and is eligible for management</li> <li>• "managed" - The storage backend is in a "running" or "unknown" state and is under management</li> </ul>

Name	Type	Required	Description
managedStateUnready	array[string]	True	<p>JSON array of JSON strings, each indicating a reason why the storage backend is ineligible to be managed.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 127</li> </ul>
healthState	string	False	<p>JSON string containing a value indicating the health state of the storage backend.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "indeterminate" - The health of the resource cannot be determined (for example, due to lack of connectivity)</li> <li>• "normal" - The resource has no known issues and can provide services in accordance with the interface specification</li> <li>• "warning" - The resource has known issues that do not prevent it providing services in accordance with the interface specification</li> <li>• "critical" - The resource has known issues that prevent it from providing services in accordance with the interface specification</li> </ul>

Name	Type	Required	Description
healthStateUnready	array[string]	False	<p>JSON array of JSON strings, each indicating a reason why a storage backend is not in a normal health state.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 127</li> </ul>
protectionState	string	True	<p>JSON string containing a value indicating the protection state of the storage backend.</p> <p>"unknown" for ONTAP.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "protected" - The storage backend has a protection policy defined and is in conformance with that policy</li> <li>• "partial" - The storage backend has a protection policy defined but is out of conformance with that policy</li> <li>• "none" - The storage backend is not protected</li> <li>• "unknown" - The storage backend protection policy conformance cannot be determined</li> <li>• enum: ["protected", "partial", "none", "unknown"]</li> <li>• example: protected</li> </ul>

Name	Type	Required	Description
protectionStateUnready	array[string]	True	<p>JSON array of JSON strings, each indicating a reason why a protection policy is out of conformance. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 127</li> </ul>
ontap	ontap	False	<p>JSON object containing specific information related to ONTAP clusters.</p> <ul style="list-style-type: none"> <li>• additionalProperties: false</li> </ul>
metadata	type_astra_metadata_update	True	<p>Client and service-specified metadata associated with the resource. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</li> </ul>

## Example response

```
{
  "type": "application/astra-storageBackend",
  "version": "1.2",
  "id": "ad238443-2bc7-54f5-bd7f-5d1668377cd7",
  "backendName": "st1-45",
  "backendType": "ontap",
  "backendVersion": "9.8",
  "backendCredentialsName": "st1-45-cred",
  "state": "discovered",
  "stateUnready": [],
  "managedState": "unmanaged",
  "managedStateUnready": [],
  "protectionState": "unknown",
  "protectionStateUnready": [
    "Waiting for storage backend discovery"
  ],
  "ontap": {
    "backendManagementIP": "10.193.179.105",
    "managementIPs": [
      "10.193.188.110",
      "10.193.179.105",
      "10.193.179.106"
    ]
  },
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	

Name	Type	Required	Description
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	



## Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

## Definitions

## See Definitions

ontap

JSON object containing specific information related to ONTAP clusters.

Name	Type	Required	Description
backendManagementIP	string	False	JSON string containing the IP address used to connect to this ONTAP cluster.
managementIPs	array[string]	False	JSON array of JSON strings containing the list of all possible management IPs used to connect to this ONTAP cluster. This is used to correlate backends detected through Trident and storage backends in Astra. <ul style="list-style-type: none"><li>• uniqueItems: 1</li></ul>

type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[ <a href="#">type_astra_label</a> ]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	

Name	Type	Required	Description
modifiedBy	string	False	

invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Modify a storage backend

PUT /accounts/{account\_id}/topology/v1/storageBackends/{storageBackend\_id}

Replaces the entire stored resource with the supplied JSON request body while preserving key values that are not user-modifiable.

### Side Effects

- Specifying a configuration version results in storage backend type-specific configuration changes being applied, which can include the initial installation of a storage backend.
- Specifying a configuration version might result in storageClass resources being added, modified, or removed.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"> <li>• example: <code>{{.Account}}</code></li> </ul>
storageBackend_id	string	path	True	ID of the storageBackend collection to list

### Request Body

Replaces the entire stored resource with the supplied JSON request body while preserving key values that are not user-modifiable.

### Side Effects

- Specifying a configuration version results in storage backend type-specific configuration changes being

applied, which can include the initial installation of a storage backend.

- Specifying a configuration version might result in storageClass resources being added, modified, or removed.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "application/astra-storageBackend"</li> </ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "1.0"</li> <li>• "1.1"</li> <li>• "1.2"</li> </ul>
id	string	False	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the UUIDv4 Schema</li> </ul>
backendName	string	False	JSON string containing a user-specified name for the storage backend. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>
backendType	string	False	JSON string containing a value indicating the type of the storage backend being represented. Defined values are: <ul style="list-style-type: none"> <li>• "ontap" - The storage backend represents a NetApp ONTAP system</li> <li>• enum: ["ontap"]</li> <li>• example: ontap</li> </ul>

Name	Type	Required	Description
backendVersion	string	False	<p>JSON string containing a value indicating the version of the storage backend being represented.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>
backendCredentialsName	string	False	<p>JSON string containing a value indicating the name of one or more credential resources used for the storage backend. Allows for credential rotation where multiple credential objects have the same name.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>
configVersion	string	False	<p>JSON string containing a value indicating the active configuration to be used by the storage backend.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>

Name	Type	Required	Description
state	string	False	<p>JSON string containing a value indicating the operational state of the storage backend. Defined values are:</p> <ul style="list-style-type: none"> <li>• "discovered" - The storage backend has been discovered from a managed cluster</li> <li>• "running" - The storage backend is running normally</li> <li>• "unknown" - The state of the storage backend cannot be determined</li> <li>• "failed" - The storage backend is in an unavailable state</li> </ul>
stateDesired	string	False	<p>JSON string containing a value indicating the desired operational state of the storage backend. Defined values are:</p> <ul style="list-style-type: none"> <li>• "running" - The storage backend will be in a normal running state</li> </ul>
stateUnready	array[string]	False	<p>JSON array of JSON strings, each indicating a reason why a storage backend is unable to transition to "running", why it has transitioned to "failed" or "unknown", and/or why it is at risk of transitioning to "failed". Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 127</li> </ul>

Name	Type	Required	Description
managedState	string	False	<p>JSON string containing a value indicating the management state of the storage backend.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "pending" - The storage backend is scheduled to be discovered or added</li> <li>• "unmanaged" - The storage backend is in a "discovered" state, is not under management, and is eligible for management</li> <li>• "managed" - The storage backend is in a "running" or "unknown" state and is under management</li> </ul>
managedStateUnready	array[string]	False	<p>JSON array of JSON strings, each indicating a reason why the storage backend is ineligible to be managed.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 127</li> </ul>

Name	Type	Required	Description
healthState	string	False	<p>JSON string containing a value indicating the health state of the storage backend.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "indeterminate" - The health of the resource cannot be determined (for example, due to lack of connectivity)</li> <li>• "normal" - The resource has no known issues and can provide services in accordance with the interface specification</li> <li>• "warning" - The resource has known issues that do not prevent it providing services in accordance with the interface specification</li> <li>• "critical" - The resource has known issues that prevent it from providing services in accordance with the interface specification</li> </ul>
healthStateUnready	array[string]	False	<p>JSON array of JSON strings, each indicating a reason why a storage backend is not in a normal health state.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 127</li> </ul>



Name	Type	Required	Description
protectionState	string	False	<p>JSON string containing a value indicating the protection state of the storage backend.  "unknown" for ONTAP.  Defined values are:</p> <ul style="list-style-type: none"> <li>• "protected" - The storage backend has a protection policy defined and is in conformance with that policy</li> <li>• "partial" - The storage backend has a protection policy defined but is out of conformance with that policy</li> <li>• "none" - The storage backend is not protected</li> <li>• "unknown" - The storage backend protection policy conformance cannot be determined</li> <li>• enum: ["protected", "partial", "none", "unknown"]</li> <li>• example: protected</li> </ul>
protectionStateUnready	array[string]	False	<p>JSON array of JSON strings, each indicating a reason why a protection policy is out of conformance.  Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 127</li> </ul>

Name	Type	Required	Description
ontap	ontap	False	<p>JSON object containing specific information related to ONTAP clusters.</p> <ul style="list-style-type: none"> <li>additionalProperties: false</li> </ul>
metadata	type_astra_metadata_update	False	<p>Client and service-specified metadata associated with the resource. Defined values are:</p> <ul style="list-style-type: none"> <li>Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</li> </ul>

### Example request

```
{
  "type": "application/astra-storageBackend",
  "version": "1.2",
  "backendName": "st1-46"
}
```

### Response

Status: 204, Indicates if the storageBackend resource was updated.

### Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 409, Conflict

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

### Example response

```
{
  "type": "https://astra.netapp.io/problems/10",
  "title": "JSON resource conflict",
  "detail": "The request body JSON contains a field that conflicts with an idempotent value.",
  "status": "409"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/1",
  "title": "Resource not found",
  "detail": "The resource specified in the request URI wasn't found.",
  "status": "404"
}
```

**Definitions**

## See Definitions

ontap

JSON object containing specific information related to ONTAP clusters.

Name	Type	Required	Description
backendManagementIP	string	False	JSON string containing the IP address used to connect to this ONTAP cluster.
managementIPs	array[string]	False	JSON array of JSON strings containing the list of all possible management IPs used to connect to this ONTAP cluster. This is used to correlate backends detected through Trident and storage backends in Astra. <ul style="list-style-type: none"><li>• uniqueItems: 1</li></ul>

type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[ <a href="#">type_astra_label</a> ]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	

Name	Type	Required	Description
modifiedBy	string	False	

#### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

#### invalidFields

Name	Type	Required	Description
name	string	True	Name of the invalid request body field
reason	string	True	Reason why the request body field is invalid

## Delete a storage backend

DELETE /accounts/{account\_id}/topology/v1/storageBackends/{storageBackend\_id}

Removes the specified Storage Backend API resource.

### Side Effects

- All backendConfig resources associated with the storage backend are removed.
- All backendNode resources associated with the storage backend are removed.
- The storage backend might be removed.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"> <li>• example: <code>{{.Account}}</code></li> </ul>



Name	Type	In	Required	Description
storageBackend_id	string	path	True	ID of the storageBackend collection to list

## Response

Status: 204, Indicates if the storageBackend resource was deleted.

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

## Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	

Name	Type	Required	Description
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/1",
  "title": "Resource not found",
  "detail": "The resource specified in the request URI wasn't found.",
  "status": "404"
}
```

### Definitions

#### See Definitions

invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Storage class

### Storage class overview

The Storage Class API provides CRUD (Create-Read-Update-Delete) access to storageClass resources in order to describe storage classes known to a given cluster.

## List the storage classes for a cloud

GET

/accounts/{account\_id}/topology/v1/clouds/{cloud\_id}/clusters/{cluster\_id}/storageClasses

Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"><li>example: {{.Account}}</li></ul>
cloud_id	string	path	True	ID of the containing cloud resource
cluster_id	string	path	True	ID of the containing cluster resource
include	string	query	False	Indicates which fields should be returned when listing a collection.  URL examples: "include=id", "include=id,name"  OpenAPI examples: "id" <ul style="list-style-type: none"><li>example: id,name</li></ul>
limit	string	query	False	Indicates the maximum number of resources to return when listing a collection.  URL examples: "limit=2"  OpenAPI examples: "2"

## Response

Status: 200, Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

Name	Type	Required	Description
items	array[Any of: <a href="#">storageClass_1.1_get_response_body</a> , array[]]	True	
metadata	<a href="#">type_astra_metadata_list</a>	True	

## Example response

```
{
  "type": "application/astra-storageClasses",
  "version": "1.1",
  "items": [
    [
      "e280ff62-be35-4f31-a31b-a210a1ad1b33",
      "my-storage-class"
    ],
    [
      "e8507dad-d33f-44b3-9c15-ec55ba6f6473",
      "standard"
    ]
  ],
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	

Name	Type	Required	Description
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

### Definitions



## See Definitions

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### type\_astra\_metadata

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema

Name	Type	Required	Description
labels	array[type_astra_label]	True	
creationTimestamp	string	True	
modificationTimestamp	string	True	
createdBy	string	True	
modifiedBy	string	False	

### storageClass\_1.1\_get\_response\_body

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>• "application/astra-storageClass"</li></ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"><li>• "1.0"</li><li>• "1.1"</li></ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"><li>• Conforms to the UUIDv4 Schema</li></ul>

Name	Type	Required	Description
name	string	True	<p>JSON string containing a value indicating the name of the storage class.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>
provisioner	string	True	<p>JSON string containing a value indicating the provisioner associated with the storage class.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>
available	string	True	<p>JSON string indicating whether the storage class is available for the cluster or is eligible to be added to the cluster when under management.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "available" - The storage class is available for use</li> <li>• "eligible" - The storage class is eligible to be used by the cluster when it is under management</li> <li>• "ineligible" - The storage class is ineligible to be used by the cluster when it is under management</li> </ul>

Name	Type	Required	Description
allowVolumeExpansion	string	True	<p>JSON string indicating whether the storage class allows volume expansion.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - The storage class allows volume expansion</li> <li>• "false" - The storage class does not allow volume expansion</li> <li>• "unavailable" - It is unknown whether the storage class allows volume expansion</li> </ul>
reclaimPolicy	string	True	<p>JSON string containing a cloud-specific value indicating the retention policy of the storage class.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>
volumeBindingMode	string	True	<p>JSON string containing a cloud-specific value indicating the binding mode for the storage class.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>
isDefault	string	False	<p>JSON string indicating whether the storage class contains the default annotation.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - The storage class contains the default annotation</li> </ul>

Name	Type	Required	Description
maxSnapshotCount	number	False	JSON number indicating how many snapshots are supported. This information is attached to storage classes provided by NetApp.
maxBackupCount	number	False	JSON number indicating how many backups are supported. This information is attached to storage classes provided by NetApp.
price	string	False	JSON string indicating the currency units per unit of time for the storage class. This information is attached to storage classes provided by NetApp. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>
currency	string	False	JSON string indicating the ISO 4217 three-letter code for the currency that the price is measured in. This information is attached to storage classes provided by NetApp. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>

Name	Type	Required	Description
performance	number	False	JSON number indicating the performance service-level objective (SLO) in MBps. This information is attached to storage classes provided by NetApp.
resilience	string	False	JSON string indicating the resilience configuration for the storage. This information is attached to storage classes provided by NetApp. Defined values are: <ul style="list-style-type: none"> <li>"regional" - The volume will become unavailable if a given region becomes unavailable</li> <li>"multisite" - The volume will continue to be available if a given region becomes unavailable</li> </ul>
metadata	<a href="#">type_astra_metadata</a>	True	Client and service-specified metadata associated with the resource. Defined values are: <ul style="list-style-type: none"> <li>Conforms to the Astra Metadata Schema</li> </ul>

#### type\_astra\_metadata\_list

Name	Type	Required	Description
continue	string	False	
count	number	False	
labels	array[ <a href="#">type_astra_label</a> ]	False	
creationTimestamp	string	False	

Name	Type	Required	Description
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Retrieve a storage class for a cloud

GET

/accounts/{account\_id}/topology/v1/clouds/{cloud\_id}/clusters/{cluster\_id}/storageClasses/{storageClass\_id}

Returns the stored Storage Class API resource in the JSON response body.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource  • example: {{.Account}}
cloud_id	string	path	True	ID of the containing cloud resource
cluster_id	string	path	True	ID of the containing cluster resource
storageClass_id	string	path	True	ID of the storageClass collection to list

### Response

Status: 200, Returns the stored Storage Class API resource in the JSON response body.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>• "application/astra-storageClass"</li></ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"><li>• "1.0"</li><li>• "1.1"</li></ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"><li>• Conforms to the UUIDv4 Schema</li></ul>
name	string	True	JSON string containing a value indicating the name of the storage class. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 1</li><li>• Maximum length: 255</li></ul>
provisioner	string	True	JSON string containing a value indicating the provisioner associated with the storage class. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 1</li><li>• Maximum length: 255</li></ul>

Name	Type	Required	Description
available	string	True	<p>JSON string indicating whether the storage class is available for the cluster or is eligible to be added to the cluster when under management.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "available" - The storage class is available for use</li> <li>• "eligible" - The storage class is eligible to be used by the cluster when it is under management</li> <li>• "ineligible" - The storage class is ineligible to be used by the cluster when it is under management</li> </ul>
allowVolumeExpansion	string	True	<p>JSON string indicating whether the storage class allows volume expansion.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - The storage class allows volume expansion</li> <li>• "false" - The storage class does not allow volume expansion</li> <li>• "unavailable" - It is unknown whether the storage class allows volume expansion</li> </ul>
reclaimPolicy	string	True	<p>JSON string containing a cloud-specific value indicating the retention policy of the storage class.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>



Name	Type	Required	Description
volumeBindingMode	string	True	<p>JSON string containing a cloud-specific value indicating the binding mode for the storage class.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>
isDefault	string	False	<p>JSON string indicating whether the storage class contains the default annotation.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - The storage class contains the default annotation</li> </ul>
maxSnapshotCount	number	False	<p>JSON number indicating how many snapshots are supported.</p> <p>This information is attached to storage classes provided by NetApp.</p>
maxBackupCount	number	False	<p>JSON number indicating how many backups are supported.</p> <p>This information is attached to storage classes provided by NetApp.</p>
price	string	False	<p>JSON string indicating the currency units per unit of time for the storage class.</p> <p>This information is attached to storage classes provided by NetApp.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>

Name	Type	Required	Description
currency	string	False	<p>JSON string indicating the ISO 4217 three-letter code for the currency that the price is measured in. This information is attached to storage classes provided by NetApp.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>
performance	number	False	<p>JSON number indicating the performance service-level objective (SLO) in MBps. This information is attached to storage classes provided by NetApp.</p>
resilience	string	False	<p>JSON string indicating the resilience configuration for the storage. This information is attached to storage classes provided by NetApp.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "regional" - The volume will become unavailable if a given region becomes unavailable</li> <li>• "multisite" - The volume will continue to be available if a given region becomes unavailable</li> </ul>

Name	Type	Required	Description
metadata	<a href="#">type_astra_metadata</a>	True	Client and service-specified metadata associated with the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema</li> </ul>

### Example response

```
{
  "type": "application/astra-storageClass",
  "version": "1.1",
  "id": "ad9be22b-53c7-540c-8647-76afe2878952",
  "name": "my-storage-class",
  "provisioner": "csi.trident.netapp.io",
  "available": "eligible",
  "allowVolumeExpansion": "true",
  "reclaimPolicy": "recycle",
  "volumeBindingMode": "immediate",
  "isDefault": "true",
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

### Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	

Name	Type	Required	Description
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't found.",
  "status": "404"
}
```

## Definitions

### See Definitions

type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

type\_astra\_metadata

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema

Name	Type	Required	Description
labels	array[type_astra_label]	True	
creationTimestamp	string	True	
modificationTimestamp	string	True	
createdBy	string	True	
modifiedBy	string	False	

invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## List the storage classes for a cluster

GET /accounts/{account\_id}/topology/v1/clusters/{cluster\_id}/storageClasses

Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource  • example: {{.Account}}
cluster_id	string	path	True	ID of the containing cluster resource
include	string	query	False	Indicates which fields should be returned when listing a collection.  URL examples: "include=id", "include=id,name"  OpenAPI examples: "id"  • example: id,name
limit	string	query	False	Indicates the maximum number of resources to return when listing a collection.  URL examples: "limit=2"  OpenAPI examples: "2"

## Response

Status: 200, Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

Name	Type	Required	Description
items	array[Any of: <a href="#">storageClass_1.1_get_response_body</a> , array[]]	True	

Name	Type	Required	Description
metadata	<a href="#">type_astra_metadata_list</a>	True	

### Example response

```
{
  "type": "application/astra-storageClasses",
  "version": "1.1",
  "items": [
    [
      "e280ff62-be35-4f31-a31b-a210a1ad1b33",
      "my-storage-class"
    ],
    [
      "e8507dad-d33f-44b3-9c15-ec55ba6f6473",
      "standard"
    ]
  ],
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

### Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	



### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	

Name	Type	Required	Description
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't found.",
  "status": "404"
}
```

**Definitions**

## See Definitions

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### type\_astra\_metadata

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema

Name	Type	Required	Description
labels	array[type_astra_label]	True	
creationTimestamp	string	True	
modificationTimestamp	string	True	
createdBy	string	True	
modifiedBy	string	False	

### storageClass\_1.1\_get\_response\_body

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>• "application/astra-storageClass"</li></ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"><li>• "1.0"</li><li>• "1.1"</li></ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"><li>• Conforms to the UUIDv4 Schema</li></ul>

Name	Type	Required	Description
name	string	True	<p>JSON string containing a value indicating the name of the storage class.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>
provisioner	string	True	<p>JSON string containing a value indicating the provisioner associated with the storage class.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>
available	string	True	<p>JSON string indicating whether the storage class is available for the cluster or is eligible to be added to the cluster when under management.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "available" - The storage class is available for use</li> <li>• "eligible" - The storage class is eligible to be used by the cluster when it is under management</li> <li>• "ineligible" - The storage class is ineligible to be used by the cluster when it is under management</li> </ul>

Name	Type	Required	Description
allowVolumeExpansion	string	True	<p>JSON string indicating whether the storage class allows volume expansion.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - The storage class allows volume expansion</li> <li>• "false" - The storage class does not allow volume expansion</li> <li>• "unavailable" - It is unknown whether the storage class allows volume expansion</li> </ul>
reclaimPolicy	string	True	<p>JSON string containing a cloud-specific value indicating the retention policy of the storage class.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>
volumeBindingMode	string	True	<p>JSON string containing a cloud-specific value indicating the binding mode for the storage class.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>
isDefault	string	False	<p>JSON string indicating whether the storage class contains the default annotation.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - The storage class contains the default annotation</li> </ul>

Name	Type	Required	Description
maxSnapshotCount	number	False	JSON number indicating how many snapshots are supported. This information is attached to storage classes provided by NetApp.
maxBackupCount	number	False	JSON number indicating how many backups are supported. This information is attached to storage classes provided by NetApp.
price	string	False	JSON string indicating the currency units per unit of time for the storage class. This information is attached to storage classes provided by NetApp. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>
currency	string	False	JSON string indicating the ISO 4217 three-letter code for the currency that the price is measured in. This information is attached to storage classes provided by NetApp. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>

Name	Type	Required	Description
performance	number	False	JSON number indicating the performance service-level objective (SLO) in MBps. This information is attached to storage classes provided by NetApp.
resilience	string	False	JSON string indicating the resilience configuration for the storage. This information is attached to storage classes provided by NetApp. Defined values are: <ul style="list-style-type: none"> <li>"regional" - The volume will become unavailable if a given region becomes unavailable</li> <li>"multisite" - The volume will continue to be available if a given region becomes unavailable</li> </ul>
metadata	<a href="#">type_astra_metadata</a>	True	Client and service-specified metadata associated with the resource. Defined values are: <ul style="list-style-type: none"> <li>Conforms to the Astra Metadata Schema</li> </ul>

#### type\_astra\_metadata\_list

Name	Type	Required	Description
continue	string	False	
count	number	False	
labels	array[ <a href="#">type_astra_label</a> ]	False	
creationTimestamp	string	False	



Name	Type	Required	Description
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Retrieve a storage class for a cluster

GET

/accounts/{account\_id}/topology/v1/clusters/{cluster\_id}/storageClasses/{storageClass\_id}

Returns the stored Storage Class API resource in the JSON response body.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource  • example: {{.Account}}
cluster_id	string	path	True	ID of the containing cluster resource
storageClass_id	string	path	True	ID of the storageClass collection to list

### Response

Status: 200, Returns the stored Storage Class API resource in the JSON response body.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "application/astra-storageClass"</li> </ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "1.0"</li> <li>• "1.1"</li> </ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the UUIDv4 Schema</li> </ul>
name	string	True	JSON string containing a value indicating the name of the storage class. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>
provisioner	string	True	JSON string containing a value indicating the provisioner associated with the storage class. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>

Name	Type	Required	Description
available	string	True	<p>JSON string indicating whether the storage class is available for the cluster or is eligible to be added to the cluster when under management.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "available" - The storage class is available for use</li> <li>• "eligible" - The storage class is eligible to be used by the cluster when it is under management</li> <li>• "ineligible" - The storage class is ineligible to be used by the cluster when it is under management</li> </ul>
allowVolumeExpansion	string	True	<p>JSON string indicating whether the storage class allows volume expansion.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - The storage class allows volume expansion</li> <li>• "false" - The storage class does not allow volume expansion</li> <li>• "unavailable" - It is unknown whether the storage class allows volume expansion</li> </ul>
reclaimPolicy	string	True	<p>JSON string containing a cloud-specific value indicating the retention policy of the storage class.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>

Name	Type	Required	Description
volumeBindingMode	string	True	<p>JSON string containing a cloud-specific value indicating the binding mode for the storage class.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>
isDefault	string	False	<p>JSON string indicating whether the storage class contains the default annotation.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - The storage class contains the default annotation</li> </ul>
maxSnapshotCount	number	False	<p>JSON number indicating how many snapshots are supported.</p> <p>This information is attached to storage classes provided by NetApp.</p>
maxBackupCount	number	False	<p>JSON number indicating how many backups are supported.</p> <p>This information is attached to storage classes provided by NetApp.</p>
price	string	False	<p>JSON string indicating the currency units per unit of time for the storage class.</p> <p>This information is attached to storage classes provided by NetApp.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>

Name	Type	Required	Description
currency	string	False	<p>JSON string indicating the ISO 4217 three-letter code for the currency that the price is measured in. This information is attached to storage classes provided by NetApp.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>
performance	number	False	<p>JSON number indicating the performance service-level objective (SLO) in MBps. This information is attached to storage classes provided by NetApp.</p>
resilience	string	False	<p>JSON string indicating the resilience configuration for the storage. This information is attached to storage classes provided by NetApp.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "regional" - The volume will become unavailable if a given region becomes unavailable</li> <li>• "multisite" - The volume will continue to be available if a given region becomes unavailable</li> </ul>

Name	Type	Required	Description
metadata	<a href="#">type_astra_metadata</a>	True	Client and service-specified metadata associated with the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema</li> </ul>

### Example response

```
{
  "type": "application/astra-storageClass",
  "version": "1.1",
  "id": "ad9be22b-53c7-540c-8647-76afe2878952",
  "name": "my-storage-class",
  "provisioner": "csi.trident.netapp.io",
  "available": "eligible",
  "allowVolumeExpansion": "true",
  "reclaimPolicy": "recycle",
  "volumeBindingMode": "immediate",
  "isDefault": "true",
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

### Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	

Name	Type	Required	Description
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```



## Definitions

### See Definitions

type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

type\_astra\_metadata

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema

Name	Type	Required	Description
labels	array[type_astra_label]	True	
creationTimestamp	string	True	
modificationTimestamp	string	True	
createdBy	string	True	
modifiedBy	string	False	

invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## List the storage classes for a managed cluster

GET

/accounts/{account\_id}/topology/v1/managedClusters/{managedCluster\_id}/storageClasses

Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

## Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"><li>example: {{.Account}}</li></ul>
managedCluster_id	string	path	True	ID of the containing managedCluster resource
include	string	query	False	Indicates which fields should be returned when listing a collection.  URL examples: "include=id", "include=id,name"  OpenAPI examples: "id" <ul style="list-style-type: none"><li>example: id,name</li></ul>
limit	string	query	False	Indicates the maximum number of resources to return when listing a collection.  URL examples: "limit=2"  OpenAPI examples: "2"

## Response

Status: 200, Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

Name	Type	Required	Description
items	array[Any of: <a href="#">storageClass_1.1_get_response_body</a> , array[]]	True	
metadata	<a href="#">type_astra_metadata_list</a>	True	

### Example response

```
{
  "type": "application/astra-storageClasses",
  "version": "1.1",
  "items": [
    [
      "e280ff62-be35-4f31-a31b-a210a1ad1b33",
      "my-storage-class"
    ],
    [
      "e8507dad-d33f-44b3-9c15-ec55ba6f6473",
      "standard"
    ]
  ],
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

### Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	

Name	Type	Required	Description
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't found.",
  "status": "404"
}
```

**Definitions**

## See Definitions

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### type\_astra\_metadata

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema

Name	Type	Required	Description
labels	array[type_astra_label]	True	
creationTimestamp	string	True	
modificationTimestamp	string	True	
createdBy	string	True	
modifiedBy	string	False	

### storageClass\_1.1\_get\_response\_body

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>• "application/astra-storageClass"</li></ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"><li>• "1.0"</li><li>• "1.1"</li></ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"><li>• Conforms to the UUIDv4 Schema</li></ul>

Name	Type	Required	Description
name	string	True	<p>JSON string containing a value indicating the name of the storage class.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>
provisioner	string	True	<p>JSON string containing a value indicating the provisioner associated with the storage class.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>
available	string	True	<p>JSON string indicating whether the storage class is available for the cluster or is eligible to be added to the cluster when under management.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "available" - The storage class is available for use</li> <li>• "eligible" - The storage class is eligible to be used by the cluster when it is under management</li> <li>• "ineligible" - The storage class is ineligible to be used by the cluster when it is under management</li> </ul>



Name	Type	Required	Description
allowVolumeExpansion	string	True	<p>JSON string indicating whether the storage class allows volume expansion.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - The storage class allows volume expansion</li> <li>• "false" - The storage class does not allow volume expansion</li> <li>• "unavailable" - It is unknown whether the storage class allows volume expansion</li> </ul>
reclaimPolicy	string	True	<p>JSON string containing a cloud-specific value indicating the retention policy of the storage class.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>
volumeBindingMode	string	True	<p>JSON string containing a cloud-specific value indicating the binding mode for the storage class.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>
isDefault	string	False	<p>JSON string indicating whether the storage class contains the default annotation.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - The storage class contains the default annotation</li> </ul>

Name	Type	Required	Description
maxSnapshotCount	number	False	JSON number indicating how many snapshots are supported. This information is attached to storage classes provided by NetApp.
maxBackupCount	number	False	JSON number indicating how many backups are supported. This information is attached to storage classes provided by NetApp.
price	string	False	JSON string indicating the currency units per unit of time for the storage class. This information is attached to storage classes provided by NetApp. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>
currency	string	False	JSON string indicating the ISO 4217 three-letter code for the currency that the price is measured in. This information is attached to storage classes provided by NetApp. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>

Name	Type	Required	Description
performance	number	False	JSON number indicating the performance service-level objective (SLO) in MBps. This information is attached to storage classes provided by NetApp.
resilience	string	False	JSON string indicating the resilience configuration for the storage. This information is attached to storage classes provided by NetApp. Defined values are: <ul style="list-style-type: none"> <li>"regional" - The volume will become unavailable if a given region becomes unavailable</li> <li>"multisite" - The volume will continue to be available if a given region becomes unavailable</li> </ul>
metadata	<a href="#">type_astra_metadata</a>	True	Client and service-specified metadata associated with the resource. Defined values are: <ul style="list-style-type: none"> <li>Conforms to the Astra Metadata Schema</li> </ul>

#### type\_astra\_metadata\_list

Name	Type	Required	Description
continue	string	False	
count	number	False	
labels	array[ <a href="#">type_astra_label</a> ]	False	
creationTimestamp	string	False	

Name	Type	Required	Description
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Retrieve a storage class for a managed cluster

GET

/accounts/{account\_id}/topology/v1/managedClusters/{managedCluster\_id}/storageClasses/{storageClass\_id}

Returns the stored Storage Class API resource in the JSON response body.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource  • example: {{.Account}}
managedCluster_id	string	path	True	ID of the containing managedCluster resource
storageClass_id	string	path	True	ID of the storageClass collection to list

### Response

Status: 200, Returns the stored Storage Class API resource in the JSON response body.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "application/astra-storageClass"</li> </ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "1.0"</li> <li>• "1.1"</li> </ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the UUIDv4 Schema</li> </ul>
name	string	True	JSON string containing a value indicating the name of the storage class. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>
provisioner	string	True	JSON string containing a value indicating the provisioner associated with the storage class. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>

Name	Type	Required	Description
available	string	True	<p>JSON string indicating whether the storage class is available for the cluster or is eligible to be added to the cluster when under management.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "available" - The storage class is available for use</li> <li>• "eligible" - The storage class is eligible to be used by the cluster when it is under management</li> <li>• "ineligible" - The storage class is ineligible to be used by the cluster when it is under management</li> </ul>
allowVolumeExpansion	string	True	<p>JSON string indicating whether the storage class allows volume expansion.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - The storage class allows volume expansion</li> <li>• "false" - The storage class does not allow volume expansion</li> <li>• "unavailable" - It is unknown whether the storage class allows volume expansion</li> </ul>
reclaimPolicy	string	True	<p>JSON string containing a cloud-specific value indicating the retention policy of the storage class.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>

Name	Type	Required	Description
volumeBindingMode	string	True	<p>JSON string containing a cloud-specific value indicating the binding mode for the storage class.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>
isDefault	string	False	<p>JSON string indicating whether the storage class contains the default annotation.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - The storage class contains the default annotation</li> </ul>
maxSnapshotCount	number	False	<p>JSON number indicating how many snapshots are supported.</p> <p>This information is attached to storage classes provided by NetApp.</p>
maxBackupCount	number	False	<p>JSON number indicating how many backups are supported.</p> <p>This information is attached to storage classes provided by NetApp.</p>
price	string	False	<p>JSON string indicating the currency units per unit of time for the storage class.</p> <p>This information is attached to storage classes provided by NetApp.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>

Name	Type	Required	Description
currency	string	False	<p>JSON string indicating the ISO 4217 three-letter code for the currency that the price is measured in. This information is attached to storage classes provided by NetApp.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>
performance	number	False	<p>JSON number indicating the performance service-level objective (SLO) in MBps. This information is attached to storage classes provided by NetApp.</p>
resilience	string	False	<p>JSON string indicating the resilience configuration for the storage. This information is attached to storage classes provided by NetApp.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "regional" - The volume will become unavailable if a given region becomes unavailable</li> <li>• "multisite" - The volume will continue to be available if a given region becomes unavailable</li> </ul>



Name	Type	Required	Description
metadata	<a href="#">type_astra_metadata</a>	True	Client and service-specified metadata associated with the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema</li> </ul>

### Example response

```
{
  "type": "application/astra-storageClass",
  "version": "1.1",
  "id": "ad9be22b-53c7-540c-8647-76afe2878952",
  "name": "my-storage-class",
  "provisioner": "csi.trident.netapp.io",
  "available": "eligible",
  "allowVolumeExpansion": "true",
  "reclaimPolicy": "recycle",
  "volumeBindingMode": "immediate",
  "isDefault": "true",
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

### Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	

Name	Type	Required	Description
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't found.",
  "status": "404"
}
```

## Definitions

### See Definitions

type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

type\_astra\_metadata

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema

Name	Type	Required	Description
labels	array[type_astra_label]	True	
creationTimestamp	string	True	
modificationTimestamp	string	True	
createdBy	string	True	
modifiedBy	string	False	

invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Subscription

### Subscription overview

The Subscription API provides CRUD (Create-Read-Update-Delete) access to subscription resources in order to represent active subscriptions.

### Create a new subscription

POST /accounts/{account\_id}/core/v1/subscriptions

Indicates desired values for the Subscription API resource to be created.

## Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"><li>example: {{.Account}}</li></ul>

## Request Body

Indicates desired values for the Subscription API resource to be created.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>"application/astra-subscription"</li></ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"><li>"1.0"</li><li>"1.1"</li><li>"1.2"</li></ul>
customerProfileID	string	False	JSON string containing the customer profile ID from <a href="#">Authorize.net</a> , which was invoked by the UI, is not set for the trial term. Returns an empty string during read operation, if not set. Defined values are: <ul style="list-style-type: none"><li>Minimum length: 0</li><li>Maximum length: 63</li></ul>

Name	Type	Required	Description
paymentFirstName	string	False	<p>JSON string containing a user-specified long-form first name used for payment billing. Specified only when the subscription is being rebilled.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>
paymentLastName	string	False	<p>JSON string containing a user-specified long-form last name used for payment billing. Specified only when the subscription is being rebilled.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>
paymentAddress	<a href="#">paymentAddress</a>	False	<p>JSON object containing a collection of JSON strings specifying a billing address. Specified only when the subscription is being rebilled.</p> <p>If this key exists, all six of the contained JSON strings will be present. If nothing was provided by the user, the string will be empty.</p>
paymentProfileID	string	False	<p>JSON string containing the payment profile ID from <a href="#">Authorize.net</a> that was invoked by the UI, not set for trial term.</p> <p>Returns an empty string during read operation if not set.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 0</li> <li>• Maximum length: 63</li> </ul>

Name	Type	Required	Description
paymentExpiry	string	False	<p>JSON string containing a timestamp indicating when the payment method expires. This is obtained from authorize.net(<a href="http://authorize.net">http://authorize.net</a>) and is set by the UI.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul> <p>This field is not returned for trial terms.</p>
marketplace	string	False	<p>JSON string indicating the marketplace for an account where payments will be recorded.</p> <p>Defined values:</p> <ul style="list-style-type: none"> <li>• "netapp"</li> <li>• "azure"</li> <li>• "aws"</li> <li>• "gcp"</li> </ul>
terms	string	True	<p>JSON string indicating the current tier of the account.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "trial"</li> <li>• "paid"</li> </ul>

Name	Type	Required	Description
metadata	<a href="#">type_astra_metadata_update</a>	False	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</li> </ul>

### Example request

```
{
  "type": "application/astra-subscription",
  "version": "1.2",
  "terms": "trial"
}
```

### Response

Status: 201, Returns the newly created subscription resource in the JSON response body.

Name	Type	Required	Description
type	string	True	<p>Media type of the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "application/astra-subscription"</li> </ul>



Name	Type	Required	Description
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "1.0"</li> <li>• "1.1"</li> <li>• "1.2"</li> </ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the UUIDv4 Schema</li> </ul>
customerProfileID	string	True	JSON string containing the customer profile ID from <a href="#">Authorize.net</a> , which was invoked by the UI, is not set for the trial term. Returns an empty string during read operation, if not set. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 0</li> <li>• Maximum length: 63</li> </ul>
paymentProfileID	string	False	JSON string containing the payment profile ID from <a href="#">Authorize.net</a> that was invoked by the UI, not set for trial term. Returns an empty string during read operation if not set. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 0</li> <li>• Maximum length: 63</li> </ul>

Name	Type	Required	Description
paymentExpiry	string	False	<p>JSON string containing a timestamp indicating when the payment method expires. This is obtained from authorize.net](<a href="http://authorize.net">http://authorize.net</a>) and is set by the UI.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul> <p>This field is not returned for trial terms.</p>
purchaseOrderNumber	string	False	<p>JSON string containing the purchase order number for the payment method.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 31</li> </ul>
marketplace	string	False	<p>JSON string indicating the marketplace for an account where payments will be recorded.</p> <p>Defined values:</p> <ul style="list-style-type: none"> <li>• "netapp"</li> <li>• "azure"</li> <li>• "aws"</li> <li>• "gcp"</li> </ul>
licenseSN	string	False	<p>JSON string containing the license serial number for the payment method.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 31</li> </ul>

Name	Type	Required	Description
terms	string	True	JSON string indicating the current tier of the account. Defined values are: <ul style="list-style-type: none"> <li>• "trial"</li> <li>• "paid"</li> </ul>
status	string	True	JSON string indicating the current status of the subscription. Defined values are: <ul style="list-style-type: none"> <li>• "active"</li> <li>• "inactive"</li> </ul>
appLimit	number	True	JSON number indicating the application limit for this subscription. Value of -1 indicates no limit.
namespaceLimit	number	True	JSON number indicating the namespace limit for this subscription. Value of -1 indicates no limit.
subscriptionPeriod	number	True	JSON number indicating the subscription period. Value of -1 indicates no limit. Unit: days
gracePeriod	number	True	JSON number indicating the grace period after the trial subscription has expired or a paid subscription is canceled. Unit: days
reminderBeforePeriod	number	True	JSON number indicating the number of days before the end of the trial subscription we should start notifying the customer. Value of -1 indicates N/A. Unit: days

Name	Type	Required	Description
onboardStatus	string	True	<p>JSON string indicating the current status of customer onboarding. Valid values are "not started", "in progress", "success", "failed".</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "not started"</li> <li>• "in progress"</li> <li>• "success"</li> <li>• "failed"</li> </ul>
costPerAppUnit	number	True	<p>JSON number indicating the cost per app unit. For a trial version, the value would be 0. Unit: US dollars</p>
costPerNamespaceUnit	number	True	<p>JSON number indicating the cost per namespace unit. For a trial version, the value would be 0. Unit: US dollars</p>
metadata	<a href="#">type_astra_metadata_update</a>	True	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</li> </ul>

## Example response

```
{
  "type": "application/astra-subscription",
  "version": "1.2",
  "id": "40b4106f-b743-5d83-95c7-d539b2b45f63",
  "customerProfileID": "2157047189",
  "paymentProfileID": "E7CEB0A9F1BECA32A02493E1B31D5955",
  "paymentExpiry": "2022-02-01T00:00:00Z",
  "purchaseOrderNumber": "72384632",
  "marketplace": "netapp",
  "licenseSN": "278343",
  "terms": "trial",
  "status": "active",
  "appLimit": 0,
  "namespaceLimit": 10,
  "subscriptionPeriod": 90,
  "gracePeriod": 7,
  "reminderBeforePeriod": 30,
  "onboardStatus": "in progress",
  "costPerAppUnit": 0,
  "costPerNamespaceUnit": 0.005,
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 409, Conflict

Name	Type	Required	Description
type	string	True	

Name	Type	Required	Description
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

### Example response

```
{
  "type": "https://astra.netapp.io/problems/10",
  "title": "JSON resource conflict",
  "detail": "The request body JSON contains a field that conflicts with an idempotent value.",
  "status": "409"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

## Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

## Definitions



## See Definitions

### paymentAddress

JSON object containing a collection of JSON strings specifying a billing address. Specified only when the subscription is being rebilled.

If this key exists, all six of the contained JSON strings will be present. If nothing was provided by the user, the string will be empty.

Name	Type	Required	Description
addressCountry	string	True	JSON string containing the country name or country code associated with the postal address, as specified in ISO 3166 Alpha-2. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 0</li><li>• Maximum length: 2</li></ul>
addressLocality	string	True	JSON string containing the locality (for example, city) associated with the postal address. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 0</li><li>• Maximum length: 63</li></ul>
addressRegion	string	True	JSON string containing the region (for example, state) associated with the postal address. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 0</li><li>• Maximum length: 63</li></ul>
postalCode	string	True	JSON string containing the postal code associated with the postal address. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 0</li><li>• Maximum length: 63</li></ul>

Name	Type	Required	Description
streetAddress1	string	True	JSON string containing the street address associated with the postal address. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 0</li> <li>• Maximum length: 63</li> </ul>
streetAddress2	string	False	JSON string containing optional ancillary street address information, post office box, and more. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 0</li> <li>• Maximum length: 63</li> </ul>

#### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

#### type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[ <a href="#">type_astra_label</a> ]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

#### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

invalidFields

Name	Type	Required	Description
name	string	True	Name of the invalid request body field
reason	string	True	Reason why the request body field is invalid

## List all subscriptions

GET /accounts/{account\_id}/core/v1/subscriptions

Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"> <li>example: <code>{{.Account}}</code></li> </ul>

Name	Type	In	Required	Description
continue		query	False	<p>Indicates the token to resume listing from.</p> <p>URL examples:  "continue=&lt;continue token="" from="" collection="" metadata=""&gt;"&lt;/continue&gt;</p> <p>OpenAPI examples:  "&lt;continue token="" from="" collection="" metadata=""&gt;"&lt;/continue&gt;&amp;lt;/continue&amp;gt;</p>
count	string	query	False	<p>Indicates if the total number of resources should be returned in the metadata object.</p> <p>URL examples:  "count=true"</p> <p>OpenAPI examples:  "true"</p>

Name	Type	In	Required	Description
filter	string	query	False	<p>Indicates which fields should be matched in order to return a resource when listing a collection.</p> <p>Supported operators are:</p> <ul style="list-style-type: none"> <li>• eq - Equality</li> <li>• lt/gt - Less than/Greater than</li> <li>• lte/gte - Less than or equals to/Greater than or equals to</li> </ul> <p>URL example: "filter=field%20eq%20%27value%27"</p> <p>OpenAPI examples: "field eq 'value'"</p>
include	string	query	False	<p>Indicates which fields should be returned when listing a collection.</p> <p>URL examples: "include=id", "include=id,name"</p> <p>OpenAPI examples: "id"</p>
limit	string	query	False	<p>Indicates the maximum number of resources to return when listing a collection.</p> <p>URL examples: "limit=2"</p> <p>OpenAPI examples: "2"</p>

Name	Type	In	Required	Description
orderBy	string	query	False	Indicates the sort order of resource when listing a collection.  URL examples: "orderBy=name", "orderBy=name%20desc"  OpenAPI examples: "name desc"
skip	string	query	False	Indicates the number of resources to skip over when listing a collection.  URL examples: "skip=1"  OpenAPI examples: "1"

## Response

Status: 200, Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

Name	Type	Required	Description
items	array[Any of: <a href="#">subscription_1.2_get_response_body</a> , array[]]	True	
metadata	<a href="#">type_astra_metadata_list</a>	True	

## Example response

```
{
  "type": "application/astra-subscriptions",
  "version": "1.2",
  "items": [
    {
      "type": "application/astra-subscription",
      "version": "1.1",
      "id": "d4c865c9-64a7-4661-ae4a-3307dffcd3da",
      "customerProfileID": "2157047189",
      "paymentProfileID": "E7CEB0A9F1BECA32A02493E1B31D5955",
      "paymentExpiry": "2022-02-01T00:00:00Z",
      "purchaseOrderNumber": "72384632",
      "marketplace": "netapp",
      "licenseSN": "278343",
      "terms": "trial",
      "status": "inactive",
      "appLimit": 0,
      "namespaceLimit": 10,
      "subscriptionPeriod": 90,
      "gracePeriod": 7,
      "reminderBeforePeriod": 30,
      "onboardStatus": "success",
      "costPerAppUnit": 0,
      "costPerNamespaceUnit": 0.005,
      "metadata": {
        "labels": [],
        "creationTimestamp": "2020-05-06T12:24:52.256624Z",
        "modificationTimestamp": "2020-05-06T12:24:52.256624Z",
        "createdBy": "11c0cfa1-4f27-4ef7-a21c-cb452fc5c9aa"
      }
    },
    {
      "type": "application/astra-subscription",
      "version": "1.1",
      "id": "4c43ed8b-078f-4fe3-b8c6-5d515f6382e6",
      "customerProfileID": "2157047189",
      "paymentProfileID": "E7CEB0A9F1BECA32A02493E1B31D5955",
      "paymentExpiry": "2022-05-01T00:00:00Z",
      "purchaseOrderNumber": "92374658",
      "marketplace": "netapp",
      "licenseSN": "374623",
      "terms": "paid",
      "status": "active",
      "appLimit": 0,
    }
  ]
}
```

```

"namespaceLimit": -1,
"subscriptionPeriod": -1,
"gracePeriod": -1,
"reminderBeforePeriod": -1,
"onboardStatus": "success",
"costPerAppUnit": 0,
"costPerNamespaceUnit": 0.005,
"metadata": {
  "labels": [],
  "creationTimestamp": "2020-08-06T12:24:52.256624Z",
  "modificationTimestamp": "2020-08-06T12:24:52.256624Z",
  "createdBy": "11c0cfa1-4f27-4ef7-a21c-cb452fc5c9aa"
}
},
"metadata": {
  "labels": [],
  "creationTimestamp": "2022-10-06T20:58:16.305662Z",
  "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
  "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
}
}

```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	



### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	

Name	Type	Required	Description
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't found.",
  "status": "404"
}
```

**Definitions**

## See Definitions

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[type_astra_label]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

### subscription\_1.2\_get\_response\_body

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>• "application/astra-subscription"</li></ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"><li>• "1.0"</li><li>• "1.1"</li><li>• "1.2"</li></ul>

Name	Type	Required	Description
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the UUIDv4 Schema</li> </ul>
customerProfileID	string	True	JSON string containing the customer profile ID from <a href="https://authorize.net">Authorize.net</a> , which was invoked by the UI, is not set for the trial term. Returns an empty string during read operation, if not set. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 0</li> <li>• Maximum length: 63</li> </ul>
paymentProfileID	string	False	JSON string containing the payment profile ID from <a href="https://authorize.net">Authorize.net</a> that was invoked by the UI, not set for trial term. Returns an empty string during read operation if not set. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 0</li> <li>• Maximum length: 63</li> </ul>
paymentExpiry	string	False	JSON string containing a timestamp indicating when the payment method expires. This is obtained from <a href="https://authorize.net">authorize.net</a> ( <a href="http://authorize.net">http://authorize.net</a> ) and is set by the UI. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul> This field is not returned for trial terms.

Name	Type	Required	Description
purchaseOrderNumber	string	False	JSON string containing the purchase order number for the payment method. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 31</li> </ul>
marketplace	string	False	JSON string indicating the marketplace for an account where payments will be recorded. Defined values: <ul style="list-style-type: none"> <li>• "netapp"</li> <li>• "azure"</li> <li>• "aws"</li> <li>• "gcp"</li> </ul>
licenseSN	string	False	JSON string containing the license serial number for the payment method. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 31</li> </ul>
terms	string	True	JSON string indicating the current tier of the account. Defined values are: <ul style="list-style-type: none"> <li>• "trial"</li> <li>• "paid"</li> </ul>
status	string	True	JSON string indicating the current status of the subscription. Defined values are: <ul style="list-style-type: none"> <li>• "active"</li> <li>• "inactive"</li> </ul>

Name	Type	Required	Description
appLimit	number	True	JSON number indicating the application limit for this subscription. Value of -1 indicates no limit.
namespaceLimit	number	True	JSON number indicating the namespace limit for this subscription. Value of -1 indicates no limit.
subscriptionPeriod	number	True	JSON number indicating the subscription period. Value of -1 indicates no limit. Unit: days
gracePeriod	number	True	JSON number indicating the grace period after the trial subscription has expired or a paid subscription is canceled. Unit: days
reminderBeforePeriod	number	True	JSON number indicating the number of days before the end of the trial subscription we should start notifying the customer. Value of -1 indicates N/A. Unit: days
onboardStatus	string	True	JSON string indicating the current status of customer onboarding. Valid values are "not started", "in progress", "success", "failed". Defined values are: <ul style="list-style-type: none"> <li>• "not started"</li> <li>• "in progress"</li> <li>• "success"</li> <li>• "failed"</li> </ul>
costPerAppUnit	number	True	JSON number indicating the cost per app unit. For a trial version, the value would be 0. Unit: US dollars

Name	Type	Required	Description
costPerNamespaceUnit	number	True	JSON number indicating the cost per namespace unit. For a trial version, the value would be 0. Unit: US dollars
metadata	<a href="#">type_astra_metadata_update</a>	True	Client and service-specified metadata associated with the resource. Defined values are: <ul style="list-style-type: none"> <li>Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</li> </ul>

#### type\_astra\_metadata\_list

Name	Type	Required	Description
continue	string	False	
count	number	False	
labels	array[ <a href="#">type_astra_label</a> ]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

#### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter



Name	Type	Required	Description
reason	string	True	Reason why the query parameter is invalid

## Retrieve a subscription

GET /accounts/{account\_id}/core/v1/subscriptions/{subscription\_id}

Returns the stored Subscription API resource in the JSON response body.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"> <li>example: <code>{{.Account}}</code></li> </ul>
subscription_id	string	path	True	ID of the subscription collection to list

### Response

Status: 200, Returns the stored Subscription API resource in the JSON response body.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"> <li>"application/astra-subscription"</li> </ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>"1.0"</li> <li>"1.1"</li> <li>"1.2"</li> </ul>

Name	Type	Required	Description
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the UUIDv4 Schema</li> </ul>
customerProfileID	string	True	JSON string containing the customer profile ID from <a href="http://authorize.net">Authorize.net</a> , which was invoked by the UI, is not set for the trial term. Returns an empty string during read operation, if not set. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 0</li> <li>• Maximum length: 63</li> </ul>
paymentProfileID	string	False	JSON string containing the payment profile ID from <a href="http://authorize.net">Authorize.net</a> that was invoked by the UI, not set for trial term. Returns an empty string during read operation if not set. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 0</li> <li>• Maximum length: 63</li> </ul>
paymentExpiry	string	False	JSON string containing a timestamp indicating when the payment method expires. This is obtained from <a href="http://authorize.net">authorize.net</a> ( <a href="http://authorize.net">http://authorize.net</a> ) and is set by the UI. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema This field is not returned for trial terms.</li> </ul>

Name	Type	Required	Description
purchaseOrderNumber	string	False	JSON string containing the purchase order number for the payment method. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 31</li> </ul>
marketplace	string	False	JSON string indicating the marketplace for an account where payments will be recorded. Defined values: <ul style="list-style-type: none"> <li>• "netapp"</li> <li>• "azure"</li> <li>• "aws"</li> <li>• "gcp"</li> </ul>
licenseSN	string	False	JSON string containing the license serial number for the payment method. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 31</li> </ul>
terms	string	True	JSON string indicating the current tier of the account. Defined values are: <ul style="list-style-type: none"> <li>• "trial"</li> <li>• "paid"</li> </ul>
status	string	True	JSON string indicating the current status of the subscription. Defined values are: <ul style="list-style-type: none"> <li>• "active"</li> <li>• "inactive"</li> </ul>

Name	Type	Required	Description
appLimit	number	True	JSON number indicating the application limit for this subscription. Value of -1 indicates no limit.
namespaceLimit	number	True	JSON number indicating the namespace limit for this subscription. Value of -1 indicates no limit.
subscriptionPeriod	number	True	JSON number indicating the subscription period. Value of -1 indicates no limit. Unit: days
gracePeriod	number	True	JSON number indicating the grace period after the trial subscription has expired or a paid subscription is canceled. Unit: days
reminderBeforePeriod	number	True	JSON number indicating the number of days before the end of the trial subscription we should start notifying the customer. Value of -1 indicates N/A. Unit: days
onboardStatus	string	True	JSON string indicating the current status of customer onboarding. Valid values are "not started", "in progress", "success", "failed". Defined values are: <ul style="list-style-type: none"> <li>• "not started"</li> <li>• "in progress"</li> <li>• "success"</li> <li>• "failed"</li> </ul>
costPerAppUnit	number	True	JSON number indicating the cost per app unit. For a trial version, the value would be 0. Unit: US dollars

Name	Type	Required	Description
costPerNamespaceUnit	number	True	JSON number indicating the cost per namespace unit. For a trial version, the value would be 0. Unit: US dollars
metadata	type_astra_metadata_update	True	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</li> </ul>

## Example response

```
{
  "type": "application/astra-subscription",
  "version": "1.2",
  "id": "40b4106f-b743-5d83-95c7-d539b2b45f63",
  "customerProfileID": "2157047189",
  "paymentProfileID": "E7CEB0A9F1BECA32A02493E1B31D5955",
  "paymentExpiry": "2022-02-01T00:00:00Z",
  "purchaseOrderNumber": "72384632",
  "marketplace": "netapp",
  "licenseSN": "278343",
  "terms": "trial",
  "status": "active",
  "onboardStatus": "success",
  "costPerAppUnit": 0,
  "costPerNamespaceUnit": 0.005,
  "appLimit": 0,
  "namespaceLimit": 10,
  "subscriptionPeriod": 90,
  "gracePeriod": 7,
  "reminderBeforePeriod": 30,
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	

Name	Type	Required	Description
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't found.",
  "status": "404"
}
```



## Definitions

### See Definitions

type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[type_astra_label]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Modify a subscription

PUT /accounts/{account\_id}/core/v1/subscriptions/{subscription\_id}

Replaces the entire stored resource with the supplied JSON request body while preserving key values that are not user-modifiable.

### Side Effects

- If the user cancels the subscription, the PUT endpoint must be called with "status": "inactive".

- When the status is set to "inactive", the pending charges for this subscription are sent to Zuora and the Zuora subscription will be marked as "inactive" in some way.

## Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"> <li>• example: <code>{{.Account}}</code></li> </ul>
subscription_id	string	path	True	ID of the subscription collection to list

## Request Body

Replaces the entire stored resource with the supplied JSON request body while preserving key values that are not user-modifiable.

## Side Effects

- If the user cancels the subscription, the PUT endpoint must be called with "status": "inactive".
- When the status is set to "inactive", the pending charges for this subscription are sent to Zuora and the Zuora subscription will be marked as "inactive" in some way.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "application/astra-subscription"</li> </ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "1.0"</li> <li>• "1.1"</li> <li>• "1.2"</li> </ul>
id	string	False	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the UUIDv4 Schema</li> </ul>

Name	Type	Required	Description
customerProfileID	string	False	<p>JSON string containing the customer profile ID from <a href="#">Authorize.net</a>, which was invoked by the UI, is not set for the trial term. Returns an empty string during read operation, if not set.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 0</li> <li>• Maximum length: 63</li> </ul>
paymentFirstName	string	False	<p>JSON string containing a user-specified long-form first name used for payment billing. Specified only when the subscription is being rebilled.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>
paymentLastName	string	False	<p>JSON string containing a user-specified long-form last name used for payment billing. Specified only when the subscription is being rebilled.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>
paymentAddress	<a href="#">paymentAddress</a>	False	<p>JSON object containing a collection of JSON strings specifying a billing address. Specified only when the subscription is being rebilled.</p> <p>If this key exists, all six of the contained JSON strings will be present. If nothing was provided by the user, the string will be empty.</p>

Name	Type	Required	Description
paymentProfileID	string	False	<p>JSON string containing the payment profile ID from <a href="https://authorize.net">Authorize.net</a> that was invoked by the UI, not set for trial term. Returns an empty string during read operation if not set.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 0</li> <li>• Maximum length: 63</li> </ul>
paymentExpiry	string	False	<p>JSON string containing a timestamp indicating when the payment method expires. This is obtained from <a href="https://authorize.net">authorize.net</a> (<a href="http://authorize.net">http://authorize.net</a>) and is set by the UI.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul> <p>This field is not returned for trial terms.</p>
purchaseOrderNumber	string	False	<p>JSON string containing the purchase order number for the payment method.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 31</li> </ul>

Name	Type	Required	Description
marketplace	string	False	JSON string indicating the marketplace for an account where payments will be recorded. Defined values: <ul style="list-style-type: none"> <li>• "netapp"</li> <li>• "azure"</li> <li>• "aws"</li> <li>• "gcp"</li> </ul>
licenseSN	string	False	JSON string containing the license serial number for the payment method. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 31</li> </ul>
terms	string	False	JSON string indicating the current tier of the account. Defined values are: <ul style="list-style-type: none"> <li>• "trial"</li> <li>• "paid"</li> </ul>
status	string	False	JSON string indicating the current status of the subscription. Defined values are: <ul style="list-style-type: none"> <li>• "active"</li> <li>• "inactive"</li> </ul>
appLimit	number	False	JSON number indicating the application limit for this subscription. Value of -1 indicates no limit.
namespaceLimit	number	False	JSON number indicating the namespace limit for this subscription. Value of -1 indicates no limit.

Name	Type	Required	Description
subscriptionPeriod	number	False	JSON number indicating the subscription period. Value of -1 indicates no limit. Unit: days
gracePeriod	number	False	JSON number indicating the grace period after the trial subscription has expired or a paid subscription is canceled. Unit: days
reminderBeforePeriod	number	False	JSON number indicating the number of days before the end of the trial subscription we should start notifying the customer. Value of -1 indicates N/A. Unit: days
onboardStatus	string	False	JSON string indicating the current status of customer onboarding. Valid values are "not started", "in progress", "success", "failed". Defined values are: <ul style="list-style-type: none"> <li>• "not started"</li> <li>• "in progress"</li> <li>• "success"</li> <li>• "failed"</li> </ul>
costPerAppUnit	number	False	JSON number indicating the cost per app unit. For a trial version, the value would be 0. Unit: US dollars
costPerNamespaceUnit	number	False	JSON number indicating the cost per namespace unit. For a trial version, the value would be 0. Unit: US dollars

Name	Type	Required	Description
metadata	<a href="#">type_astra_metadata_update</a>	False	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema</li> </ul> <p>If not specified on create, a metadata object will be created with no labels.</p> <p>If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</p>

### Example request

```
{
  "type": "application/astra-subscription",
  "version": "1.2",
  "customerProfileID": "2157047189",
  "paymentProfileID": "E7CEB0A9F1BECA32A02493E1B31D5955",
  "paymentExpiry": "2022-05-01T00:00:00Z"
}
```

### Response

Status: 204, Indicates if the subscription resource was updated.

### Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	

Name	Type	Required	Description
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```



## Response

Status: 409, Conflict

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

## Example response

```
{
  "type": "https://astra.netapp.io/problems/10",
  "title": "JSON resource conflict",
  "detail": "The request body JSON contains a field that conflicts with an idempotent value.",
  "status": "409"
}
```

## Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

## Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example error response

```
{
  "type": "https://astra.netapp.io/problems/1",
  "title": "Resource not found",
  "detail": "The resource specified in the request URI wasn't found.",
  "status": "404"
}
```

## Definitions

## See Definitions

### paymentAddress

JSON object containing a collection of JSON strings specifying a billing address. Specified only when the subscription is being rebilled.

If this key exists, all six of the contained JSON strings will be present. If nothing was provided by the user, the string will be empty.

Name	Type	Required	Description
addressCountry	string	True	JSON string containing the country name or country code associated with the postal address, as specified in ISO 3166 Alpha-2. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 0</li><li>• Maximum length: 2</li></ul>
addressLocality	string	True	JSON string containing the locality (for example, city) associated with the postal address. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 0</li><li>• Maximum length: 63</li></ul>
addressRegion	string	True	JSON string containing the region (for example, state) associated with the postal address. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 0</li><li>• Maximum length: 63</li></ul>
postalCode	string	True	JSON string containing the postal code associated with the postal address. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 0</li><li>• Maximum length: 63</li></ul>

Name	Type	Required	Description
streetAddress1	string	True	JSON string containing the street address associated with the postal address. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 0</li> <li>• Maximum length: 63</li> </ul>
streetAddress2	string	False	JSON string containing optional ancillary street address information, post office box, and more. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 0</li> <li>• Maximum length: 63</li> </ul>

#### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

#### type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[ <a href="#">type_astra_label</a> ]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

#### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

invalidFields

Name	Type	Required	Description
name	string	True	Name of the invalid request body field
reason	string	True	Reason why the request body field is invalid

## Delete a subscription

DELETE /accounts/{account\_id}/core/v1/subscriptions/{subscription\_id}

Removes the specified Subscription API resource.

### Side Effects

- Subscription is deleted along with all the charges associated with it.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource  • example: {{.Account}}
subscription_id	string	path	True	ID of the subscription collection to list

### Response

Status: 204, Indicates if the subscription resource was deleted.

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

## Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	

Name	Type	Required	Description
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/1",
  "title": "Resource not found",
  "detail": "The resource specified in the request URI wasn't found.",
  "status": "404"
}
```

### Definitions

#### See Definitions

invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Task

### Task overview

The Task App API provides CRUD (Create-Read-Update-Delete) access to managed task resources in order to represent long-running tasks.

### List all tasks

GET /accounts/{account\_id}/core/v1/tasks

Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

### Parameters



Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"> <li>example: <code>{{.Account}}</code></li> </ul>
include	string	query	False	Indicates which fields should be returned when listing a collection. <p>URL examples: "include=id", "include=id,name"</p> <p>OpenAPI examples: "id"</p>
limit	string	query	False	Indicates the maximum number of resources to return when listing a collection. <p>URL examples: "limit=2"</p> <p>OpenAPI examples: "2"</p>

Name	Type	In	Required	Description
filter	string	query	False	<p>Indicates which fields should be matched in order to return a resource when listing a collection.</p> <p>Supported operators are:</p> <ul style="list-style-type: none"> <li>• eq - Equality</li> <li>• lt/gt - Less than/Greater than</li> <li>• lte/gte - Less than or equals to/Greater than or equals to</li> </ul> <p>URL example: "filter=field%20eq%20%27value%27"</p> <p>OpenAPI examples: "field eq 'value'"</p>

## Response

Status: 200, Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

Name	Type	Required	Description
items	array[Any of: <a href="#">task_1.0_get_response_body</a> , array[]]	True	
metadata	<a href="#">type_astra_metadata_list</a>	True	

## Example response

```
{
  "type": "application/astra-tasks",
  "version": "1.0",
  "items": [
    {
      "type": "application/astra-task",
      "version": "1.0",
      "id": "ae1e6561-9e22-406c-8a5a-762f4604da00",
      "name": "astra.backup.prep",
      "summary": "Backup preparation",
      "description": "Task to prepare for the application backup",
      "service": "nautilus",
      "parentTaskID": "9cc8c321-6af1-406c-8158-2c6582c247f8",
      "resourceID": "626a0978-d55f-4841-8b7c-dc0c0f592c6f",
      "resourceURI": "/accounts/fdaa655c-15ab-4d34-aa61-1e9098e67be0/k8s/v1/apps/7c8bef49-697e-4fb4-810c-675cef4cf6c9/appSnaps/5cb608f9-571b-492e-a520-5bfb900a9b9c",
      "resourceCollectionURI": [
        "/accounts/fdaa655c-15ab-4d34-aa61-1e9098e67be0/topology/v1/clouds/0df3f1a0-7203-4c12-aabf-a7bee6302671/clusters/dfd9de2d-6f0b-437b-a737-c8f7f176cd14/namespaces/f8b58091-4b9c-4c64-9b40-018dbaf7c5de/apps/f670bf11-8850-44bd-b330-815af6186a06/appSnaps/5cb608f9-571b-492e-a520-5bfb900a9b9c",
        "/accounts/fdaa655c-15ab-4d34-aa61-1e9098e67be0/topology/v1/clouds/0df3f1a0-7203-4c12-aabf-a7bee6302671/clusters/dfd9de2d-6f0b-437b-a737-c8f7f176cd14/namespaces/923708f8-0435-45b5-8c00-fbdef3ffaf25/apps/f670bf11-8850-44bd-b330-815af6186a06/appSnaps/5cb608f9-571b-492e-a520-5bfb900a9b9c"
      ],
      "state": "running",
      "stateTransitions": [
        {
          "from": "running",
          "to": [
            "paused",
            "cancelled"
          ]
        },
        {
          "from": "paused",
          "to": [
            "running",

```

```

        "cancelled"
    ]
}
],
"stateDetails": [],
"orderHint": 0,
"percentDone": 20.25,
"startTime": "2020-08-06T12:24:52.256624Z",
"metadata": {
    "labels": [],
    "creationTimestamp": "2020-08-06T12:24:52.256624Z",
    "modificationTimestamp": "2020-08-06T12:24:52.256624Z",
    "createdBy": "00000000-0000-0000-0000-000000000000"
}
},
{
    "type": "application/astra-task",
    "version": "1.0",
    "id": "bc1e6561-9e22-406c-8a5a-762f4604da00",
    "name": "astra.backup",
    "summary": "Backup",
    "description": "Task to take a Backup for an application",
    "service": "nautilus",
    "resourceID": "736a0978-d55f-4841-8b7c-dc0c0f592c6f",
    "resourceURI": "/accounts/fdaa655c-15ab-4d34-aa61-1e9098e67be0/k8s/v1/apps/7c8bef49-697e-4fb4-810c-675cef4cf6c9/appBackups/736a0978-d55f-4841-8b7c-dc0c0f592c6f",
    "resourceCollectionURI": [
        "/accounts/fdaa655c-15ab-4d34-aa61-1e9098e67be0/topology/v1/clouds/0df3f1a0-7203-4c12-aabf-a7bee6302671/clusters/dfd9de2d-6f0b-437b-a737-c8f7f176cd14/namespaces/f8b58091-4b9c-4c64-9b40-018dbaf7c5de/apps/f670bf11-8850-44bd-b330-815af6186a06/appBackups/736a0978-d55f-4841-8b7c-dc0c0f592c6f",
        "/accounts/fdaa655c-15ab-4d34-aa61-1e9098e67be0/topology/v1/clouds/0df3f1a0-7203-4c12-aabf-a7bee6302671/clusters/dfd9de2d-6f0b-437b-a737-c8f7f176cd14/namespaces/923708f8-0435-45b5-8c00-fbdef3ffaf25/apps/f670bf11-8850-44bd-b330-815af6186a06/appBackups/736a0978-d55f-4841-8b7c-dc0c0f592c6f"
    ],
    "state": "completed",
    "stateTransitions": [
        {
            "from": "running",
            "to": [

```

```

        "paused",
        "cancelled"
    ]
},
{
    "from": "paused",
    "to": [
        "running",
        "cancelled"
    ]
}
],
"stateDetails": [],
"orderHint": 0,
"percentDone": 100,
"startTime": "2020-08-06T12:24:52.256624Z",
"endTime": "2020-08-06T12:26:52.256624Z",
"metadata": {
    "labels": [],
    "creationTimestamp": "2020-08-06T12:24:52.256624Z",
    "modificationTimestamp": "2020-08-06T12:24:52.256624Z",
    "createdBy": "00000000-0000-0000-0000-000000000000"
}
}
],
"metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
}
}

```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	

Name	Type	Required	Description
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

**Definitions**



## See Definitions

### type\_astra\_stateTransitions

Name	Type	Required	Description
from	string	True	
to	array[string]	True	

### type\_astra\_stateDetails

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.  
Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[ <a href="#">type_astra_label</a> ]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

### task\_1.0\_get\_response\_body

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "application/astra-task"</li> </ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "1.0"</li> </ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the UUIDv4 Schema</li> </ul>
name	string	True	JSON string containing a dot notation (.) hierarchical name for the task. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 3</li> <li>• Maximum length: 127</li> <li>• Defined regex is: <code>"^[a-z](\.[a-z])+\$"</code></li> </ul>
summary	string	True	JSON string containing the short-form summary of the task. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 3</li> <li>• Maximum length: 63</li> </ul>
description	string	True	JSON string containing a description of the task. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 511</li> </ul>

Name	Type	Required	Description
service	string	False	JSON string containing the name of the service that is managing the task. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 31</li> </ul>
parentTaskID	string	False	JSON string containing a globally unique identifier of a parent task of the task. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
resourceID	string	True	JSON string containing a globally unique identifier of the resource associated with the task. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
resourceURI	string	True	JSON string containing the URI associated with the task. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 3</li> <li>• Maximum length: 4095</li> </ul>
resourceCollectionURI	array[string]	True	JSON array of JSON strings, each indicating the fully-expanded access URL of the resource associated with the task. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 3</li> <li>• Maximum length: 4095</li> </ul>

Name	Type	Required	Description
state	string	True	<p>JSON string containing a value indicating the operational state of the task.</p> <p>Defined values are:</p> <ul style="list-style-type: none"><li>• "notStarted" - The task has not started executing.</li><li>• "running" - The task is running.</li><li>• "completed" - The task has completed.</li><li>• "pausing" - The task was requested to pause.</li><li>• "paused" - The task is paused.</li><li>• "cancelling" - The task was requested to cancel.</li><li>• "cancelled" - The task is cancelled.</li><li>• "failed" - The task has failed.</li><li>• Minimum length: 1</li><li>• Maximum length: 31</li></ul>

Name	Type	Required	Description
stateTransitions	array[type_astra_stateTransitions]	True	<p>JSON array of JSON objects, each representing the set of permitted state transitions from a given defined state. Each JSON object contains the fields "from" and "to", where the "from" value is the name of a state, and the "to" value is an array of permitted destination states.</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 31</li> </ul> <p>For example:  "stateTransitions" : [ { "from": "running", "to": ["paused", "cancelled"] }, { "from": "paused", "to": ["running", "cancelled"] }, ]</p>
stateDetails	array[type_astra_stateDetails]	True	<p>JSON array of JSON objects that lists additional details about the current "state". This field indicates when there are conditions or errors that prevent the actual state from matching the desired state. If no details are available, this array will be empty.</p> <ul style="list-style-type: none"> <li>• Minimum Items: 0</li> </ul>
orderHint	number	False	<p>JSON number representing the order of subtasks. This field can be used by the client to sort subtasks from smallest to largest.</p>

Name	Type	Required	Description
percentDone	number	False	JSON number containing the percentage complete for a running task. When the task is completed, this is set to "100".
startTime	string	False	JSON string containing the timestamp indicating when the task started. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>
endTime	string	False	JSON string containing the timestamp indicating when the task ended. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>
cancelTime	string	False	JSON string containing the timestamp indicating when the task was cancelled. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>

Name	Type	Required	Description
metadata	<a href="#">type_astra_metadata_update</a>	True	Client and service-specified metadata associated with the resource. Defined values are: <ul style="list-style-type: none"> <li>Conforms to the Astra Metadata Schema If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</li> </ul>

#### type\_astra\_metadata\_list

Name	Type	Required	Description
continue	string	False	
count	number	False	
labels	array[ <a href="#">type_astra_label</a> ]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

#### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Retrieve a task

GET /accounts/{account\_id}/core/v1/tasks/{task\_id}

Returns the stored Task API resource in the JSON response body.

## Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"><li>example: {{.Account}}</li></ul>
task_id	string	path	True	ID of the task collection to list

## Response

Status: 200, Returns the stored Task API resource in the JSON response body.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>"application/astra-task"</li></ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"><li>"1.0"</li></ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"><li>Conforms to the UUIDv4 Schema</li></ul>



Name	Type	Required	Description
name	string	True	JSON string containing a dot notation (.) hierarchical name for the task. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 3</li> <li>• Maximum length: 127</li> <li>• Defined regex is: "<code>^[a-z](\.[a-z])+\$</code>"</li> </ul>
summary	string	True	JSON string containing the short-form summary of the task. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 3</li> <li>• Maximum length: 63</li> </ul>
description	string	True	JSON string containing a description of the task. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 511</li> </ul>
service	string	False	JSON string containing the name of the service that is managing the task. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 31</li> </ul>
parentTaskID	string	False	JSON string containing a globally unique identifier of a parent task of the task. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
resourceID	string	True	<p>JSON string containing a globally unique identifier of the resource associated with the task. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
resourceURI	string	True	<p>JSON string containing the URI associated with the task. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 3</li> <li>• Maximum length: 4095</li> </ul>
resourceCollectionURI	array[string]	True	<p>JSON array of JSON strings, each indicating the fully-expanded access URL of the resource associated with the task. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 3</li> <li>• Maximum length: 4095</li> </ul>

Name	Type	Required	Description
state	string	True	<p>JSON string containing a value indicating the operational state of the task.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "notStarted" - The task has not started executing.</li> <li>• "running" - The task is running.</li> <li>• "completed" - The task has completed.</li> <li>• "pausing" - The task was requested to pause.</li> <li>• "paused" - The task is paused.</li> <li>• "cancelling" - The task was requested to cancel.</li> <li>• "cancelled" - The task is cancelled.</li> <li>• "failed" - The task has failed.</li> <li>• Minimum length: 1</li> <li>• Maximum length: 31</li> </ul>

Name	Type	Required	Description
stateTransitions	array[type_astra_stateTransitions]	True	<p>JSON array of JSON objects, each representing the set of permitted state transitions from a given defined state.</p> <p>Each JSON object contains the fields "from" and "to", where the "from" value is the name of a state, and the "to" value is an array of permitted destination states.</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 31</li> </ul> <p>For example:</p> <pre>"stateTransitions" : [ {   "from": "running", "to":   ["paused",   "cancelled"] }, { "from":   "paused", "to":   ["running",   "cancelled"] }, ]</pre>
stateDetails	array[type_astra_stateDetails]	True	<p>JSON array of JSON objects that lists additional details about the current "state". This field indicates when there are conditions or errors that prevent the actual state from matching the desired state.</p> <p>If no details are available, this array will be empty.</p> <ul style="list-style-type: none"> <li>• Minimum Items: 0</li> </ul>
orderHint	number	False	<p>JSON number representing the order of subtasks.</p> <p>This field can be used by the client to sort subtasks from smallest to largest.</p>

Name	Type	Required	Description
percentDone	number	False	JSON number containing the percentage complete for a running task. When the task is completed, this is set to "100".
startTime	string	False	JSON string containing the timestamp indicating when the task started. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>
endTime	string	False	JSON string containing the timestamp indicating when the task ended. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>
cancelTime	string	False	JSON string containing the timestamp indicating when the task was cancelled. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>
metadata	<a href="#">type_astra_metadata_update</a>	True	Client and service-specified metadata associated with the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</li> </ul>

## Example response

```
{
  "type": "application/astra-task",
  "version": "1.0",
  "id": "b1c006b2-2ebf-5dfb-994e-e807c184ac0a",
  "name": "astra.backup.prep",
  "summary": "Backup preparation",
  "description": "Task to prepare for the application backup",
  "service": "nautilus",
  "parentTaskID": "9cc8c321-6af1-406c-8158-2c6582c247f8",
  "resourceID": "626a0978-d55f-4841-8b7c-dc0c0f592c6f",
  "resourceURI": "/accounts/fdaa655c-15ab-4d34-aa61-1e9098e67be0/k8s/v1/apps/7c8bef49-697e-4fb4-810c-675cef4cf6c9/appSnaps/2b6dafc3-2172-4431-a482-6306b2703130",
  "resourceCollectionURI": [
    "/accounts/fdaa655c-15ab-4d34-aa61-1e9098e67be0/topology/v1/clouds/0df3f1a0-7203-4c12-aabf-a7bee6302671/clusters/dfd9de2d-6f0b-437b-a737-c8f7f176cd14/namespaces/f8b58091-4b9c-4c64-9b40-018dbaf7c5de/apps/f670bf11-8850-44bd-b330-815af6186a06/appSnaps/2b6dafc3-2172-4431-a482-6306b2703130",
    "/accounts/fdaa655c-15ab-4d34-aa61-1e9098e67be0/topology/v1/clouds/0df3f1a0-7203-4c12-aabf-a7bee6302671/clusters/dfd9de2d-6f0b-437b-a737-c8f7f176cd14/namespaces/923708f8-0435-45b5-8c00-fbdef3ffaf25/apps/f670bf11-8850-44bd-b330-815af6186a06/appSnaps/2b6dafc3-2172-4431-a482-6306b2703130"
  ],
  "state": "running",
  "stateTransitions": [
    {
      "from": "running",
      "to": [
        "paused",
        "cancelled"
      ]
    },
    {
      "from": "paused",
      "to": [
        "running",
        "cancelled"
      ]
    }
  ]
},
```

```
"stateDetails": [],
"orderHint": 0,
"percentDone": 20.25,
"startTime": "2020-08-06T12:24:52.256624Z",
"endTime": "2020-08-06T12:26:52.256624Z",
"metadata": {
  "labels": [],
  "creationTimestamp": "2022-10-06T20:58:16.305662Z",
  "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
  "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
}
}
```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

## Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	



## Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

## Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example error response

```
{
  "type": "https://astra.netapp.io/problems/1",
  "title": "Resource not found",
  "detail": "The resource specified in the request URI wasn't found.",
  "status": "404"
}
```

## Definitions

## See Definitions

### type\_astra\_stateTransitions

Name	Type	Required	Description
from	string	True	
to	array[string]	True	

### type\_astra\_stateDetails

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.  
Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[type_astra_label]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter

Name	Type	Required	Description
reason	string	True	Reason why the query parameter is invalid

# Token

## Token overview

The Token API provides CRUD (Create-Read-Update-Delete) access to token resources in order to allow users to create and manage API access tokens.

## Create a new token for a user

POST /accounts/{account\_id}/core/v1/users/{user\_id}/tokens

Indicates desired values for the Token API resource to be created.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"> <li>example: <code>{{.Account}}</code></li> </ul>
user_id	string	path	True	ID of the containing user resource

### Request Body

Indicates desired values for the Token API resource to be created.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"> <li>"application/astra-token"</li> </ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>"1.0"</li> </ul>

Name	Type	Required	Description
name	string	True	<p>JSON string containing a token name.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> <li>• This string is internally validated to prevent XSS, Unicode, directory traversal, and SQL-injection attacks.</li> </ul>
metadata	<a href="#">type_astra_metadata_update</a>	False	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</li> </ul>

### Example request

```
{
  "type": "application/astra-token",
  "version": "1.0",
  "name": "Snapshot Script"
}
```

### Response

Status: 201, Returns the newly created token resource in the JSON response body.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>• "application/astra-token"</li></ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"><li>• "1.0"</li></ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"><li>• Conforms to the UUIDv4 Schema</li></ul>
name	string	True	JSON string containing a token name. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 1</li><li>• Maximum length: 63</li><li>• This string is internally validated to prevent XSS, Unicode, directory traversal, and SQL-injection attacks.</li></ul>
userID	string	True	JSON string containing the UUID for the user that the token is associated with. Defined values are: <ul style="list-style-type: none"><li>• Conforms to the Astra Identifier Schema</li></ul>

Name	Type	Required	Description
token	string	True	<p>JSON string containing a base64-encoded system-generated API token.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the base64 Encoded Data Schema</li> </ul>
metadata	<a href="#">type_astra_metadata_update</a>	True	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</li> </ul>

### Example response

```

{
  "type": "application/astra-token",
  "version": "1.0",
  "id": "822fab12-c224-5d1f-8118-5fb5d2def8b9",
  "name": "Snapshot Script",
  "userID": "09f8933c-ad74-4f4e-8ef5-1ffaa0fb8e9b",
  "token": "QSBKV1QgVG9rZW4gd291bGQgZ28gaGVyZS4=",
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}

```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

## Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 409, Conflict

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

### Example response

```
{
  "type": "https://astra.netapp.io/problems/10",
  "title": "JSON resource conflict",
  "detail": "The request body JSON contains a field that conflicts with an idempotent value.",
  "status": "409"
}
```

### Response

Status: 403, Forbidden



Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

## Definitions

### See Definitions

type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[type_astra_label]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

invalidFields

Name	Type	Required	Description
name	string	True	Name of the invalid request body field
reason	string	True	Reason why the request body field is invalid

## List the tokens for a user

GET /accounts/{account\_id}/core/v1/users/{user\_id}/tokens

Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"><li>example: {{.Account}}</li></ul>
user_id	string	path	True	ID of the containing user resource
include	string	query	False	Indicates which fields should be returned when listing a collection.  URL examples: "include=id", "include=id,name"  OpenAPI examples: "id" <ul style="list-style-type: none"><li>example: id,name</li></ul>
limit	string	query	False	Indicates the maximum number of resources to return when listing a collection.  URL examples: "limit=2"  OpenAPI examples: "2"

Name	Type	In	Required	Description
filter	string	query	False	<p>Indicates which fields should be matched in order to return a resource when listing a collection.</p> <p>Supported operators are:</p> <ul style="list-style-type: none"> <li>• eq - Equality</li> <li>• lt/gt - Less than/Greater than</li> <li>• lte/gte - Less than or equals to/Greater than or equals to</li> </ul> <p>URL example: "filter=field%20eq%20%27value%27"</p> <p>OpenAPI examples: "field eq 'value'"</p>
orderBy	string	query	False	<p>Indicates the sort order of resource when listing a collection.</p> <p>URL examples: "orderBy=name", "orderBy=name%20desc"</p> <p>OpenAPI examples: "name desc"</p>
skip	string	query	False	<p>Indicates the number of resources to skip over when listing a collection.</p> <p>URL examples: "skip=1"</p> <p>OpenAPI examples: "1"</p>

Name	Type	In	Required	Description
count	string	query	False	Indicates if the total number of resources should be returned in the metadata object.  URL examples: "count=true"  OpenAPI examples: "true"
continue		query	False	Indicates the token to resume listing from.  URL examples: "continue=<continue token="" from="" collection="" metadata=""></continue>  OpenAPI examples: "<continue token="" from="" collection="" metadata=""></continue>&lt;/continue&gt;"

## Response

Status: 200, Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

Name	Type	Required	Description
items	array[Any of: <a href="#">token_1.0_get_response_body</a> , array[]]	True	
metadata	<a href="#">type_astra_metadata_list</a>	True	

## Example response

```
{
  "type": "application/astra-tokens",
  "version": "1.0",
  "items": [
    [
      "4e99da96-152e-4aee-9207-4b6d04d2238d",
      "Snapshot Script"
    ],
    [
      "43ab09af-e558-4b1b-a6d5-49df7c39f22c",
      "Snapshot Taker"
    ],
    [
      "cca48856-9e25-4170-b49a-d32265c5e5f1",
      "Volume Checker"
    ]
  ],
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	

Name	Type	Required	Description
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't found.",
  "status": "404"
}
```



## Definitions

## See Definitions

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[type_astra_label]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

### token\_1.0\_get\_response\_body

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>• "application/astra-token"</li></ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"><li>• "1.0"</li></ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"><li>• Conforms to the UUIDv4 Schema</li></ul>

Name	Type	Required	Description
name	string	True	JSON string containing a token name. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> <li>• This string is internally validated to prevent XSS, Unicode, directory traversal, and SQL-injection attacks.</li> </ul>
userID	string	True	JSON string containing the UUID for the user that the token is associated with. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
metadata	<a href="#">type_astra_metadata_update</a>	True	Client and service-specified metadata associated with the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</li> </ul>

type\_astra\_metadata\_list

Name	Type	Required	Description
continue	string	False	

Name	Type	Required	Description
count	number	False	
labels	array[type_astra_label]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

#### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Retrieve a token

GET /accounts/{account\_id}/core/v1/users/{user\_id}/tokens/{token\_id}

Returns the stored Token API resource in the JSON response body.

- The "token" key/value will not be returned.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource  • example: {{.Account}}
user_id	string	path	True	ID of the containing user resource
token_id	string	path	True	ID of the token collection to list

### Response

Status: 200

Returns the stored Token API resource in the JSON response body.

- The "token" key/value will not be returned.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>• "application/astra-token"</li></ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"><li>• "1.0"</li></ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"><li>• Conforms to the UUIDv4 Schema</li></ul>
name	string	True	JSON string containing a token name. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 1</li><li>• Maximum length: 63</li><li>• This string is internally validated to prevent XSS, Unicode, directory traversal, and SQL-injection attacks.</li></ul>
userID	string	True	JSON string containing the UUID for the user that the token is associated with. Defined values are: <ul style="list-style-type: none"><li>• Conforms to the Astra Identifier Schema</li></ul>

Name	Type	Required	Description
metadata	<a href="#">type_astra_metadata_update</a>	True	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>Conforms to the Astra Metadata Schema</li> </ul> <p>If not specified on create, a metadata object will be created with no labels.</p> <p>If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</p>

### Example response

```
{
  "type": "application/astra-token",
  "version": "1.0",
  "id": "822fab12-c224-5d1f-8118-5fb5d2def8b9",
  "name": "Snapshot Script",
  "userID": "09f8933c-ad74-4f4e-8ef5-1ffaa0fb8e9b",
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

### Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	

Name	Type	Required	Description
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

## Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

## Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	



## Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

## Definitions

## See Definitions

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[type_astra_label]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Modify a token

PUT /accounts/{account\_id}/core/v1/users/{user\_id}/tokens/{token\_id}

Replaces the entire stored resource with the supplied JSON request body while preserving key values that are not user-modifiable.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource  • example: {{.Account}}
user_id	string	path	True	ID of the containing user resource
token_id	string	path	True	ID of the token collection to list

### Request Body

Replaces the entire stored resource with the supplied JSON request body while preserving key values that are not user-modifiable.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are:  • "application/astra-token"
version	string	True	Version of the resource. Defined values are:  • "1.0"
id	string	False	Globally unique identifier of the resource. Defined values are:  • Conforms to the UUIDv4 Schema

Name	Type	Required	Description
name	string	False	<p>JSON string containing a token name.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> <li>• This string is internally validated to prevent XSS, Unicode, directory traversal, and SQL-injection attacks.</li> </ul>
userID	string	False	<p>JSON string containing the UUID for the user that the token is associated with.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
metadata	type_astra_metadata_update	False	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</li> </ul>

### Example request

```
{
  "type": "application/astra-token",
  "version": "1.0",
  "name": "New Token Name"
}
```

### Response

Status: 204, Indicates if the token resource was updated.

### Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 409, Conflict

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

### Example response

```
{
  "type": "https://astra.netapp.io/problems/10",
  "title": "JSON resource conflict",
  "detail": "The request body JSON contains a field that conflicts with
an idempotent value.",
  "status": "409"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	

Name	Type	Required	Description
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/1",
  "title": "Resource not found",
  "detail": "The resource specified in the request URI wasn't found.",
  "status": "404"
}
```

### Definitions



## See Definitions

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[type_astra_label]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

### invalidFields

Name	Type	Required	Description
name	string	True	Name of the invalid request body field
reason	string	True	Reason why the request body field is invalid

## Delete a token

DELETE /accounts/{account\_id}/core/v1/users/{user\_id}/tokens/{token\_id}

Removes the specified Token API resource.

### Side Effects

- The corresponding API token credential is removed from the credential service as a side effect.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource  • example: {{.Account}}
user_id	string	path	True	ID of the containing user resource
token_id	string	path	True	ID of the token collection to list

### Response

Status: 204, Indicates if the token resource was deleted.

### Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	

Name	Type	Required	Description
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/1",
  "title": "Resource not found",
  "detail": "The resource specified in the request URI wasn't found.",
  "status": "404"
}
```

### Definitions

## See Definitions

invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

# Unread Notification

## Unread Notification overview

The Unread Notification API provides CRUD (Create-Read-Update-Delete) access to unreadNotification resources in order to provide a view into which notifications have not been read by a given user and to allow them to be marked as read.

## List the unread notifications for a user

GET /accounts/{account\_id}/core/v1/users/{user\_id}/unreadNotifications

Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

## Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource  • example: {{.Account}}
user_id	string	path	True	ID of the containing user resource

Name	Type	In	Required	Description
include	string	query	False	<p>Indicates which fields should be returned when listing a collection.</p> <p>URL examples:  "include=id",  "include=id,name"</p> <p>OpenAPI examples:  "id"</p> <ul style="list-style-type: none"> <li>example:  notificationID,sequenceCount</li> </ul>
limit	string	query	False	<p>Indicates the maximum number of resources to return when listing a collection.</p> <p>URL examples:  "limit=2"</p> <p>OpenAPI examples:  "2"</p> <ul style="list-style-type: none"> <li>example: 2</li> </ul>

Name	Type	In	Required	Description
filter	string	query	False	<p>Indicates which fields should be matched in order to return a resource when listing a collection.</p> <p>Supported operators are:</p> <ul style="list-style-type: none"> <li>• eq - Equality</li> <li>• lt/gt - Less than/Greater than</li> <li>• lte/gte - Less than or equals to/Greater than or equals to</li> </ul> <p>URL example: "filter=field%20eq%20%27value%27"</p> <p>OpenAPI examples: "field eq 'value'"</p>
orderBy	string	query	False	<p>Indicates the sort order of resource when listing a collection.</p> <p>URL examples: "orderBy=name", "orderBy=name%20desc"</p> <p>OpenAPI examples: "name desc"</p> <ul style="list-style-type: none"> <li>• example: count%20desc</li> </ul>

Name	Type	In	Required	Description
skip	string	query	False	<p>Indicates the number of resources to skip over when listing a collection.</p> <p>URL examples: "skip=1"</p> <p>OpenAPI examples: "1"</p>
count	string	query	False	<p>Indicates if the total number of resources should be returned in the metadata object.</p> <p>URL examples: "count=true"</p> <p>OpenAPI examples: "true"</p> <ul style="list-style-type: none"> <li>• example: true</li> </ul>
continue		query	False	<p>Indicates the token to resume listing from.</p> <p>URL examples: "continue=&lt;continue token="" from="" collection="" metadata=""&gt;"&lt;/continue&gt;</p> <p>OpenAPI examples: "&lt;continue token="" from="" collection="" metadata=""&gt;"&lt;/continue&gt;&amp;lt;/continue&amp;gt;</p>

## Response

Status: 200, Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.



Name	Type	Required	Description
items	array[Any of: unreadNotification_1.0_get_response_body, array[]]	True	
metadata	type_astra_metadata_list	True	

### Example response

```
{
  "type": "application/astra-unreadNotifications",
  "version": "1.0",
  "items": [
    [
      "4080cf5f-2261-4130-b8fb-8432e2e553e6",
      48923
    ],
    [
      "1b4e89f1-2e70-4a08-a015-e7064b0fb703",
      47345
    ]
  ],
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

### Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	

Name	Type	Required	Description
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't found.",
  "status": "404"
}
```

**Definitions**

## See Definitions

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### type\_astra\_metadata

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema

Name	Type	Required	Description
labels	array[type_astra_label]	True	
creationTimestamp	string	True	
modificationTimestamp	string	True	
createdBy	string	True	
modifiedBy	string	False	

### unreadNotification\_1.0\_get\_response\_body

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>• "application/astra-unreadNotification"</li></ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"><li>• "1.0"</li></ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"><li>• Conforms to the UUIDv4 Schema</li></ul>

<b>Name</b>	<b>Type</b>	<b>Required</b>	<b>Description</b>
notificationID	string	True	JSON string containing a notification ID that is to be marked as read by the user creating the mark. Defined values are: <ul style="list-style-type: none"><li>• Conforms to the Astra Identifier Schema</li></ul>
sequenceCount	number	True	JSON number containing a sequence count associated with the notification specified by the notification ID.

Name	Type	Required	Description
severity	string	True	<p>JSON string containing one of the following values that indicate the severity of the event. Defined values are:</p> <ul style="list-style-type: none"> <li>• "cleared" - Indicates that a previously reported event describing a condition is no longer active. An event with severity "cleared" will use the same summary and correlation ID to enable it to be matched up</li> <li>• "indeterminate" - Indicates that the severity cannot be determined</li> <li>• "informational" - Indicates a change in state that is both expected and normal (not defined in X.733)</li> <li>• "warning" - Indicates the detection of a potential or impending service-affecting fault before any significant effects have been felt</li> <li>• "critical" - Indicates that a service-affecting condition has occurred and immediate corrective action is required</li> </ul>

Name	Type	Required	Description
metadata	<a href="#">type_astra_metadata</a>	True	Client and service-specified metadata associated with the resource. Defined values are: <ul style="list-style-type: none"> <li>Conforms to the Astra Metadata Schema</li> </ul>

#### type\_astra\_metadata\_list

Name	Type	Required	Description
continue	string	False	
count	number	False	
labels	array[ <a href="#">type_astra_label</a> ]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

#### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Retrieve an unread notification

GET

/accounts/{account\_id}/core/v1/users/{user\_id}/unreadNotifications/{unreadNotification\_id}

Returns the stored Unread Notification API resource in the JSON response body.

### Parameters



Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"> <li>example: <code>{{.Account}}</code></li> </ul>
user_id	string	path	True	ID of the containing user resource
unreadNotification_id	string	path	True	ID of the unreadNotification collection to list

## Response

Status: 200, Returns the stored Unread Notification API resource in the JSON response body.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"> <li>"application/astra-unreadNotification"</li> </ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>"1.0"</li> </ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>Conforms to the UUIDv4 Schema</li> </ul>
notificationID	string	True	JSON string containing a notification ID that is to be marked as read by the user creating the mark. Defined values are: <ul style="list-style-type: none"> <li>Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
sequenceCount	number	True	JSON number containing a sequence count associated with the notification specified by the notification ID.
severity	string	True	<p>JSON string containing one of the following values that indicate the severity of the event. Defined values are:</p> <ul style="list-style-type: none"> <li>• "cleared" - Indicates that a previously reported event describing a condition is no longer active. An event with severity "cleared" will use the same summary and correlation ID to enable it to be matched up</li> <li>• "indeterminate" - Indicates that the severity cannot be determined</li> <li>• "informational" - Indicates a change in state that is both expected and normal (not defined in X.733)</li> <li>• "warning" - Indicates the detection of a potential or impending service-affecting fault before any significant effects have been felt</li> <li>• "critical" - Indicates that a service-affecting condition has occurred and immediate corrective action is required</li> </ul>

Name	Type	Required	Description
metadata	<a href="#">type_astra_metadata</a>	True	Client and service-specified metadata associated with the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema</li> </ul>

### Example response

```
{
  "type": "application/astra-unreadNotification",
  "version": "1.0",
  "id": "10df997b-629e-50f8-bc5f-a18b9a4ac5f6",
  "notificationID": "4080cf5f-2261-4130-b8fb-8432e2e553e6",
  "sequenceCount": 48923,
  "severity": "warning",
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

### Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

## Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

## Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

## Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	

Name	Type	Required	Description
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't found.",
  "status": "404"
}
```

## Definitions

### See Definitions

#### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

#### type\_astra\_metadata

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema

Name	Type	Required	Description
labels	array[type_astra_label]	True	
creationTimestamp	string	True	
modificationTimestamp	string	True	
createdBy	string	True	
modifiedBy	string	False	

#### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Delete an unread notification

DELETE

/accounts/{account\_id}/core/v1/users/{user\_id}/unreadNotifications/{unreadNotification\_id}

Removes the specified Unread Notification API resource.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource  • example: {{.Account}}
user_id	string	path	True	ID of the containing user resource
unreadNotification_id	string	path	True	ID of the unreadNotification collection to list

### Response

Status: 204, Indicates if the unreadNotification resource was deleted.

### Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

## Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

## Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

## Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	



## Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

## Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example error response

```
{
  "type": "https://astra.netapp.io/problems/1",
  "title": "Resource not found",
  "detail": "The resource specified in the request URI wasn't found.",
  "status": "404"
}
```

## Definitions

## See Definitions

invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

# Upgrade

## Upgrade overview

The Upgrade App API provides CRUD (Create-Read-Update-Delete) access to software components that are eligible for upgrade, and to initiate upgrades. The availability of upgrades is determined based on packages registered with the Packages API.

## List all upgrades

GET `/accounts/{account_id}/core/v1/upgrades`

Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

## Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"><li>example: {{.Account}}</li></ul>

Name	Type	In	Required	Description
include	string	query	False	<p>Indicates which fields should be returned when listing a collection.</p> <p>URL examples:  "include=id",  "include=id,name"</p> <p>OpenAPI examples:  "id"</p> <ul style="list-style-type: none"> <li>example:  id,componentName,upgradeVersion</li> </ul>
limit	string	query	False	<p>Indicates the maximum number of resources to return when listing a collection.</p> <p>URL examples:  "limit=2"</p> <p>OpenAPI examples:  "2"</p>

Name	Type	In	Required	Description
filter	string	query	False	<p>Indicates which fields should be matched in order to return a resource when listing a collection.</p> <p>Supported operators are:</p> <ul style="list-style-type: none"> <li>• eq - Equality</li> <li>• lt/gt - Less than/Greater than</li> <li>• lte/gte - Less than or equals to/Greater than or equals to</li> </ul> <p>URL example: "filter=field%20eq%20%27value%27"</p> <p>OpenAPI examples: "field eq 'value'"</p>

## Response

Status: 200, Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

Name	Type	Required	Description
items	array[Any of: <a href="#">upgrade_1.1_get_response_body</a> , array[]]	True	
metadata	<a href="#">type_astra_metadata_list</a>	True	

## Example response

```
{
  "type": "application/astra-upgrades",
  "version": "1.1",
  "items": [
    [
      "01982783-b1eb-4dca-a3fe-a385a3186c53",
      "acc",
      "21.07.1"
    ],
    [
      "0a5abab2-39b2-4101-87b9-0d9b8f537ca1",
      "acc",
      "21.07.2"
    ]
  ],
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	

Name	Type	Required	Description
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't found.",
  "status": "404"
}
```

## Definitions



## See Definitions

### type\_astra\_stateDetails

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[ <a href="#">type_astra_label</a> ]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

### upgrade\_1.1\_get\_response\_body

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>• "application/astra-upgrade"</li></ul>

Name	Type	Required	Description
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "1.0"</li> <li>• "1.1"</li> </ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the UUIDv4 Schema</li> </ul>
componentName	string	True	JSON string containing the name of the type of software that can be upgraded. Defined values are: <ul style="list-style-type: none"> <li>• "acc"</li> <li>• "acs"</li> <li>• "trident"</li> <li>• "kubernetes"</li> </ul>
componentInstance	string	True	JSON string containing the URI of the component that can be upgraded. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 3</li> <li>• Maximum length: 4095</li> </ul>
componentID	string	True	JSON string containing a globally unique identifier of the component that can be upgraded. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
upgradeVersion	string	True	<p>JSON string containing the SemVer of the software image file that can be upgraded to. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the SemVer Schema</li> </ul>
currentVersion	string	True	<p>JSON string containing the current SemVer of the entity to be upgraded. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the SemVer Schema</li> </ul>
dependencies	array[string]	True	<p>JSON array of JSON strings, each containing the UUID of an upgrade that must be completed before this upgrade can proceed. Used to determine which upgrades will be performed as prerequisites and in which order. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
state	string	True	<p>JSON string containing a value indicating the operational state of the upgrade.</p> <p>If auto-upgrade is enabled, upgrades will start in the "scheduled" state. Otherwise, upgrades will start in the "proposed" state.</p> <p>Defined values are:</p> <ul style="list-style-type: none"><li>• "unavailable" - The upgrade is not available at this time</li><li>• "proposed" - The upgrade is proposed but will not automatically run until approved</li><li>• "scheduled" - The upgrade is approved but is not ready to be installed due to dependencies, time windows, or available resources</li><li>• "running" - The upgrade is in progress</li><li>• "complete" - The upgrade has completed</li><li>• "failed" - The upgrade did not complete</li></ul>

Name	Type	Required	Description
stateDesired	string	True	<p>JSON string containing a value indicating the desired state for "state". This field is only included when the user can directly request a change in the state of the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "proposed" - The upgrade is not approved and must not be performed</li> <li>• "scheduled" - The upgrade is approved and must be performed in the specified time window</li> <li>• "running" - The upgrade must be performed immediately, regardless of the time window</li> </ul>
stateDetails	array[ <a href="#">type_astra_stateDetails</a> ]	True	<p>JSON array of JSON objects that lists additional details about the current "state". If no details are available, this array will be empty.</p> <ul style="list-style-type: none"> <li>• Minimum Items: 0</li> </ul>

Name	Type	Required	Description
metadata	<a href="#">type_astra_metadata_update</a>	True	Client and service-specified metadata associated with the resource. Defined values are: <ul style="list-style-type: none"> <li>Conforms to the Astra Metadata Schema If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</li> </ul>

#### type\_astra\_metadata\_list

Name	Type	Required	Description
continue	string	False	
count	number	False	
labels	array[ <a href="#">type_astra_label</a> ]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

#### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Retrieve an upgrade

GET /accounts/{account\_id}/core/v1/upgrades/{upgrade\_id}

Returns the stored Upgrade API resource in the JSON response body.

## Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"><li>example: {{.Account}}</li></ul>
upgrade_id	string	path	True	ID of the upgrade collection to list

## Response

Status: 200, Returns the stored Upgrade API resource in the JSON response body.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>"application/astra-upgrade"</li></ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"><li>"1.0"</li><li>"1.1"</li></ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"><li>Conforms to the UUIDv4 Schema</li></ul>

Name	Type	Required	Description
componentName	string	True	<p>JSON string containing the name of the type of software that can be upgraded.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "acc"</li> <li>• "acs"</li> <li>• "trident"</li> <li>• "kubernetes"</li> </ul>
componentInstance	string	True	<p>JSON string containing the URI of the component that can be upgraded.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 3</li> <li>• Maximum length: 4095</li> </ul>
componentID	string	True	<p>JSON string containing a globally unique identifier of the component that can be upgraded.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
upgradeVersion	string	True	<p>JSON string containing the SemVer of the software image file that can be upgraded to.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the SemVer Schema</li> </ul>
currentVersion	string	True	<p>JSON string containing the current SemVer of the entity to be upgraded.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the SemVer Schema</li> </ul>



Name	Type	Required	Description
dependencies	array[string]	True	<p>JSON array of JSON strings, each containing the UUID of an upgrade that must be completed before this upgrade can proceed. Used to determine which upgrades will be performed as prerequisites and in which order.</p> <p>Defined values are:</p> <ul style="list-style-type: none"><li>• Conforms to the Astra Identifier Schema</li></ul>

Name	Type	Required	Description
state	string	True	<p>JSON string containing a value indicating the operational state of the upgrade.</p> <p>If auto-upgrade is enabled, upgrades will start in the "scheduled" state. Otherwise, upgrades will start in the "proposed" state.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "unavailable" - The upgrade is not available at this time</li> <li>• "proposed" - The upgrade is proposed but will not automatically run until approved</li> <li>• "scheduled" - The upgrade is approved but is not ready to be installed due to dependencies, time windows, or available resources</li> <li>• "running" - The upgrade is in progress</li> <li>• "complete" - The upgrade has completed</li> <li>• "failed" - The upgrade did not complete</li> </ul>

Name	Type	Required	Description
stateDesired	string	True	<p>JSON string containing a value indicating the desired state for "state". This field is only included when the user can directly request a change in the state of the resource. Defined values are:</p> <ul style="list-style-type: none"> <li>• "proposed" - The upgrade is not approved and must not be performed</li> <li>• "scheduled" - The upgrade is approved and must be performed in the specified time window</li> <li>• "running" - The upgrade must be performed immediately, regardless of the time window</li> </ul>
stateDetails	array[type_astra_stateDetails]	True	<p>JSON array of JSON objects that lists additional details about the current "state". If no details are available, this array will be empty.</p> <ul style="list-style-type: none"> <li>• Minimum Items: 0</li> </ul>
metadata	type_astra_metadata_update	True	<p>Client and service-specified metadata associated with the resource. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</li> </ul>

## Example response

```
{
  "type": "application/astra-upgrade",
  "version": "1.1",
  "id": "aa9a8e88-c012-55b1-b514-7cd94dc79008",
  "componentName": "trident",
  "componentInstance": "https://<dns_name>/accounts/0b311ae7-d89a-4a11-
a52c-1349ca090415/topology/v1/clouds/fdda3ff3-a46a-43a4-902e-
444fde2baeba/storageBackends/72d19c3c-eb43-4bec-b23e-a228c900aded",
  "componentID": "72d19c3c-eb43-4bec-b23e-a228c900aded",
  "upgradeVersion": "21.07.1",
  "currentVersion": "21.04.1",
  "dependencies": [],
  "state": "scheduled",
  "stateDesired": "scheduled",
  "stateDetails": [],
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	

Name	Type	Required	Description
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't found.",
  "status": "404"
}
```

## Definitions

### See Definitions

#### type\_astra\_stateDetails

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	

#### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

#### type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[ <a href="#">type_astra_label</a> ]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

#### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Modify an upgrade

PUT /accounts/{account\_id}/core/v1/upgrades/{upgrade\_id}

Replaces the entire stored resource with the supplied JSON request body while preserving key values that are not user-modifiable.

### Side Effects

- Upgrades are scheduled or run based on desired state.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"><li>• example: <code>{{.Account}}</code></li></ul>
upgrade_id	string	path	True	ID of the upgrade collection to list

### Request Body

Replaces the entire stored resource with the supplied JSON request body while preserving key values that are not user-modifiable.

### Side Effects

- Upgrades are scheduled or run based on desired state.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>• "application/astra-upgrade"</li></ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"><li>• "1.0"</li><li>• "1.1"</li></ul>



Name	Type	Required	Description
id	string	False	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the UUIDv4 Schema</li> </ul>
componentName	string	False	JSON string containing the name of the type of software that can be upgraded. Defined values are: <ul style="list-style-type: none"> <li>• "acc"</li> <li>• "acs"</li> <li>• "trident"</li> <li>• "kubernetes"</li> </ul>
componentInstance	string	False	JSON string containing the URI of the component that can be upgraded. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 3</li> <li>• Maximum length: 4095</li> </ul>
componentID	string	False	JSON string containing a globally unique identifier of the component that can be upgraded. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
upgradeVersion	string	False	JSON string containing the SemVer of the software image file that can be upgraded to. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the SemVer Schema</li> </ul>

Name	Type	Required	Description
currentVersion	string	False	<p>JSON string containing the current SemVer of the entity to be upgraded. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the SemVer Schema</li> </ul>
dependencies	array[string]	False	<p>JSON array of JSON strings, each containing the UUID of an upgrade that must be completed before this upgrade can proceed. Used to determine which upgrades will be performed as prerequisites and in which order. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
state	string	False	<p>JSON string containing a value indicating the operational state of the upgrade.</p> <p>If auto-upgrade is enabled, upgrades will start in the "scheduled" state. Otherwise, upgrades will start in the "proposed" state.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "unavailable" - The upgrade is not available at this time</li> <li>• "proposed" - The upgrade is proposed but will not automatically run until approved</li> <li>• "scheduled" - The upgrade is approved but is not ready to be installed due to dependencies, time windows, or available resources</li> <li>• "running" - The upgrade is in progress</li> <li>• "complete" - The upgrade has completed</li> <li>• "failed" - The upgrade did not complete</li> </ul>

Name	Type	Required	Description
stateDesired	string	False	<p>JSON string containing a value indicating the desired state for "state". This field is only included when the user can directly request a change in the state of the resource. Defined values are:</p> <ul style="list-style-type: none"> <li>• "proposed" - The upgrade is not approved and must not be performed</li> <li>• "scheduled" - The upgrade is approved and must be performed in the specified time window</li> <li>• "running" - The upgrade must be performed immediately, regardless of the time window</li> </ul>
stateDetails	array[type_astra_stateDetails]	False	<p>JSON array of JSON objects that lists additional details about the current "state". If no details are available, this array will be empty.</p> <ul style="list-style-type: none"> <li>• Minimum Items: 0</li> </ul>
metadata	type_astra_metadata_update	False	<p>Client and service-specified metadata associated with the resource. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</li> </ul>

### Example request

```
{
  "type": "application/astra-upgrade",
  "version": "1.1",
  "stateDesired": "running"
}
```

### Response

Status: 204, Indicates if the upgrade resource was updated.

### Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 409, Conflict

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

### Example response

```
{
  "type": "https://astra.netapp.io/problems/10",
  "title": "JSON resource conflict",
  "detail": "The request body JSON contains a field that conflicts with
an idempotent value.",
  "status": "409"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	

Name	Type	Required	Description
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{  
  "type": "https://astra.netapp.io/problems/1",  
  "title": "Resource not found",  
  "detail": "The resource specified in the request URI wasn't found.",  
  "status": "404"  
}
```

### Definitions



## See Definitions

### type\_astra\_stateDetails

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[ <a href="#">type_astra_label</a> ]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

### invalidFields

Name	Type	Required	Description
name	string	True	Name of the invalid request body field
reason	string	True	Reason why the request body field is invalid

# User

## User overview

The User API provides CRUD (Create-Read-Update-Delete) access to user resources in order to represent users who are able to interact with the system.

## Create a new user

POST /accounts/{account\_id}/core/v1/users

Indicates desired values for the User API resource to be created.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"> <li>example: <code>{{.Account}}</code></li> </ul>

### Request Body

Indicates desired values for the User API resource to be created.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"> <li>"application/astra-user"</li> </ul>

Name	Type	Required	Description
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "1.0"</li> <li>• "1.1"</li> <li>• "1.2"</li> </ul>
authID	string	False	JSON string containing the identifier associated with an external identity provider. The contents of this string depend on the specified authProvider. For a user with "authProvider" as "local", "authID" is set to the value of "email". For a user with "authProvider" as "ldap", "authID" is set to its Distinguished Name (DN) from the LDAP server.

Name	Type	Required	Description
authProvider	string	False	<p>JSON string indicating the context of the idAuth identifier.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "cloud-central" - User authentication comes from the NetApp Cloud Central service</li> <li>• "local" - User authentication comes from the local user/password store</li> <li>• "ldap" - User authentication comes from an external LDAP server In Astra Control Center, all users are required to have a value of "local", or "ldap". If a value is not specified, a default value of "local" is chosen. In Astra Control Service, "authProvider" as "local", or "ldap" is not supported. If a value is not specified, it will default to "cloud-central".</li> </ul>
firstName	string	False	<p>JSON string containing a user-specified long form first name.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 0</li> <li>• Maximum length: 63</li> <li>• This string is internally validated to prevent XSS, Unicode, directory traversal, and SQL-injection attacks</li> </ul>

Name	Type	Required	Description
lastName	string	False	<p>JSON string containing a user-specified long-form last name.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 0</li> <li>• Maximum length: 63</li> <li>• This string is internally validated to prevent XSS, Unicode, directory traversal, and SQL-injection attacks</li> </ul>
companyName	string	False	<p>JSON string containing the company name associated with the user. If this key does not exist, it indicates that a company name has not been provided.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> <li>• This string is internally validated to prevent XSS, Unicode, directory traversal, and SQL-injection attacks</li> </ul>
email	string	True	<p>JSON strings containing a user-specified email address.</p>
phone	string	False	<p>JSON string containing the phone number of the user. If this key does not exist, it indicates that a phone number has not been provided.</p>

Name	Type	Required	Description
postalAddress	<a href="#">postalAddress</a>	False	<p>JSON object containing a collection of fields that specifies an address. If this key does not exist, it indicates that an address has not been provided. If this key exists, all six of the contained fields will be present. If nothing was provided by the user, the string will be empty.</p>
sendWelcomeEmail	string	False	<p>JSON string indicating whether a welcome email will be sent after validation. If not specified on create, the value will be set to "true" for ACS and "false" for Astra Control Center.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - A welcome email will be sent; default value on create</li> <li>• "false" - A welcome email will not be sent For a user with "authProvider" as "local" or "ldap", this value is ignored and is set to "false".</li> </ul>

Name	Type	Required	Description
metadata	type_astra_metadata_update	False	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>Conforms to the Astra Metadata Schema</li> </ul> <p>If not specified on create, a metadata object will be created with no labels.</p> <p>If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</p>

### Example request

```
{
  "type": "application/astra-user",
  "version": "1.2",
  "firstName": "John",
  "lastName": "Doe",
  "email": "<a href='mailto:jdoe@example.com'>jdoe@example.com</a>"
}
```

### Response

Status: 201, Returns the newly created user resource in the JSON response body.

Name	Type	Required	Description
type	string	True	<p>Media type of the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>"application/astra-user"</li> </ul>

Name	Type	Required	Description
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "1.0"</li> <li>• "1.1"</li> <li>• "1.2"</li> </ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the UUIDv4 Schema</li> </ul>
state	string	True	JSON string containing a value indicating the operational state of the user. Defined values are: <ul style="list-style-type: none"> <li>• "pending" - The user account is in the process of being created. The user can only read and modify the user resource (default value).</li> <li>• This state is not valid for a user with "authProvider" as "local"</li> <li>• "active" - The user account is operational (The user can log in if the account setting "isEnabled" is "true").</li> <li>• This is the default value for a user with "authProvider" as "local"</li> <li>• "suspended" - The user account is suspended (The user cannot log in regardless of account "isEnabled" setting).</li> </ul>



Name	Type	Required	Description
isEnabled	string	True	<p>JSON string indicating if the user is allowed to log in.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - The user is allowed to log in; default value on create.</li> <li>• "false" - The user is not allowed to log in.</li> </ul>
authID	string	False	<p>JSON string containing the identifier associated with an external identity provider.</p> <p>The contents of this string depend on the specified authProvider.</p> <p>For a user with "authProvider" as "local", "authID" is set to the value of "email".</p> <p>For a user with "authProvider" as "ldap", "authID" is set to its Distinguished Name (DN) from the LDAP server.</p>

Name	Type	Required	Description
authProvider	string	False	<p>JSON string indicating the context of the idAuth identifier.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "cloud-central" - User authentication comes from the NetApp Cloud Central service</li> <li>• "local" - User authentication comes from the local user/password store</li> <li>• "Idap" - User authentication comes from an external LDAP server In Astra Control Center, all users are required to have a value of "local", or "Idap". If a value is not specified, a default value of "local" is chosen. In Astra Control Service, "authProvider" as "local", or "Idap" is not supported. If a value is not specified, it will default to "cloud-central".</li> </ul>
firstName	string	True	<p>JSON string containing a user-specified long form first name.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 0</li> <li>• Maximum length: 63</li> <li>• This string is internally validated to prevent XSS, Unicode, directory traversal, and SQL-injection attacks</li> </ul>

Name	Type	Required	Description
lastName	string	True	<p>JSON string containing a user-specified long-form last name.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 0</li> <li>• Maximum length: 63</li> <li>• This string is internally validated to prevent XSS, Unicode, directory traversal, and SQL-injection attacks</li> </ul>
companyName	string	False	<p>JSON string containing the company name associated with the user. If this key does not exist, it indicates that a company name has not been provided.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> <li>• This string is internally validated to prevent XSS, Unicode, directory traversal, and SQL-injection attacks</li> </ul>
email	string	True	<p>JSON strings containing a user-specified email address.</p>
phone	string	False	<p>JSON string containing the phone number of the user. If this key does not exist, it indicates that a phone number has not been provided.</p>

Name	Type	Required	Description
postalAddress	postalAddress	False	<p>JSON object containing a collection of fields that specifies an address. If this key does not exist, it indicates that an address has not been provided. If this key exists, all six of the contained fields will be present. If nothing was provided by the user, the string will be empty.</p>
sendWelcomeEmail	string	True	<p>JSON string indicating whether a welcome email will be sent after validation. If not specified on create, the value will be set to "true" for ACS and "false" for Astra Control Center.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - A welcome email will be sent; default value on create</li> <li>• "false" - A welcome email will not be sent For a user with "authProvider" as "local" or "ldap", this value is ignored and is set to "false".</li> </ul>
enableTimestamp	string	False	<p>JSON string containing an ISO-8601 formatted timestamp indicating when the user was last enabled.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>

Name	Type	Required	Description
lastActTimestamp	string	False	<p>JSON string containing an ISO-8601 formatted timestamp indicating when the identity API was last invoked on behalf of this user. (Note: This is expensive.)</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>
metadata	type_astra_metadata_update	True	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</li> </ul>

## Example response

```
{
  "type": "application/astra-user",
  "version": "1.2",
  "id": "5bad8e04-e2fd-5c43-98d7-300580993f49",
  "state": "pending",
  "isEnabled": "true",
  "authID": "HteLK3hk28sdbDLKHReB",
  "authProvider": "cloud-central",
  "firstName": "John",
  "lastName": "Doe",
  "email": "<a href='mailto:jdoo@example.com'>jdoo@example.com</a>",
  "sendWelcomeEmail": "true",
  "lastActTimestamp": "2020-08-05T14:24:54.128427Z",
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 409, Conflict

Name	Type	Required	Description
type	string	True	

Name	Type	Required	Description
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

### Example response

```
{
  "type": "https://astra.netapp.io/problems/10",
  "title": "JSON resource conflict",
  "detail": "The request body JSON contains a field that conflicts with an idempotent value.",
  "status": "409"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```



## Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

## Definitions

## See Definitions

### postalAddress

JSON object containing a collection of fields that specifies an address. If this key does not exist, it indicates that an address has not been provided.

If this key exists, all six of the contained fields will be present. If nothing was provided by the user, the string will be empty.

Name	Type	Required	Description
addressCountry	string	True	JSON string containing the country name or country code associated with the postal address, as specified in ISO 3166 Alpha-2. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 2</li><li>• Maximum length: 2</li></ul>
addressLocality	string	True	JSON string containing the locality (for example, city) associated with the postal address. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 1</li><li>• Maximum length: 63</li></ul>
addressRegion	string	True	JSON string containing the region (for example, state) associated with the postal address. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 1</li><li>• Maximum length: 63</li></ul>
postalCode	string	True	JSON string containing the postal code associated with the postal address. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 1</li><li>• Maximum length: 63</li></ul>

Name	Type	Required	Description
streetAddress1	string	True	JSON string containing the street address associated with the postal address. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>
streetAddress2	string	False	JSON string containing optional ancillary street address information, post office box, and so on. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>

#### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

#### type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[ <a href="#">type_astra_label</a> ]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

#### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

invalidFields

Name	Type	Required	Description
name	string	True	Name of the invalid request body field
reason	string	True	Reason why the request body field is invalid

## List all users

GET /accounts/{account\_id}/core/v1/users

Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"> <li>example: <code>{{.Account}}</code></li> </ul>

Name	Type	In	Required	Description
include	string	query	False	<p>Indicates which fields should be returned when listing a collection.</p> <p>URL examples:  "include=id",  "include=id,name"</p> <p>OpenAPI examples:  "id"</p> <ul style="list-style-type: none"> <li>example: id,email</li> </ul>
limit	string	query	False	<p>Indicates the maximum number of resources to return when listing a collection.</p> <p>URL examples:  "limit=2"</p> <p>OpenAPI examples:  "2"</p>

Name	Type	In	Required	Description
filter	string	query	False	<p>Indicates which fields should be matched in order to return a resource when listing a collection.</p> <p>Supported operators are:</p> <ul style="list-style-type: none"> <li>• eq - Equality</li> <li>• lt/gt - Less than/Greater than</li> <li>• lte/gte - Less than or equals to/Greater than or equals to</li> </ul> <p>URL example: "filter=field%20eq%20%27value%27"</p> <p>OpenAPI examples: "field eq 'value'"</p>
orderBy	string	query	False	<p>Indicates the sort order of resource when listing a collection.</p> <p>URL examples: "orderBy=name", "orderBy=name%20desc"</p> <p>OpenAPI examples: "name desc"</p>
skip	string	query	False	<p>Indicates the number of resources to skip over when listing a collection.</p> <p>URL examples: "skip=1"</p> <p>OpenAPI examples: "1"</p>

Name	Type	In	Required	Description
count	string	query	False	Indicates if the total number of resources should be returned in the metadata object.  URL examples: "count=true"  OpenAPI examples: "true"
continue		query	False	Indicates the token to resume listing from.  URL examples: "continue=<continue token="" from="" collection="" metadata="">"</continue>  OpenAPI examples: "<continue token="" from="" collection="" metadata="">"</continue>&lt;/continue&gt;"

## Response

Status: 200, Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

Name	Type	Required	Description
items	array[Any of: <a href="#">user_1.2_get_response_body</a> , array[]]	True	
metadata	<a href="#">type_astra_metadata_list</a>	True	

## Example response

```
{
  "type": "application/astra-users",
  "version": "1.2",
  "items": [
    [
      "11c0cfa1-4f27-4ef7-a21c-cb452fc5c9aa",
      "<a href='mailto:jdoe@example.com'>jdoe@example.com</a>"
    ],
    [
      "e324ec3a-706d-4f57-a95d-1d88c03e7b73",
      "<a href='mailto:ssmith@example.com'>:ssmith@example.com</a>"
    ],
    [
      "3070c84d-129b-4017-82a8-2c26a42dd77e",
      "<a href='mailto:wjohns@example.com'>wjohms@example.com</a>"
    ]
  ],
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	



### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	

Name	Type	Required	Description
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't found.",
  "status": "404"
}
```

**Definitions**

## See Definitions

### postalAddress

JSON object containing a collection of fields that specifies an address. If this key does not exist, it indicates that an address has not been provided.

If this key exists, all six of the contained fields will be present. If nothing was provided by the user, the string will be empty.

Name	Type	Required	Description
addressCountry	string	True	JSON string containing the country name or country code associated with the postal address, as specified in ISO 3166 Alpha-2. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 2</li><li>• Maximum length: 2</li></ul>
addressLocality	string	True	JSON string containing the locality (for example, city) associated with the postal address. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 1</li><li>• Maximum length: 63</li></ul>
addressRegion	string	True	JSON string containing the region (for example, state) associated with the postal address. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 1</li><li>• Maximum length: 63</li></ul>
postalCode	string	True	JSON string containing the postal code associated with the postal address. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 1</li><li>• Maximum length: 63</li></ul>

Name	Type	Required	Description
streetAddress1	string	True	JSON string containing the street address associated with the postal address. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>
streetAddress2	string	False	JSON string containing optional ancillary street address information, post office box, and so on. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>

#### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

#### type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[ <a href="#">type_astra_label</a> ]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

#### user\_1.2\_get\_response\_body

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>• "application/astra-user"</li></ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"><li>• "1.0"</li><li>• "1.1"</li><li>• "1.2"</li></ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"><li>• Conforms to the UUIDv4 Schema</li></ul>

Name	Type	Required	Description
state	string	True	<p>JSON string containing a value indicating the operational state of the user.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "pending" - The user account is in the process of being created. The user can only read and modify the user resource (default value).</li> <li>• This state is not valid for a user with "authProvider" as "local"</li> <li>• "active" - The user account is operational (The user can log in if the account setting "isEnabled" is "true").</li> <li>• This is the default value for a user with "authProvider" as "local"</li> <li>• "suspended" - The user account is suspended (The user cannot log in regardless of account "isEnabled" setting).</li> </ul>
isEnabled	string	True	<p>JSON string indicating if the user is allowed to log in.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - The user is allowed to log in; default value on create.</li> <li>• "false" - The user is not allowed to log in.</li> </ul>

Name	Type	Required	Description
authID	string	False	<p>JSON string containing the identifier associated with an external identity provider.</p> <p>The contents of this string depend on the specified authProvider.</p> <p>For a user with "authProvider" as "local", "authID" is set to the value of "email".</p> <p>For a user with "authProvider" as "ldap", "authID" is set to its Distinguished Name (DN) from the LDAP server.</p>



Name	Type	Required	Description
authProvider	string	False	<p>JSON string indicating the context of the idAuth identifier.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "cloud-central" - User authentication comes from the NetApp Cloud Central service</li> <li>• "local" - User authentication comes from the local user/password store</li> <li>• "ldap" - User authentication comes from an external LDAP server</li> </ul> <p>In Astra Control Center, all users are required to have a value of "local", or "ldap". If a value is not specified, a default value of "local" is chosen.</p> <p>In Astra Control Service, "authProvider" as "local", or "ldap" is not supported. If a value is not specified, it will default to "cloud-central".</p>

Name	Type	Required	Description
firstName	string	True	<p>JSON string containing a user-specified long form first name.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 0</li> <li>• Maximum length: 63</li> <li>• This string is internally validated to prevent XSS, Unicode, directory traversal, and SQL-injection attacks</li> </ul>
lastName	string	True	<p>JSON string containing a user-specified long-form last name.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 0</li> <li>• Maximum length: 63</li> <li>• This string is internally validated to prevent XSS, Unicode, directory traversal, and SQL-injection attacks</li> </ul>
companyName	string	False	<p>JSON string containing the company name associated with the user. If this key does not exist, it indicates that a company name has not been provided.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> <li>• This string is internally validated to prevent XSS, Unicode, directory traversal, and SQL-injection attacks</li> </ul>

Name	Type	Required	Description
email	string	True	JSON strings containing a user-specified email address.
phone	string	False	JSON string containing the phone number of the user. If this key does not exist, it indicates that a phone number has not been provided.
postalAddress	<a href="#">postalAddress</a>	False	JSON object containing a collection of fields that specifies an address. If this key does not exist, it indicates that an address has not been provided. If this key exists, all six of the contained fields will be present. If nothing was provided by the user, the string will be empty.
sendWelcomeEmail	string	True	<p>JSON string indicating whether a welcome email will be sent after validation. If not specified on create, the value will be set to "true" for ACS and "false" for Astra Control Center. Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - A welcome email will be sent; default value on create</li> <li>• "false" - A welcome email will not be sent. For a user with "authProvider" as "local" or "ldap", this value is ignored and is set to "false".</li> </ul>

Name	Type	Required	Description
enableTimestamp	string	False	JSON string containing an ISO-8601 formatted timestamp indicating when the user was last enabled. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>
lastActTimestamp	string	False	JSON string containing an ISO-8601 formatted timestamp indicating when the identity API was last invoked on behalf of this user. (Note: This is expensive.) Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>
metadata	<a href="#">type_astra_metadata_update</a>	True	Client and service-specified metadata associated with the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</li> </ul>

type\_astra\_metadata\_list

Name	Type	Required	Description
continue	string	False	

Name	Type	Required	Description
count	number	False	
labels	array[type_astra_label]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

#### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Retrieve a user

GET /accounts/{account\_id}/core/v1/users/{user\_id}

Returns the stored User API resource in the JSON response body.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource  • example: {{.Account}}
user_id	string	path	True	ID of the user collection to list

### Response

Status: 200, Returns the stored User API resource in the JSON response body.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "application/astra-user"</li> </ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "1.0"</li> <li>• "1.1"</li> <li>• "1.2"</li> </ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the UUIDv4 Schema</li> </ul>

Name	Type	Required	Description
state	string	True	<p>JSON string containing a value indicating the operational state of the user.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "pending" - The user account is in the process of being created. The user can only read and modify the user resource (default value).</li> <li>• This state is not valid for a user with "authProvider" as "local"</li> <li>• "active" - The user account is operational (The user can log in if the account setting "isEnabled" is "true").</li> <li>• This is the default value for a user with "authProvider" as "local"</li> <li>• "suspended" - The user account is suspended (The user cannot log in regardless of account "isEnabled" setting).</li> </ul>
isEnabled	string	True	<p>JSON string indicating if the user is allowed to log in.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - The user is allowed to log in; default value on create.</li> <li>• "false" - The user is not allowed to log in.</li> </ul>

Name	Type	Required	Description
authID	string	False	<p>JSON string containing the identifier associated with an external identity provider.</p> <p>The contents of this string depend on the specified authProvider.</p> <p>For a user with "authProvider" as "local", "authID" is set to the value of "email".</p> <p>For a user with "authProvider" as "ldap", "authID" is set to its Distinguished Name (DN) from the LDAP server.</p>
authProvider	string	False	<p>JSON string indicating the context of the idAuth identifier.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "cloud-central" - User authentication comes from the NetApp Cloud Central service</li> <li>• "local" - User authentication comes from the local user/password store</li> <li>• "ldap" - User authentication comes from an external LDAP server</li> </ul> <p>In Astra Control Center, all users are required to have a value of "local", or "ldap". If a value is not specified, a default value of "local" is chosen.</p> <p>In Astra Control Service, "authProvider" as "local", or "ldap" is not supported. If a value is not specified, it will default to "cloud-central".</p>



Name	Type	Required	Description
firstName	string	True	<p>JSON string containing a user-specified long form first name.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 0</li> <li>• Maximum length: 63</li> <li>• This string is internally validated to prevent XSS, Unicode, directory traversal, and SQL-injection attacks</li> </ul>
lastName	string	True	<p>JSON string containing a user-specified long-form last name.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 0</li> <li>• Maximum length: 63</li> <li>• This string is internally validated to prevent XSS, Unicode, directory traversal, and SQL-injection attacks</li> </ul>
companyName	string	False	<p>JSON string containing the company name associated with the user. If this key does not exist, it indicates that a company name has not been provided.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> <li>• This string is internally validated to prevent XSS, Unicode, directory traversal, and SQL-injection attacks</li> </ul>

Name	Type	Required	Description
email	string	True	JSON strings containing a user-specified email address.
phone	string	False	JSON string containing the phone number of the user. If this key does not exist, it indicates that a phone number has not been provided.
postalAddress	<a href="#">postalAddress</a>	False	JSON object containing a collection of fields that specifies an address. If this key does not exist, it indicates that an address has not been provided. If this key exists, all six of the contained fields will be present. If nothing was provided by the user, the string will be empty.
sendWelcomeEmail	string	True	<p>JSON string indicating whether a welcome email will be sent after validation. If not specified on create, the value will be set to "true" for ACS and "false" for Astra Control Center.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - A welcome email will be sent; default value on create</li> <li>• "false" - A welcome email will not be sent For a user with "authProvider" as "local" or "ldap", this value is ignored and is set to "false".</li> </ul>

Name	Type	Required	Description
enableTimestamp	string	False	<p>JSON string containing an ISO-8601 formatted timestamp indicating when the user was last enabled.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>
lastActTimestamp	string	False	<p>JSON string containing an ISO-8601 formatted timestamp indicating when the identity API was last invoked on behalf of this user. (Note: This is expensive.)</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>
metadata	type_astra_metadata_update	True	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</li> </ul>

## Example response

```
{
  "type": "application/astra-user",
  "version": "1.2",
  "id": "5bad8e04-e2fd-5c43-98d7-300580993f49",
  "state": "active",
  "isEnabled": "true",
  "authID": "HteLK3hk28sdbDLKHReB",
  "authProvider": "cloud-central",
  "firstName": "John",
  "lastName": "Doe",
  "companyName": "NetApp, Inc.",
  "email": "<a href='mailto:jd@exampl.com'>jd@exampl.com</a>",
  "phone": "408-555-2222",
  "postalAddress": {
    "addressCountry": "US",
    "addressLocality": "Sunnyvale",
    "addressRegion": "California",
    "postalCode": "94089",
    "streetAddress1": "495 East Java Drive"
  },
  "sendWelcomeEmail": "true",
  "enableTimestamp": "2020-08-05T14:24:54.128427Z",
  "lastActTimestamp": "2020-08-05T14:24:54.128427Z",
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	

Name	Type	Required	Description
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

## Definitions

## See Definitions

### postalAddress

JSON object containing a collection of fields that specifies an address. If this key does not exist, it indicates that an address has not been provided.

If this key exists, all six of the contained fields will be present. If nothing was provided by the user, the string will be empty.

Name	Type	Required	Description
addressCountry	string	True	JSON string containing the country name or country code associated with the postal address, as specified in ISO 3166 Alpha-2. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 2</li><li>• Maximum length: 2</li></ul>
addressLocality	string	True	JSON string containing the locality (for example, city) associated with the postal address. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 1</li><li>• Maximum length: 63</li></ul>
addressRegion	string	True	JSON string containing the region (for example, state) associated with the postal address. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 1</li><li>• Maximum length: 63</li></ul>
postalCode	string	True	JSON string containing the postal code associated with the postal address. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 1</li><li>• Maximum length: 63</li></ul>



Name	Type	Required	Description
streetAddress1	string	True	JSON string containing the street address associated with the postal address. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>
streetAddress2	string	False	JSON string containing optional ancillary street address information, post office box, and so on. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>

#### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

#### type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[ <a href="#">type_astra_label</a> ]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

#### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Modify a user

PUT /accounts/{account\_id}/core/v1/users/{user\_id}

Replaces the entire stored resource with the supplied JSON request body while preserving key values that are not user-modifiable.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"> <li>example: <code>{{.Account}}</code></li> </ul>
user_id	string	path	True	ID of the user collection to list

### Request Body

Replaces the entire stored resource with the supplied JSON request body while preserving key values that are not user-modifiable.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"> <li>"application/astra-user"</li> </ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>"1.0"</li> <li>"1.1"</li> <li>"1.2"</li> </ul>

Name	Type	Required	Description
id	string	False	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the UUIDv4 Schema</li> </ul>
state	string	False	JSON string containing a value indicating the operational state of the user. Defined values are: <ul style="list-style-type: none"> <li>• "pending" - The user account is in the process of being created. The user can only read and modify the user resource (default value).</li> <li>• This state is not valid for a user with "authProvider" as "local"</li> <li>• "active" - The user account is operational (The user can log in if the account setting "isEnabled" is "true").</li> <li>• This is the default value for a user with "authProvider" as "local"</li> <li>• "suspended" - The user account is suspended (The user cannot log in regardless of account "isEnabled" setting).</li> </ul>

Name	Type	Required	Description
isEnabled	string	False	<p>JSON string indicating if the user is allowed to log in.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - The user is allowed to log in; default value on create.</li> <li>• "false" - The user is not allowed to log in.</li> </ul>
authID	string	False	<p>JSON string containing the identifier associated with an external identity provider.</p> <p>The contents of this string depend on the specified authProvider.</p> <p>For a user with "authProvider" as "local", "authID" is set to the value of "email".</p> <p>For a user with "authProvider" as "ldap", "authID" is set to its Distinguished Name (DN) from the LDAP server.</p>

Name	Type	Required	Description
authProvider	string	False	<p>JSON string indicating the context of the idAuth identifier.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "cloud-central" - User authentication comes from the NetApp Cloud Central service</li> <li>• "local" - User authentication comes from the local user/password store</li> <li>• "Idap" - User authentication comes from an external LDAP server In Astra Control Center, all users are required to have a value of "local", or "Idap". If a value is not specified, a default value of "local" is chosen. In Astra Control Service, "authProvider" as "local", or "Idap" is not supported. If a value is not specified, it will default to "cloud-central".</li> </ul>
firstName	string	False	<p>JSON string containing a user-specified long form first name.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 0</li> <li>• Maximum length: 63</li> <li>• This string is internally validated to prevent XSS, Unicode, directory traversal, and SQL-injection attacks</li> </ul>

Name	Type	Required	Description
lastName	string	False	<p>JSON string containing a user-specified long-form last name.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 0</li> <li>• Maximum length: 63</li> <li>• This string is internally validated to prevent XSS, Unicode, directory traversal, and SQL-injection attacks</li> </ul>
companyName	string	False	<p>JSON string containing the company name associated with the user. If this key does not exist, it indicates that a company name has not been provided.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> <li>• This string is internally validated to prevent XSS, Unicode, directory traversal, and SQL-injection attacks</li> </ul>
email	string	False	<p>JSON strings containing a user-specified email address.</p>
phone	string	False	<p>JSON string containing the phone number of the user. If this key does not exist, it indicates that a phone number has not been provided.</p>

Name	Type	Required	Description
postalAddress	postalAddress	False	<p>JSON object containing a collection of fields that specifies an address. If this key does not exist, it indicates that an address has not been provided. If this key exists, all six of the contained fields will be present. If nothing was provided by the user, the string will be empty.</p>
sendWelcomeEmail	string	False	<p>JSON string indicating whether a welcome email will be sent after validation. If not specified on create, the value will be set to "true" for ACS and "false" for Astra Control Center.            Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - A welcome email will be sent; default value on create</li> <li>• "false" - A welcome email will not be sent              For a user with "authProvider" as "local" or "ldap", this value is ignored and is set to "false".</li> </ul>
enableTimestamp	string	False	<p>JSON string containing an ISO-8601 formatted timestamp indicating when the user was last enabled.            Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>

Name	Type	Required	Description
lastActTimestamp	string	False	<p>JSON string containing an ISO-8601 formatted timestamp indicating when the identity API was last invoked on behalf of this user. (Note: This is expensive.)</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>
metadata	type_astra_metadata_update	False	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.</li> </ul>

### Example request

```
{
  "type": "application/astra-user",
  "version": "1.2",
  "firstName": "John",
  "lastName": "Dale",
  "email": "<a href='mailto:jdale@example.com'>jdale@example.com</a>"
}
```

### Response



Status: 204, Indicates if the user resource was updated.

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

## Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 409, Conflict

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

### Example response

```
{
  "type": "https://astra.netapp.io/problems/10",
  "title": "JSON resource conflict",
  "detail": "The request body JSON contains a field that conflicts with an idempotent value.",
  "status": "409"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/1",
  "title": "Resource not found",
  "detail": "The resource specified in the request URI wasn't found.",
  "status": "404"
}
```

## Definitions

## See Definitions

### postalAddress

JSON object containing a collection of fields that specifies an address. If this key does not exist, it indicates that an address has not been provided.

If this key exists, all six of the contained fields will be present. If nothing was provided by the user, the string will be empty.

Name	Type	Required	Description
addressCountry	string	True	JSON string containing the country name or country code associated with the postal address, as specified in ISO 3166 Alpha-2. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 2</li><li>• Maximum length: 2</li></ul>
addressLocality	string	True	JSON string containing the locality (for example, city) associated with the postal address. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 1</li><li>• Maximum length: 63</li></ul>
addressRegion	string	True	JSON string containing the region (for example, state) associated with the postal address. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 1</li><li>• Maximum length: 63</li></ul>
postalCode	string	True	JSON string containing the postal code associated with the postal address. Defined values are: <ul style="list-style-type: none"><li>• Minimum length: 1</li><li>• Maximum length: 63</li></ul>

Name	Type	Required	Description
streetAddress1	string	True	JSON string containing the street address associated with the postal address. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>
streetAddress2	string	False	JSON string containing optional ancillary street address information, post office box, and so on. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>

#### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

#### type\_astra\_metadata\_update

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema  
If not specified on create, a metadata object will be created with no labels.  
If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
labels	array[ <a href="#">type_astra_label</a> ]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

#### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

invalidFields

Name	Type	Required	Description
name	string	True	Name of the invalid request body field
reason	string	True	Reason why the request body field is invalid

## Delete a user

DELETE /accounts/{account\_id}/core/v1/users/{user\_id}

Removes the specified User API resource.

### Side Effects

- The following resources associated with the user are deleted: notificationMarks, tokens, and all roleBindings referring to the user.
- For a user with "authProvider" as "local", the linked credential with "keyType" as "passwordHash" will also be deleted.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"> <li>• example: <code>{{.Account}}</code></li> </ul>
user_id	string	path	True	ID of the user collection to list

### Response

Status: 204, Indicates if the user resource was deleted.

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

## Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters



### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	

Name	Type	Required	Description
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/1",
  "title": "Resource not found",
  "detail": "The resource specified in the request URI wasn't found.",
  "status": "404"
}
```

### Definitions

#### See Definitions

invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Volume

### Volume overview

The Volume API provides CRUD (Create-Read-Update-Delete) access to volume resources in order to provide visibility into Kubernetes volumes associated with applications.

### List the volumes for a managed cluster

GET

/accounts/{account\_id}/topology/v1/managedClusters/{managedCluster\_id}/volumes

Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

## Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"><li>example: {{.Account}}</li></ul>
managedCluster_id	string	path	True	ID of the containing managedCluster resource
include	string	query	False	Indicates which fields should be returned when listing a collection.  URL examples: "include=id", "include=id,name"  OpenAPI examples: "id" <ul style="list-style-type: none"><li>example: id,name</li></ul>
limit	string	query	False	Indicates the maximum number of resources to return when listing a collection.  URL examples: "limit=2"  OpenAPI examples: "2"

## Response

Status: 200, Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

Name	Type	Required	Description
items	array[Any of: <a href="#">volume_1.2_get_response_body</a> , array[]]	True	
metadata	<a href="#">type_astra_metadata_list</a>	True	

### Example response

```
{
  "type": "application/astra-volumes",
  "version": "1.2",
  "items": [
    [
      "24fe6e79-bf8d-45c9-96af-ef1d11fbd4a0",
      "myVolume"
    ],
    [
      "20a370f4-957f-446a-9126-08853d01933a",
      "secondVol"
    ],
    [
      "48e349a2-5bcd-4c59-896c-12b8240e634b",
      "smallVol"
    ]
  ],
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

### Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	

Name	Type	Required	Description
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

## Definitions

## See Definitions

### type\_astra\_stateDetails

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### type\_astra\_metadata

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema

Name	Type	Required	Description
labels	array[type_astra_label]	True	
creationTimestamp	string	True	
modificationTimestamp	string	True	
createdBy	string	True	
modifiedBy	string	False	

### volume\_1.2\_get\_response\_body

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>• "application/astra-volume"</li></ul>



Name	Type	Required	Description
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "1.0"</li> <li>• "1.1"</li> <li>• "1.2"</li> </ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the UUIDv4 Schema</li> </ul>
name	string	True	JSON string containing the name of the volume. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>
state	string	False	JSON string containing a value indicating the operational state of the volume.
size	string	False	JSON string containing the size of the volume.
used	number	False	JSON number containing the number of bytes of quota used by the provisioned volume.
usedPercentage	number	False	JSON number containing the percentage of volume used.
total	number	False	JSON number containing the total bytes of volumes provisioned.

Name	Type	Required	Description
creationToken	string	False	JSON string containing the creation token of the volume. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>
snapshotPossible	string	False	JSON string indicating whether the driver can perform a snapshot of the volume. Defined values are: <ul style="list-style-type: none"> <li>• "true" - Driver can take a snapshot of the volume</li> <li>• "false" - Driver cannot take a snapshot of the volume</li> </ul>
storageClass	string	False	JSON string containing the storage class for the volume. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>
pvcName	string	False	JSON string containing the PersistentVolumeClaim (PVC) name of the volume. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>

Name	Type	Required	Description
internalName	string	False	<p>JSON string containing the internal name of the volume on the target storage cluster, if available. This name is obtained from the Kubernetes CSI driver.</p> <ul style="list-style-type: none"> <li>• Defined values are:</li> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>
appsUsing	array[string]	True	<p>JSON array of JSON strings, each containing the ID of an application that is using the volume. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
storageBackendID	string	False	<p>JSON string containing the ID of the storage backend that provides the volume. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
orchestrator	string	False	<p>JSON string containing the orchestrator for this volume. This will be defined for Astra Data Store volumes.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "trident" - Trident has provisioned this volume</li> <li>• "vasa" - NetApp VASA Provider has provisioned this volume</li> <li>• "other" - The volume has been provisioned manually or the orchestrator is not known</li> </ul>
serviceLevel	string	False	<p>JSON string containing the quality of service (QoS) policy defined for this volume at the storage backend level. This will be defined for Astra Data Store volumes.</p>
exportPolicy	string	False	<p>JSON string containing the export policy associated with this volume. This will be defined for Astra Data Store volumes.</p>
nodeId	string	False	<p>JSON string containing the node ID serving the volume. This will be defined for Astra Data Store volumes.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
healthState	string	False	<p>JSON string containing a value indicating the health state of the volume. This will be defined for Astra Data Store volumes.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "indeterminate" - The health of the resource cannot be determined (for example, due to lack of connectivity)</li> <li>• "normal" - The resource has no known issues and can provide services in accordance with the interface specification</li> <li>• "warning" - The resource has known issues that do not prevent it providing services in accordance with the interface specification</li> <li>• "critical" - The resource has known issues that prevent it from providing services in accordance with the interface specification</li> </ul>
healthStateDetails	array[ <a href="#">type_astra_stateDetails</a> ]	True	<p>JSON array of JSON objects that lists additional details about the current health. If no details are available, this array will be empty.</p> <ul style="list-style-type: none"> <li>• Minimum Items: 0</li> </ul>

Name	Type	Required	Description
metadata	<a href="#">type_astra_metadata</a>	True	Client and service-specified metadata associated with the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema</li> </ul>

#### type\_astra\_metadata\_list

Name	Type	Required	Description
continue	string	False	
count	number	False	
labels	array[ <a href="#">type_astra_label</a> ]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

#### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Retrieve a volume for a managed cluster

GET

/accounts/{account\_id}/topology/v1/managedClusters/{managedCluster\_id}/volumes/{volume\_id}

Returns the stored Volume API resource in the JSON response body.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"> <li>example: <code>{{.Account}}</code></li> </ul>
managedCluster_id	string	path	True	ID of the containing managedCluster resource
volume_id	string	path	True	ID of the volume collection to list

## Response

Status: 200, Returns the stored Volume API resource in the JSON response body.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"> <li>"application/astra-volume"</li> </ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>"1.0"</li> <li>"1.1"</li> <li>"1.2"</li> </ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>Conforms to the UUIDv4 Schema</li> </ul>

Name	Type	Required	Description
name	string	True	JSON string containing the name of the volume. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>
state	string	False	JSON string containing a value indicating the operational state of the volume.
size	string	False	JSON string containing the size of the volume.
used	number	False	JSON number containing the number of bytes of quota used by the provisioned volume.
usedPercentage	number	False	JSON number containing the percentage of volume used.
total	number	False	JSON number containing the total bytes of volumes provisioned.
creationToken	string	False	JSON string containing the creation token of the volume. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>



Name	Type	Required	Description
snapshotPossible	string	False	<p>JSON string indicating whether the driver can perform a snapshot of the volume.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - Driver can take a snapshot of the volume</li> <li>• "false" - Driver cannot take a snapshot of the volume</li> </ul>
storageClass	string	False	<p>JSON string containing the storage class for the volume.</p> <ul style="list-style-type: none"> <li>• Defined values are:</li> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>
pvcName	string	False	<p>JSON string containing the PersistentVolumeClaim (PVC) name of the volume.</p> <ul style="list-style-type: none"> <li>• Defined values are:</li> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>
internalName	string	False	<p>JSON string containing the internal name of the volume on the target storage cluster, if available. This name is obtained from the Kubernetes CSI driver.</p> <ul style="list-style-type: none"> <li>• Defined values are:</li> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>

Name	Type	Required	Description
appsUsing	array[string]	True	<p>JSON array of JSON strings, each containing the ID of an application that is using the volume. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
storageBackendID	string	False	<p>JSON string containing the ID of the storage backend that provides the volume. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
orchestrator	string	False	<p>JSON string containing the orchestrator for this volume. This will be defined for Astra Data Store volumes. Defined values are:</p> <ul style="list-style-type: none"> <li>• "trident" - Trident has provisioned this volume</li> <li>• "vasa" - NetApp VASA Provider has provisioned this volume</li> <li>• "other" - The volume has been provisioned manually or the orchestrator is not known</li> </ul>
serviceLevel	string	False	<p>JSON string containing the quality of service (QoS) policy defined for this volume at the storage backend level. This will be defined for Astra Data Store volumes.</p>

Name	Type	Required	Description
exportPolicy	string	False	JSON string containing the export policy associated with this volume. This will be defined for Astra Data Store volumes.
nodeId	string	False	<p>JSON string containing the node ID serving the volume. This will be defined for Astra Data Store volumes.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
healthState	string	False	<p>JSON string containing a value indicating the health state of the volume. This will be defined for Astra Data Store volumes.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "indeterminate" - The health of the resource cannot be determined (for example, due to lack of connectivity)</li> <li>• "normal" - The resource has no known issues and can provide services in accordance with the interface specification</li> <li>• "warning" - The resource has known issues that do not prevent it providing services in accordance with the interface specification</li> <li>• "critical" - The resource has known issues that prevent it from providing services in accordance with the interface specification</li> </ul>

Name	Type	Required	Description
healthStateDetails	array[type_astra_stateDetails]	True	<p>JSON array of JSON objects that lists additional details about the current health.</p> <p>If no details are available, this array will be empty.</p> <ul style="list-style-type: none"> <li>• Minimum Items: 0</li> </ul>
metadata	type_astra_metadata	True	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema</li> </ul>

## Example response

```
{
  "type": "application/astra-volume",
  "version": "1.2",
  "id": "ab5c9fb8-ddba-526f-8bd3-8d5b72cf4f7f",
  "name": "myVolume",
  "state": "ready",
  "size": "512 GiB",
  "used": 10000000000,
  "usedPercentage": 10,
  "total": 10000000000,
  "creationToken": "ba7d4e0c-6ae3-4b6e-859d-9463e7ca4b4e",
  "snapshotPossible": "true",
  "storageClass": "gold",
  "pvcName": "myVolume",
  "internalName": "trident_sd234234_23424_897d_876sd65w",
  "appsUsing": [],
  "orchestrator": "trident",
  "serviceLevel": "gold",
  "exportPolicy": "astra-vp-default",
  "nodeId": "94d16dd2-9beb-4edb-ab58-1a00e9a90052",
  "healthState": "normal",
  "healthStateDetails": [],
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	

Name	Type	Required	Description
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

## Definitions

### See Definitions

#### type\_astra\_stateDetails

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	

#### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

#### type\_astra\_metadata

Client and service-specified metadata associated with the resource.  
Defined values are:

- Conforms to the Astra Metadata Schema

Name	Type	Required	Description
labels	array[type_astra_label]	True	
creationTimestamp	string	True	
modificationTimestamp	string	True	
createdBy	string	True	
modifiedBy	string	False	

#### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## List the volumes for a storage backend

GET

/accounts/{account\_id}/topology/v1/storageBackends/{storageBackend\_id}/volumes



Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"><li>example: {{.Account}}</li></ul>
storageBackend_id	string	path	True	ID of the containing storageBackend resource
include	string	query	False	Indicates which fields should be returned when listing a collection.  URL examples: "include=id", "include=id,name"  OpenAPI examples: "id" <ul style="list-style-type: none"><li>example: id,name</li></ul>
limit	string	query	False	Indicates the maximum number of resources to return when listing a collection.  URL examples: "limit=2"  OpenAPI examples: "2"

### Response

Status: 200, Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

Name	Type	Required	Description
items	array[Any of: <a href="#">volume_1.2_get_response_body</a> , array[]]	True	
metadata	<a href="#">type_astra_metadata_list</a>	True	

### Example response

```
{
  "type": "application/astra-volumes",
  "version": "1.2",
  "items": [
    [
      "24fe6e79-bf8d-45c9-96af-ef1d11fbd4a0",
      "myVolume"
    ],
    [
      "20a370f4-957f-446a-9126-08853d01933a",
      "secondVol"
    ],
    [
      "48e349a2-5bcd-4c59-896c-12b8240e634b",
      "smallVol"
    ]
  ],
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

### Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	

Name	Type	Required	Description
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

### Definitions

## See Definitions

### type\_astra\_stateDetails

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### type\_astra\_metadata

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema

Name	Type	Required	Description
labels	array[type_astra_label]	True	
creationTimestamp	string	True	
modificationTimestamp	string	True	
createdBy	string	True	
modifiedBy	string	False	

### volume\_1.2\_get\_response\_body

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>• "application/astra-volume"</li></ul>

Name	Type	Required	Description
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "1.0"</li> <li>• "1.1"</li> <li>• "1.2"</li> </ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the UUIDv4 Schema</li> </ul>
name	string	True	JSON string containing the name of the volume. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>
state	string	False	JSON string containing a value indicating the operational state of the volume.
size	string	False	JSON string containing the size of the volume.
used	number	False	JSON number containing the number of bytes of quota used by the provisioned volume.
usedPercentage	number	False	JSON number containing the percentage of volume used.
total	number	False	JSON number containing the total bytes of volumes provisioned.

Name	Type	Required	Description
creationToken	string	False	JSON string containing the creation token of the volume. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>
snapshotPossible	string	False	JSON string indicating whether the driver can perform a snapshot of the volume. Defined values are: <ul style="list-style-type: none"> <li>• "true" - Driver can take a snapshot of the volume</li> <li>• "false" - Driver cannot take a snapshot of the volume</li> </ul>
storageClass	string	False	JSON string containing the storage class for the volume. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>
pvcName	string	False	JSON string containing the PersistentVolumeClaim (PVC) name of the volume. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>



Name	Type	Required	Description
internalName	string	False	<p>JSON string containing the internal name of the volume on the target storage cluster, if available. This name is obtained from the Kubernetes CSI driver.</p> <ul style="list-style-type: none"> <li>• Defined values are:</li> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>
appsUsing	array[string]	True	<p>JSON array of JSON strings, each containing the ID of an application that is using the volume. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
storageBackendID	string	False	<p>JSON string containing the ID of the storage backend that provides the volume. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
orchestrator	string	False	<p>JSON string containing the orchestrator for this volume. This will be defined for Astra Data Store volumes.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "trident" - Trident has provisioned this volume</li> <li>• "vasa" - NetApp VASA Provider has provisioned this volume</li> <li>• "other" - The volume has been provisioned manually or the orchestrator is not known</li> </ul>
serviceLevel	string	False	<p>JSON string containing the quality of service (QoS) policy defined for this volume at the storage backend level. This will be defined for Astra Data Store volumes.</p>
exportPolicy	string	False	<p>JSON string containing the export policy associated with this volume. This will be defined for Astra Data Store volumes.</p>
nodeId	string	False	<p>JSON string containing the node ID serving the volume. This will be defined for Astra Data Store volumes.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
healthState	string	False	<p>JSON string containing a value indicating the health state of the volume. This will be defined for Astra Data Store volumes.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "indeterminate" - The health of the resource cannot be determined (for example, due to lack of connectivity)</li> <li>• "normal" - The resource has no known issues and can provide services in accordance with the interface specification</li> <li>• "warning" - The resource has known issues that do not prevent it providing services in accordance with the interface specification</li> <li>• "critical" - The resource has known issues that prevent it from providing services in accordance with the interface specification</li> </ul>
healthStateDetails	array[ <a href="#">type_astra_stateDetails</a> ]	True	<p>JSON array of JSON objects that lists additional details about the current health. If no details are available, this array will be empty.</p> <ul style="list-style-type: none"> <li>• Minimum Items: 0</li> </ul>

Name	Type	Required	Description
metadata	<a href="#">type_astra_metadata</a>	True	Client and service-specified metadata associated with the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema</li> </ul>

#### type\_astra\_metadata\_list

Name	Type	Required	Description
continue	string	False	
count	number	False	
labels	array[ <a href="#">type_astra_label</a> ]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

#### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Retrieve a volume for a storage backend

GET

/accounts/{account\_id}/topology/v1/storageBackends/{storageBackend\_id}/volumes/{volume\_id}

Returns the stored Volume API resource in the JSON response body.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"> <li>example: <code>{{.Account}}</code></li> </ul>
storageBackend_id	string	path	True	ID of the containing storageBackend resource
volume_id	string	path	True	ID of the volume collection to list

## Response

Status: 200, Returns the stored Volume API resource in the JSON response body.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"> <li>"application/astra-volume"</li> </ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>"1.0"</li> <li>"1.1"</li> <li>"1.2"</li> </ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>Conforms to the UUIDv4 Schema</li> </ul>

Name	Type	Required	Description
name	string	True	JSON string containing the name of the volume. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>
state	string	False	JSON string containing a value indicating the operational state of the volume.
size	string	False	JSON string containing the size of the volume.
used	number	False	JSON number containing the number of bytes of quota used by the provisioned volume.
usedPercentage	number	False	JSON number containing the percentage of volume used.
total	number	False	JSON number containing the total bytes of volumes provisioned.
creationToken	string	False	JSON string containing the creation token of the volume. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>

Name	Type	Required	Description
snapshotPossible	string	False	<p>JSON string indicating whether the driver can perform a snapshot of the volume.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - Driver can take a snapshot of the volume</li> <li>• "false" - Driver cannot take a snapshot of the volume</li> </ul>
storageClass	string	False	<p>JSON string containing the storage class for the volume.</p> <ul style="list-style-type: none"> <li>• Defined values are:</li> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>
pvcName	string	False	<p>JSON string containing the PersistentVolumeClaim (PVC) name of the volume.</p> <ul style="list-style-type: none"> <li>• Defined values are:</li> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>
internalName	string	False	<p>JSON string containing the internal name of the volume on the target storage cluster, if available. This name is obtained from the Kubernetes CSI driver.</p> <ul style="list-style-type: none"> <li>• Defined values are:</li> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>

Name	Type	Required	Description
appsUsing	array[string]	True	<p>JSON array of JSON strings, each containing the ID of an application that is using the volume. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
storageBackendID	string	False	<p>JSON string containing the ID of the storage backend that provides the volume. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
orchestrator	string	False	<p>JSON string containing the orchestrator for this volume. This will be defined for Astra Data Store volumes. Defined values are:</p> <ul style="list-style-type: none"> <li>• "trident" - Trident has provisioned this volume</li> <li>• "vasa" - NetApp VASA Provider has provisioned this volume</li> <li>• "other" - The volume has been provisioned manually or the orchestrator is not known</li> </ul>
serviceLevel	string	False	<p>JSON string containing the quality of service (QoS) policy defined for this volume at the storage backend level. This will be defined for Astra Data Store volumes.</p>



Name	Type	Required	Description
exportPolicy	string	False	JSON string containing the export policy associated with this volume. This will be defined for Astra Data Store volumes.
nodeId	string	False	<p>JSON string containing the node ID serving the volume. This will be defined for Astra Data Store volumes.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
healthState	string	False	<p>JSON string containing a value indicating the health state of the volume. This will be defined for Astra Data Store volumes.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "indeterminate" - The health of the resource cannot be determined (for example, due to lack of connectivity)</li> <li>• "normal" - The resource has no known issues and can provide services in accordance with the interface specification</li> <li>• "warning" - The resource has known issues that do not prevent it providing services in accordance with the interface specification</li> <li>• "critical" - The resource has known issues that prevent it from providing services in accordance with the interface specification</li> </ul>

Name	Type	Required	Description
healthStateDetails	array[type_astra_stateDetails]	True	<p>JSON array of JSON objects that lists additional details about the current health.</p> <p>If no details are available, this array will be empty.</p> <ul style="list-style-type: none"> <li>• Minimum Items: 0</li> </ul>
metadata	type_astra_metadata	True	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema</li> </ul>

## Example response

```
{
  "type": "application/astra-volume",
  "version": "1.2",
  "id": "ab5c9fb8-ddba-526f-8bd3-8d5b72cf4f7f",
  "name": "myVolume",
  "state": "ready",
  "size": "512 GiB",
  "used": 10000000000,
  "usedPercentage": 10,
  "total": 10000000000,
  "creationToken": "ba7d4e0c-6ae3-4b6e-859d-9463e7ca4b4e",
  "snapshotPossible": "true",
  "storageClass": "gold",
  "pvcName": "myVolume",
  "internalName": "trident_sd234234_23424_897d_876sd65w",
  "appsUsing": [],
  "orchestrator": "trident",
  "serviceLevel": "gold",
  "exportPolicy": "astra-vp-default",
  "nodeId": "94d16dd2-9beb-4edb-ab58-1a00e9a90052",
  "healthState": "normal",
  "healthStateDetails": [],
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	

Name	Type	Required	Description
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

## Definitions

### See Definitions

#### type\_astra\_stateDetails

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	

#### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

#### type\_astra\_metadata

Client and service-specified metadata associated with the resource.  
Defined values are:

- Conforms to the Astra Metadata Schema

Name	Type	Required	Description
labels	array[ <a href="#">type_astra_label</a> ]	True	
creationTimestamp	string	True	
modificationTimestamp	string	True	
createdBy	string	True	
modifiedBy	string	False	

#### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## List all volumes

GET /accounts/{account\_id}/topology/v1/volumes

Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource  • example: {{.Account}}
include	string	query	False	Indicates which fields should be returned when listing a collection.  URL examples: "include=id", "include=id,name"  OpenAPI examples: "id"  • example: id,name
limit	string	query	False	Indicates the maximum number of resources to return when listing a collection.  URL examples: "limit=2"  OpenAPI examples: "2"

### Response

Status: 200, Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

Name	Type	Required	Description
items	array[Any of: <a href="#">volume_1.2_get_response_body</a> , array[]]	True	
metadata	<a href="#">type_astra_metadata_list</a>	True	

### Example response

```
{
  "type": "application/astra-volumes",
  "version": "1.2",
  "items": [
    [
      "24fe6e79-bf8d-45c9-96af-ef1d11fbd4a0",
      "myVolume"
    ],
    [
      "20a370f4-957f-446a-9126-08853d01933a",
      "secondVol"
    ],
    [
      "48e349a2-5bcd-4c59-896c-12b8240e634b",
      "smallVol"
    ]
  ],
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

### Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	



Name	Type	Required	Description
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

## Definitions

## See Definitions

### type\_astra\_stateDetails

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### type\_astra\_metadata

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema

Name	Type	Required	Description
labels	array[type_astra_label]	True	
creationTimestamp	string	True	
modificationTimestamp	string	True	
createdBy	string	True	
modifiedBy	string	False	

### volume\_1.2\_get\_response\_body

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>• "application/astra-volume"</li></ul>

Name	Type	Required	Description
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "1.0"</li> <li>• "1.1"</li> <li>• "1.2"</li> </ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the UUIDv4 Schema</li> </ul>
name	string	True	JSON string containing the name of the volume. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>
state	string	False	JSON string containing a value indicating the operational state of the volume.
size	string	False	JSON string containing the size of the volume.
used	number	False	JSON number containing the number of bytes of quota used by the provisioned volume.
usedPercentage	number	False	JSON number containing the percentage of volume used.
total	number	False	JSON number containing the total bytes of volumes provisioned.

Name	Type	Required	Description
creationToken	string	False	JSON string containing the creation token of the volume. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>
snapshotPossible	string	False	JSON string indicating whether the driver can perform a snapshot of the volume. Defined values are: <ul style="list-style-type: none"> <li>• "true" - Driver can take a snapshot of the volume</li> <li>• "false" - Driver cannot take a snapshot of the volume</li> </ul>
storageClass	string	False	JSON string containing the storage class for the volume. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>
pvcName	string	False	JSON string containing the PersistentVolumeClaim (PVC) name of the volume. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>

Name	Type	Required	Description
internalName	string	False	<p>JSON string containing the internal name of the volume on the target storage cluster, if available. This name is obtained from the Kubernetes CSI driver.</p> <ul style="list-style-type: none"> <li>• Defined values are:</li> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>
appsUsing	array[string]	True	<p>JSON array of JSON strings, each containing the ID of an application that is using the volume. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
storageBackendID	string	False	<p>JSON string containing the ID of the storage backend that provides the volume. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
orchestrator	string	False	<p>JSON string containing the orchestrator for this volume. This will be defined for Astra Data Store volumes.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "trident" - Trident has provisioned this volume</li> <li>• "vasa" - NetApp VASA Provider has provisioned this volume</li> <li>• "other" - The volume has been provisioned manually or the orchestrator is not known</li> </ul>
serviceLevel	string	False	<p>JSON string containing the quality of service (QoS) policy defined for this volume at the storage backend level. This will be defined for Astra Data Store volumes.</p>
exportPolicy	string	False	<p>JSON string containing the export policy associated with this volume. This will be defined for Astra Data Store volumes.</p>
nodeId	string	False	<p>JSON string containing the node ID serving the volume. This will be defined for Astra Data Store volumes.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>



Name	Type	Required	Description
healthState	string	False	<p>JSON string containing a value indicating the health state of the volume. This will be defined for Astra Data Store volumes.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "indeterminate" - The health of the resource cannot be determined (for example, due to lack of connectivity)</li> <li>• "normal" - The resource has no known issues and can provide services in accordance with the interface specification</li> <li>• "warning" - The resource has known issues that do not prevent it providing services in accordance with the interface specification</li> <li>• "critical" - The resource has known issues that prevent it from providing services in accordance with the interface specification</li> </ul>
healthStateDetails	array[ <a href="#">type_astra_stateDetails</a> ]	True	<p>JSON array of JSON objects that lists additional details about the current health. If no details are available, this array will be empty.</p> <ul style="list-style-type: none"> <li>• Minimum Items: 0</li> </ul>

Name	Type	Required	Description
metadata	<a href="#">type_astra_metadata</a>	True	Client and service-specified metadata associated with the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema</li> </ul>

#### type\_astra\_metadata\_list

Name	Type	Required	Description
continue	string	False	
count	number	False	
labels	array[ <a href="#">type_astra_label</a> ]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

#### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Retrieve a volume

GET /accounts/{account\_id}/topology/v1/volumes/{volume\_id}

Returns the stored Volume API resource in the JSON response body.

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"> <li>example: <code>{{.Account}}</code></li> </ul>
volume_id	string	path	True	ID of the volume collection to list

## Response

Status: 200, Returns the stored Volume API resource in the JSON response body.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"> <li>"application/astra-volume"</li> </ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>"1.0"</li> <li>"1.1"</li> <li>"1.2"</li> </ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>Conforms to the UUIDv4 Schema</li> </ul>
name	string	True	JSON string containing the name of the volume. Defined values are: <ul style="list-style-type: none"> <li>Minimum length: 1</li> <li>Maximum length: 255</li> </ul>

Name	Type	Required	Description
state	string	False	JSON string containing a value indicating the operational state of the volume.
size	string	False	JSON string containing the size of the volume.
used	number	False	JSON number containing the number of bytes of quota used by the provisioned volume.
usedPercentage	number	False	JSON number containing the percentage of volume used.
total	number	False	JSON number containing the total bytes of volumes provisioned.
creationToken	string	False	JSON string containing the creation token of the volume. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>
snapshotPossible	string	False	JSON string indicating whether the driver can perform a snapshot of the volume. Defined values are: <ul style="list-style-type: none"> <li>• "true" - Driver can take a snapshot of the volume</li> <li>• "false" - Driver cannot take a snapshot of the volume</li> </ul>

Name	Type	Required	Description
storageClass	string	False	<p>JSON string containing the storage class for the volume.</p> <ul style="list-style-type: none"> <li>• Defined values are:</li> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>
pvcName	string	False	<p>JSON string containing the PersistentVolumeClaim (PVC) name of the volume.</p> <ul style="list-style-type: none"> <li>• Defined values are:</li> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>
internalName	string	False	<p>JSON string containing the internal name of the volume on the target storage cluster, if available. This name is obtained from the Kubernetes CSI driver.</p> <ul style="list-style-type: none"> <li>• Defined values are:</li> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>
appsUsing	array[string]	True	<p>JSON array of JSON strings, each containing the ID of an application that is using the volume. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
storageBackendID	string	False	<p>JSON string containing the ID of the storage backend that provides the volume. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
orchestrator	string	False	<p>JSON string containing the orchestrator for this volume. This will be defined for Astra Data Store volumes.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "trident" - Trident has provisioned this volume</li> <li>• "vasa" - NetApp VASA Provider has provisioned this volume</li> <li>• "other" - The volume has been provisioned manually or the orchestrator is not known</li> </ul>
serviceLevel	string	False	<p>JSON string containing the quality of service (QoS) policy defined for this volume at the storage backend level. This will be defined for Astra Data Store volumes.</p>
exportPolicy	string	False	<p>JSON string containing the export policy associated with this volume. This will be defined for Astra Data Store volumes.</p>
nodeId	string	False	<p>JSON string containing the node ID serving the volume. This will be defined for Astra Data Store volumes.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
healthState	string	False	<p>JSON string containing a value indicating the health state of the volume. This will be defined for Astra Data Store volumes. Defined values are:</p> <ul style="list-style-type: none"> <li>• "indeterminate" - The health of the resource cannot be determined (for example, due to lack of connectivity)</li> <li>• "normal" - The resource has no known issues and can provide services in accordance with the interface specification</li> <li>• "warning" - The resource has known issues that do not prevent it providing services in accordance with the interface specification</li> <li>• "critical" - The resource has known issues that prevent it from providing services in accordance with the interface specification</li> </ul>
healthStateDetails	array[type_astra_stateDetails]	True	<p>JSON array of JSON objects that lists additional details about the current health. If no details are available, this array will be empty.</p> <ul style="list-style-type: none"> <li>• Minimum Items: 0</li> </ul>

Name	Type	Required	Description
metadata	<a href="#">type_astra_metadata</a>	True	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema</li> </ul>

### Example response

```
{
  "type": "application/astra-volume",
  "version": "1.2",
  "id": "ab5c9fb8-ddba-526f-8bd3-8d5b72cf4f7f",
  "name": "myVolume",
  "state": "ready",
  "size": "512 GiB",
  "used": 1000000000,
  "usedPercentage": 10,
  "total": 1000000000,
  "creationToken": "ba7d4e0c-6ae3-4b6e-859d-9463e7ca4b4e",
  "snapshotPossible": "true",
  "storageClass": "gold",
  "pvcName": "myVolume",
  "internalName": "trident_sd234234_23424_897d_876sd65w",
  "appsUsing": [],
  "orchestrator": "trident",
  "serviceLevel": "gold",
  "exportPolicy": "astra-vp-default",
  "nodeId": "94d16dd2-9beb-4edb-ab58-1a00e9a90052",
  "healthState": "normal",
  "healthStateDetails": [],
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```



## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

## Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

## Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

## Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

## Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	

Name	Type	Required	Description
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

### Definitions

## See Definitions

### type\_astra\_stateDetails

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### type\_astra\_metadata

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema

Name	Type	Required	Description
labels	array[type_astra_label]	True	
creationTimestamp	string	True	
modificationTimestamp	string	True	
createdBy	string	True	
modifiedBy	string	False	

### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## List the volumes for an app

GET /accounts/{account\_id}/k8s/v1/apps/{app\_id}/volumes

Returns a JSON array of all matching resources in the collection. If individual fields are specified in the

request, the items JSON array will contain the fields requested for each matching resource in the order specified.

## Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource <ul style="list-style-type: none"><li>example: {{.Account}}</li></ul>
app_id	string	path	True	ID of the containing app resource
include	string	query	False	Indicates which fields should be returned when listing a collection.  URL examples: "include=id", "include=id,name"  OpenAPI examples: "id" <ul style="list-style-type: none"><li>example: id,name</li></ul>
limit	string	query	False	Indicates the maximum number of resources to return when listing a collection.  URL examples: "limit=2"  OpenAPI examples: "2"

## Response

Status: 200, Returns a JSON array of all matching resources in the collection. If individual fields are specified in the request, the items JSON array will contain the fields requested for each matching resource in the order specified.

Name	Type	Required	Description
items	array[Any of: <a href="#">volume_1.2_get_response_body</a> , array[]]	True	
metadata	<a href="#">type_astra_metadata_list</a>	True	

### Example response

```
{
  "type": "application/astra-volumes",
  "version": "1.2",
  "items": [
    [
      "24fe6e79-bf8d-45c9-96af-ef1d11fbd4a0",
      "myVolume"
    ],
    [
      "20a370f4-957f-446a-9126-08853d01933a",
      "secondVol"
    ],
    [
      "48e349a2-5bcd-4c59-896c-12b8240e634b",
      "smallVol"
    ]
  ],
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

### Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	

Name	Type	Required	Description
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	



## Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

## Definitions

## See Definitions

### type\_astra\_stateDetails

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	

### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

### type\_astra\_metadata

Client and service-specified metadata associated with the resource.

Defined values are:

- Conforms to the Astra Metadata Schema

Name	Type	Required	Description
labels	array[type_astra_label]	True	
creationTimestamp	string	True	
modificationTimestamp	string	True	
createdBy	string	True	
modifiedBy	string	False	

### volume\_1.2\_get\_response\_body

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>• "application/astra-volume"</li></ul>

Name	Type	Required	Description
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "1.0"</li> <li>• "1.1"</li> <li>• "1.2"</li> </ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the UUIDv4 Schema</li> </ul>
name	string	True	JSON string containing the name of the volume. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>
state	string	False	JSON string containing a value indicating the operational state of the volume.
size	string	False	JSON string containing the size of the volume.
used	number	False	JSON number containing the number of bytes of quota used by the provisioned volume.
usedPercentage	number	False	JSON number containing the percentage of volume used.
total	number	False	JSON number containing the total bytes of volumes provisioned.

Name	Type	Required	Description
creationToken	string	False	JSON string containing the creation token of the volume. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>
snapshotPossible	string	False	JSON string indicating whether the driver can perform a snapshot of the volume. Defined values are: <ul style="list-style-type: none"> <li>• "true" - Driver can take a snapshot of the volume</li> <li>• "false" - Driver cannot take a snapshot of the volume</li> </ul>
storageClass	string	False	JSON string containing the storage class for the volume. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>
pvcName	string	False	JSON string containing the PersistentVolumeClaim (PVC) name of the volume. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>

Name	Type	Required	Description
internalName	string	False	<p>JSON string containing the internal name of the volume on the target storage cluster, if available. This name is obtained from the Kubernetes CSI driver.</p> <ul style="list-style-type: none"> <li>• Defined values are:</li> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>
appsUsing	array[string]	True	<p>JSON array of JSON strings, each containing the ID of an application that is using the volume. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
storageBackendID	string	False	<p>JSON string containing the ID of the storage backend that provides the volume. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
orchestrator	string	False	<p>JSON string containing the orchestrator for this volume. This will be defined for Astra Data Store volumes.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "trident" - Trident has provisioned this volume</li> <li>• "vasa" - NetApp VASA Provider has provisioned this volume</li> <li>• "other" - The volume has been provisioned manually or the orchestrator is not known</li> </ul>
serviceLevel	string	False	<p>JSON string containing the quality of service (QoS) policy defined for this volume at the storage backend level. This will be defined for Astra Data Store volumes.</p>
exportPolicy	string	False	<p>JSON string containing the export policy associated with this volume. This will be defined for Astra Data Store volumes.</p>
nodeId	string	False	<p>JSON string containing the node ID serving the volume. This will be defined for Astra Data Store volumes.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>

Name	Type	Required	Description
healthState	string	False	<p>JSON string containing a value indicating the health state of the volume. This will be defined for Astra Data Store volumes.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "indeterminate" - The health of the resource cannot be determined (for example, due to lack of connectivity)</li> <li>• "normal" - The resource has no known issues and can provide services in accordance with the interface specification</li> <li>• "warning" - The resource has known issues that do not prevent it providing services in accordance with the interface specification</li> <li>• "critical" - The resource has known issues that prevent it from providing services in accordance with the interface specification</li> </ul>
healthStateDetails	array[ <a href="#">type_astra_stateDetails</a> ]	True	<p>JSON array of JSON objects that lists additional details about the current health. If no details are available, this array will be empty.</p> <ul style="list-style-type: none"> <li>• Minimum Items: 0</li> </ul>

Name	Type	Required	Description
metadata	<a href="#">type_astra_metadata</a>	True	Client and service-specified metadata associated with the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema</li> </ul>

#### type\_astra\_metadata\_list

Name	Type	Required	Description
continue	string	False	
count	number	False	
labels	array[ <a href="#">type_astra_label</a> ]	False	
creationTimestamp	string	False	
modificationTimestamp	string	False	
createdBy	string	False	
modifiedBy	string	False	

#### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

## Retrieve a volume for an app

GET /accounts/{account\_id}/k8s/v1/apps/{app\_id}/volumes/{volume\_id}

Returns the stored Volume API resource in the JSON response body.

### Parameters



Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource  • example: {{.Account}}
app_id	string	path	True	ID of the containing app resource
volume_id	string	path	True	ID of the volume collection to list

## Response

Status: 200, Returns the stored Volume API resource in the JSON response body.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are:  • "application/astra-volume"
version	string	True	Version of the resource. Defined values are:  • "1.0" • "1.1" • "1.2"
id	string	True	Globally unique identifier of the resource. Defined values are:  • Conforms to the UUIDv4 Schema

Name	Type	Required	Description
name	string	True	JSON string containing the name of the volume. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>
state	string	False	JSON string containing a value indicating the operational state of the volume.
size	string	False	JSON string containing the size of the volume.
used	number	False	JSON number containing the number of bytes of quota used by the provisioned volume.
usedPercentage	number	False	JSON number containing the percentage of volume used.
total	number	False	JSON number containing the total bytes of volumes provisioned.
creationToken	string	False	JSON string containing the creation token of the volume. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>

Name	Type	Required	Description
snapshotPossible	string	False	<p>JSON string indicating whether the driver can perform a snapshot of the volume.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - Driver can take a snapshot of the volume</li> <li>• "false" - Driver cannot take a snapshot of the volume</li> </ul>
storageClass	string	False	<p>JSON string containing the storage class for the volume.</p> <ul style="list-style-type: none"> <li>• Defined values are:</li> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>
pvcName	string	False	<p>JSON string containing the PersistentVolumeClaim (PVC) name of the volume.</p> <ul style="list-style-type: none"> <li>• Defined values are:</li> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>
internalName	string	False	<p>JSON string containing the internal name of the volume on the target storage cluster, if available. This name is obtained from the Kubernetes CSI driver.</p> <ul style="list-style-type: none"> <li>• Defined values are:</li> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>

Name	Type	Required	Description
appsUsing	array[string]	True	<p>JSON array of JSON strings, each containing the ID of an application that is using the volume. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
storageBackendID	string	False	<p>JSON string containing the ID of the storage backend that provides the volume. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
orchestrator	string	False	<p>JSON string containing the orchestrator for this volume. This will be defined for Astra Data Store volumes. Defined values are:</p> <ul style="list-style-type: none"> <li>• "trident" - Trident has provisioned this volume</li> <li>• "vasa" - NetApp VASA Provider has provisioned this volume</li> <li>• "other" - The volume has been provisioned manually or the orchestrator is not known</li> </ul>
serviceLevel	string	False	<p>JSON string containing the quality of service (QoS) policy defined for this volume at the storage backend level. This will be defined for Astra Data Store volumes.</p>

Name	Type	Required	Description
exportPolicy	string	False	JSON string containing the export policy associated with this volume. This will be defined for Astra Data Store volumes.
nodeId	string	False	<p>JSON string containing the node ID serving the volume. This will be defined for Astra Data Store volumes.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
healthState	string	False	<p>JSON string containing a value indicating the health state of the volume. This will be defined for Astra Data Store volumes.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• "indeterminate" - The health of the resource cannot be determined (for example, due to lack of connectivity)</li> <li>• "normal" - The resource has no known issues and can provide services in accordance with the interface specification</li> <li>• "warning" - The resource has known issues that do not prevent it providing services in accordance with the interface specification</li> <li>• "critical" - The resource has known issues that prevent it from providing services in accordance with the interface specification</li> </ul>

Name	Type	Required	Description
healthStateDetails	array[type_astra_stateDetails]	True	<p>JSON array of JSON objects that lists additional details about the current health.</p> <p>If no details are available, this array will be empty.</p> <ul style="list-style-type: none"> <li>• Minimum Items: 0</li> </ul>
metadata	type_astra_metadata	True	<p>Client and service-specified metadata associated with the resource.</p> <p>Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema</li> </ul>

## Example response

```
{
  "type": "application/astra-volume",
  "version": "1.2",
  "id": "ab5c9fb8-ddba-526f-8bd3-8d5b72cf4f7f",
  "name": "myVolume",
  "state": "ready",
  "size": "512 GiB",
  "used": 10000000000,
  "usedPercentage": 10,
  "total": 10000000000,
  "creationToken": "ba7d4e0c-6ae3-4b6e-859d-9463e7ca4b4e",
  "snapshotPossible": "true",
  "storageClass": "gold",
  "pvcName": "myVolume",
  "internalName": "trident_sd234234_23424_897d_876sd65w",
  "appsUsing": [],
  "orchestrator": "trident",
  "serviceLevel": "gold",
  "exportPolicy": "astra-vp-default",
  "nodeId": "94d16dd2-9beb-4edb-ab58-1a00e9a90052",
  "healthState": "normal",
  "healthStateDetails": [],
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	

Name	Type	Required	Description
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/3",
  "title": "Missing bearer token",
  "detail": "The request is missing the required bearer token.",
  "status": "401"
}
```

### Response

Status: 400, Bad request

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	
invalidParams	array[invalidParams]	False	List of invalid query parameters

### Example response

```
{
  "type": "https://astra.netapp.io/problems/5",
  "title": "Invalid query parameters",
  "detail": "The supplied query parameters are invalid.",
  "status": "400"
}
```

### Response

Status: 403, Forbidden



Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/11",
  "title": "Operation not permitted",
  "detail": "The requested operation isn't permitted.",
  "status": "403"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	False	
status	string	True	
correlationID	string	False	

### Example error response

```
{
  "type": "https://astra.netapp.io/problems/2",
  "title": "Collection not found",
  "detail": "The collection specified in the request URI wasn't
found.",
  "status": "404"
}
```

## Definitions

### See Definitions

#### type\_astra\_stateDetails

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	

#### type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

#### type\_astra\_metadata

Client and service-specified metadata associated with the resource.  
Defined values are:

- Conforms to the Astra Metadata Schema

Name	Type	Required	Description
labels	array[ <a href="#">type_astra_label</a> ]	True	
creationTimestamp	string	True	
modificationTimestamp	string	True	
createdBy	string	True	
modifiedBy	string	False	

#### invalidParams

Name	Type	Required	Description
name	string	True	Name of the invalid query parameter
reason	string	True	Reason why the query parameter is invalid

# Risorse aggiuntive

Sono disponibili ulteriori risorse a cui è possibile accedere per ottenere assistenza e ottenere ulteriori informazioni sui servizi cloud e sul supporto NetApp, nonché sui concetti generali DI REST e cloud.

## Astra

- ["Documentazione di Astra Control Center 22.11"](#)

Documentazione per l'attuale release del software Astra Control Center implementato presso la sede del cliente.

- ["Documentazione del servizio Astra Control"](#)

Documentazione per la release corrente del software Astra Control Service disponibile nel cloud pubblico.

- ["Documentazione di Astra Trident"](#)

Documentazione per l'attuale release del software Astra Trident, un orchestrator di storage open source gestito da NetApp.

- ["Documentazione della famiglia Astra"](#)

Posizione centrale per l'accesso a tutta la documentazione Astra per implementazioni di cloud pubblico e on-premise.

- ["Discordare"](#)

Supporto della community per Astra Control e altri prodotti NetApp.

## Risorse cloud di NetApp

- ["NetApp BlueXP"](#)

Sito centrale per le soluzioni cloud di NetApp.

- ["Console NetApp Cloud Central"](#)

Console di servizio NetApp Cloud Central con accesso.

- ["Supporto NetApp"](#)

Accesso a strumenti per la risoluzione dei problemi, documentazione e assistenza tecnica.

## Concetti DI REST e cloud

- Dottorato ["dissertazione"](#) Di Roy Fielding

Questa pubblicazione ha introdotto e definito il modello di sviluppo dell'applicazione REST.

- ["Auth0"](#)

Si tratta del servizio della piattaforma di autenticazione e autorizzazione utilizzato dal servizio Astra per l'accesso web.

- ["Editor RFC"](#)

Fonte autorevole per gli standard web e Internet mantenuta come una raccolta di documenti RFC numerati in modo univoco.

# Versioni precedenti della documentazione di Astra Control Automation

È possibile accedere alla documentazione di automazione per le precedenti release di Astra Control ai collegamenti riportati di seguito.

- ["Documentazione di Astra Control Automation 22.08"](#)
- ["Documentazione di Astra Control Automation 22.04"](#)
- ["Documentazione di Astra Control Automation 21.12"](#)
- ["Documentazione di Astra Control Automation 21.08"](#)

# Note legali

Le note legali forniscono l'accesso a dichiarazioni di copyright, marchi, brevetti e altro ancora.

## Copyright

["https://www.netapp.com/company/legal/copyright/"](https://www.netapp.com/company/legal/copyright/)

## Marchi

NETAPP, il logo NETAPP e i marchi elencati nella pagina dei marchi NetApp sono marchi di NetApp, Inc. Altri nomi di società e prodotti potrebbero essere marchi dei rispettivi proprietari.

["https://www.netapp.com/company/legal/trademarks/"](https://www.netapp.com/company/legal/trademarks/)

## Brevetti

Un elenco aggiornato dei brevetti di proprietà di NetApp è disponibile all'indirizzo:

<https://www.netapp.com/pdf.html?item=/media/11887-patentspage.pdf>

## Direttiva sulla privacy

["https://www.netapp.com/company/legal/privacy-policy/"](https://www.netapp.com/company/legal/privacy-policy/)

## Licenza API Astra Control

<https://docs.netapp.com/us-en/astra-automation/media/astra-api-license.pdf>

## Informazioni sul copyright

Copyright © 2023 NetApp, Inc. Tutti i diritti riservati. Stampato negli Stati Uniti d'America. Nessuna porzione di questo documento soggetta a copyright può essere riprodotta in qualsiasi formato o mezzo (grafico, elettronico o meccanico, inclusi fotocopie, registrazione, nastri o storage in un sistema elettronico) senza previo consenso scritto da parte del detentore del copyright.

Il software derivato dal materiale sottoposto a copyright di NetApp è soggetto alla seguente licenza e dichiarazione di non responsabilità:

IL PRESENTE SOFTWARE VIENE FORNITO DA NETAPP "COSÌ COM'È" E SENZA QUALSIVOGLIA TIPO DI GARANZIA IMPLICITA O ESPRESSA FRA CUI, A TITOLO ESEMPLIFICATIVO E NON ESAUSTIVO, GARANZIE IMPLICITE DI COMMERCIALIZZABILITÀ E IDONEITÀ PER UNO SCOPO SPECIFICO, CHE VENGONO DECLINATE DAL PRESENTE DOCUMENTO. NETAPP NON VERRÀ CONSIDERATA RESPONSABILE IN ALCUN CASO PER QUALSIVOGLIA DANNO DIRETTO, INDIRETTO, ACCIDENTALE, SPECIALE, ESEMPLARE E CONSEGUENZIALE (COMPRESI, A TITOLO ESEMPLIFICATIVO E NON ESAUSTIVO, PROCUREMENT O SOSTITUZIONE DI MERCI O SERVIZI, IMPOSSIBILITÀ DI UTILIZZO O PERDITA DI DATI O PROFITTI OPPURE INTERRUZIONE DELL'ATTIVITÀ AZIENDALE) CAUSATO IN QUALSIVOGLIA MODO O IN RELAZIONE A QUALUNQUE TEORIA DI RESPONSABILITÀ, SIA ESSA CONTRATTUALE, RIGOROSA O DOVUTA A INSOLVENZA (COMPRESA LA NEGLIGENZA O ALTRO) INSORTA IN QUALSIASI MODO ATTRAVERSO L'UTILIZZO DEL PRESENTE SOFTWARE ANCHE IN PRESENZA DI UN PREAVVISO CIRCA L'EVENTUALITÀ DI QUESTO TIPO DI DANNI.

NetApp si riserva il diritto di modificare in qualsiasi momento qualunque prodotto descritto nel presente documento senza fornire alcun preavviso. NetApp non si assume alcuna responsabilità circa l'utilizzo dei prodotti o materiali descritti nel presente documento, con l'eccezione di quanto concordato espressamente e per iscritto da NetApp. L'utilizzo o l'acquisto del presente prodotto non comporta il rilascio di una licenza nell'ambito di un qualche diritto di brevetto, marchio commerciale o altro diritto di proprietà intellettuale di NetApp.

Il prodotto descritto in questa guida può essere protetto da uno o più brevetti degli Stati Uniti, esteri o in attesa di approvazione.

LEGENDA PER I DIRITTI SOTTOPOSTI A LIMITAZIONE: l'utilizzo, la duplicazione o la divulgazione da parte degli enti governativi sono soggetti alle limitazioni indicate nel sottoparagrafo (b)(3) della clausola Rights in Technical Data and Computer Software del DFARS 252.227-7013 (FEB 2014) e FAR 52.227-19 (DIC 2007).

I dati contenuti nel presente documento riguardano un articolo commerciale (secondo la definizione data in FAR 2.101) e sono di proprietà di NetApp, Inc. Tutti i dati tecnici e il software NetApp forniti secondo i termini del presente Contratto sono articoli aventi natura commerciale, sviluppati con finanziamenti esclusivamente privati. Il governo statunitense ha una licenza irrevocabile limitata, non esclusiva, non trasferibile, non cedibile, mondiale, per l'utilizzo dei Dati esclusivamente in connessione con e a supporto di un contratto governativo statunitense in base al quale i Dati sono distribuiti. Con la sola esclusione di quanto indicato nel presente documento, i Dati non possono essere utilizzati, divulgati, riprodotti, modificati, visualizzati o mostrati senza la previa approvazione scritta di NetApp, Inc. I diritti di licenza del governo degli Stati Uniti per il Dipartimento della Difesa sono limitati ai diritti identificati nella clausola DFARS 252.227-7015(b) (FEB 2014).

## Informazioni sul marchio commerciale

NETAPP, il logo NETAPP e i marchi elencati alla pagina <http://www.netapp.com/TM> sono marchi di NetApp, Inc. Gli altri nomi di aziende e prodotti potrebbero essere marchi dei rispettivi proprietari.