



# App

## Astra Automation

NetApp  
June 28, 2024

# 目錄

App	1
App overview	1
Create a new app for a managed cluster	1
List the apps for a managed cluster	38
Retrieve an app for a managed cluster	67
Modify an app for a managed cluster	97
Delete an app for a managed cluster	122
Create a new app	127
List all apps	164
Retrieve an app	193
Modify an app	222
Delete an app	247

# App

## App overview

The App API represents Kubernetes applications, including those unmanaged by Astra.

## 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: {{.Account}}</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><li>"2.2"</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[clusterScopedResources]	False	JSON array of JSON objects describing the cluster-scoped resources that are part of this app
namespaceScopedResources	array[namespaceScopedResources]	False	JSON array of JSON objects describing the resources that are part of this app
namespaceMapping	array[namespaceMapping]	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>
storageClassMapping	array[storageClassMapping]	False	<p>JSON array of JSON objects, each mapping a source storage class to a destination storage class for a restore operation. If no elements or not present, original source storage class names will be used. 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. 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>
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>

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. 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. Only returned if the application was restored from a backup. 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. 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. Only returned if the application was restored from a snapshot. 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. 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. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
restoreFilter	restoreFilter	False	<p>JSON object containing a list of filters that describe which resources are included or excluded from a selective restore operation. Include and exclude are mutually exclusive, and a selective restore can only use one kind of filter.</p>



Name	Type	Required	Description
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-app",
  "version": "2.2",
  "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> <li>"2.2"</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>
links	array[type_astra_link]	True	Links describing supported operations against the resource.
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> ]	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. 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> <li>• "deleting" - The application is in the process of being deleted</li> </ul>

Name	Type	Required	Description
stateTransitions	array[ <a href="#">type_astra_stateTransition</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_stateDetail</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.</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. 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_stateDetail]	True	<p>JSON array of JSON objects which lists additional details about the current protection 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
appDetectedType	string	False	<p>JSON string that uniquely represents the specific type of application that is detected. 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. 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. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum Items: 0</li> </ul>

Name	Type	Required	Description
storageClassMapping	array[ <a href="#">storageClassMapping</a> ]	False	<p>JSON array of JSON objects, each mapping a source storage class to a destination storage class for a restore operation. If no elements or not present, original source storage class names will be used. 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. 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. 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
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 (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. 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. Only returned if the application was restored from a backup. 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. 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. Only returned if the application was restored from a snapshot. 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. 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. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
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 the 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>

Name	Type	Required	Description
restoreFilter	restoreFilter	False	JSON object containing a list of filters that describe which resources are included or excluded from a selective restore operation. Include and exclude are mutually exclusive, and a selective restore can only use one kind of filter.
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-app",
  "version": "2.2",
  "id": "39c1c79f-efab-5357-88fb-20e628c4dd96",
  "links": [],
  "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	True	
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	True	
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	True	
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	True	
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	True	
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. Each element in this array is a Kubernetes label selector string and follows the same grammar for those values. 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 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></li> </ul>

#### 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]	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. Each element in this array is a Kubernetes label selector string and follows the grammar for those values. 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 Note that multiple selection operators can be included in a single selector, separated by commas. In that case, the results of the individual</li> </ul>

## namespaceMapping

Name	Type	Required	Description
source	string	True	<p>JSON string containing the name of the namespace on the source cluster. 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. 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>

## storageClassMapping

Name	Type	Required	Description
source	string	True	<p>JSON string containing the name of the source storage class. Can also be '*' to specify all source storage classes. 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 if Storage Class name is used</li> <li>• '*' to specify all storage classes</li> </ul>

Name	Type	Required	Description
destination	string	True	<p>JSON string containing the name of the destination storage class. 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>

#### GVKN

Name	Type	Required	Description
group	string	False	<p>JSON string containing a group identifier assigned by Kubernetes.</p> <ul style="list-style-type: none"> <li>• This string is internally validated against Astra /apiResources</li> </ul>
version	string	False	<p>JSON string containing a version identifier assigned by Kubernetes.</p> <ul style="list-style-type: none"> <li>• This string is internally validated against Astra /apiResources</li> </ul>
kind	string	False	<p>JSON string containing a kind identifier assigned by Kubernetes.</p> <ul style="list-style-type: none"> <li>• This string is internally validated against Astra /apiResources</li> </ul>

Name	Type	Required	Description
namespaces	array[string]	False	<p>JSON array of JSON strings describing namespaces to include or exclude resources from. 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>
names	array[string]	False	<p>JSON array of JSON strings describing Kubernetes resource names to include or exclude from the selective restore. 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 describing Kubernetes label selectors used to include or exclude resources from the selective restore. Each element in this array is a Kubernetes label selector string and follows the same grammar for those values. 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 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></li> </ul>

#### restoreFilter

JSON object containing a list of filters that describe which resources are included or excluded from a selective restore operation. Include and exclude are mutually exclusive, and a selective restore can only use one kind of filter.

Name	Type	Required	Description
resourceSelectionCriteria	string	True	JSON string containing a value that indicates how resource filters select resources. Valid values are include or exclude.

Name	Type	Required	Description
GVKN	array[GVKN]	True	JSON array of JSON objects that describe resources to filter during a selective restore. A resource matches a single GVKN filter element if all of the specified filter fields match the corresponding resource field. Filter fields that are arrays (for example, namespaces and names) match if any of its elements match the corresponding resource field. The labelSelectors field requires that all selectors match. A resource that matches any filter in the array of GVKN filter objects is included or excluded from the restore based on the resourceSelectionCriteria value. Specifying empty GVKN objects results in a validation error.

#### 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	

Name	Type	Required	Description
createdBy	string	False	
modifiedBy	string	False	

targetSchema

accept-post

accept-put

hints

Name	Type	Required	Description
status	string	False	
allow	array[string]	False	
accept-post	<a href="#">accept-post</a>	False	
permissions	array[string]	False	
accept-put	<a href="#">accept-put</a>	False	

type\_astra\_link

Name	Type	Required	Description
rel	string	True	
href	string	True	
type	string	False	
targetSchema	<a href="#">targetSchema</a>	False	
title	string	False	
hints	<a href="#">hints</a>	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. Each element in this array is a Kubernetes label selector string and follows the grammar for those values. 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 Note that multiple selection operators can be included in a single selector, separated by commas. In that case, the results of the individual</li> </ul>

### type\_astra\_stateTransition

Name	Type	Required	Description
from	string	True	
to	array[string]	True	

### type\_astra\_stateDetail

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

### restoreFilter

JSON object containing a list of filters that describe which resources are included or excluded from a selective restore operation. Include and exclude are mutually exclusive, and a selective restore can only use one kind of filter.

Name	Type	Required	Description
resourceSelectionCriteria	string	False	JSON string containing a value that indicates how resource filters select resources. Valid values are include or exclude.

Name	Type	Required	Description
GVKN	array[GVKN]	False	JSON array of JSON objects that describe resources to filter during a selective restore. A resource matches a single GVKN filter element if all of the specified filter fields match the corresponding resource field. Filter fields that are arrays (for example, namespaces and names) match if any of its elements match the corresponding resource field. The labelSelectors field requires that all selectors match. A resource that matches any filter in the array of GVKN filter objects is included or excluded from the restore based on the resourceSelectionCriteria value. Specifying empty GVKN objects results in a validation error.

#### 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_2.2_get_response_body</a> , array[]]	True	
metadata	<a href="#">type_astra_metadata_list</a>	True	

## Example response

```
{
  "type": "application/astra-apps",
  "version": "2.2",
  "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	True	
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	True	
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	True	
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	True	
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

targetSchema

accept-post

accept-put

hints

Name	Type	Required	Description
status	string	False	
allow	array[string]	False	
accept-post	<a href="#">accept-post</a>	False	
permissions	array[string]	False	
accept-put	<a href="#">accept-put</a>	False	

type\_astra\_link

Name	Type	Required	Description
rel	string	True	
href	string	True	
type	string	False	
targetSchema	<a href="#">targetSchema</a>	False	
title	string	False	
hints	<a href="#">hints</a>	False	

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>

Name	Type	Required	Description
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. Each element in this array is a Kubernetes label selector string and follows the same grammar for those values. 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 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></li> </ul>

#### 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. Each element in this array is a Kubernetes label selector string and follows the grammar for those values. 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 Note that multiple selection operators can be included in a single selector, separated by commas. In that case, the results of the individual</li> </ul>

### type\_astra\_stateTransition

Name	Type	Required	Description
from	string	True	
to	array[string]	True	

### type\_astra\_stateDetail

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. 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. 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>

### storageClassMapping

Name	Type	Required	Description
source	string	True	<p>JSON string containing the name of the source storage class. Can also be '*' to specify all source storage classes. 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 if Storage Class name is used</li> <li>• '*' to specify all storage classes</li> </ul>
destination	string	True	<p>JSON string containing the name of the destination storage class. 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>

#### GVKN

Name	Type	Required	Description
group	string	False	<p>JSON string containing a group identifier assigned by Kubernetes.</p> <ul style="list-style-type: none"> <li>• This string is internally validated against Astra /apiResources</li> </ul>

Name	Type	Required	Description
version	string	False	<p>JSON string containing a version identifier assigned by Kubernetes.</p> <ul style="list-style-type: none"> <li>• This string is internally validated against Astra /apiResources</li> </ul>
kind	string	False	<p>JSON string containing a kind identifier assigned by Kubernetes.</p> <ul style="list-style-type: none"> <li>• This string is internally validated against Astra /apiResources</li> </ul>
namespaces	array[string]	False	<p>JSON array of JSON strings describing namespaces to include or exclude resources from. 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>
names	array[string]	False	<p>JSON array of JSON strings describing Kubernetes resource names to include or exclude from the selective restore. 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 describing Kubernetes label selectors used to include or exclude resources from the selective restore. Each element in this array is a Kubernetes label selector string and follows the same grammar for those values. 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 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></li> </ul>

#### restoreFilter

JSON object containing a list of filters that describe which resources are included or excluded from a selective restore operation. Include and exclude are mutually exclusive, and a selective restore can only use one kind of filter.

Name	Type	Required	Description
resourceSelectionCriteria	string	False	JSON string containing a value that indicates how resource filters select resources. Valid values are include or exclude.

Name	Type	Required	Description
GVKN	array[GVKN]	False	JSON array of JSON objects that describe resources to filter during a selective restore. A resource matches a single GVKN filter element if all of the specified filter fields match the corresponding resource field. Filter fields that are arrays (for example, namespaces and names) match if any of its elements match the corresponding resource field. The labelSelectors field requires that all selectors match. A resource that matches any filter in the array of GVKN filter objects is included or excluded from the restore based on the resourceSelectionCriteria value. Specifying empty GVKN objects results in a validation error.

#### 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	

Name	Type	Required	Description
createdBy	string	False	
modifiedBy	string	False	

#### app\_2.2\_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-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> <li>"2.2"</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>
links	array[type_astra_link]	True	Links describing supported operations against the resource.
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>

Name	Type	Required	Description
clusterScopedResources	array[clusterScopedResources]	False	JSON array of JSON objects describing the cluster-scoped resources that are part of this app
namespaceScopedResources	array[namespaceScopedResources]	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. 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> <li>• "deleting" - The application is in the process of being deleted</li> </ul>

Name	Type	Required	Description
stateTransitions	array[ <a href="#">type_astra_stateTransition</a> ]	False	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.
stateDetails	array[ <a href="#">type_astra_stateDetail</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.</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. 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_stateDe tail</a> ]	True	<p>JSON array of JSON objects which lists additional details about the current protection 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
appDetectedType	string	False	<p>JSON string that uniquely represents the specific type of application that is detected. 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. 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. Defined values are:</p> <ul style="list-style-type: none"> <li>Minimum Items: 0</li> </ul>

Name	Type	Required	Description
storageClassMapping	array[ <a href="#">storageClassMapping</a> ]	False	<p>JSON array of JSON objects, each mapping a source storage class to a destination storage class for a restore operation. If no elements or not present, original source storage class names will be used. 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. 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. 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
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 (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. 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. Only returned if the application was restored from a backup. 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. 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. Only returned if the application was restored from a snapshot. 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. 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. 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 the 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>
restoreFilter	<a href="#">restoreFilter</a>	False	<p>JSON object containing a list of filters that describe which resources are included or excluded from a selective restore operation. Include and exclude are mutually exclusive, and a selective restore can only use one kind of filter.</p>

Name	Type	Required	Description
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	
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 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><li>"2.2"</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>
links	array[ <a href="#">type_astra_link</a> ]	True	Links describing supported operations against the resource.
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. 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. 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> <li>• "deleting" - The application is in the process of being deleted</li> </ul>



Name	Type	Required	Description
stateTransitions	array[ <a href="#">type_astra_stateTransition</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_stateDetail</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.</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. 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_stateDetail]	True	<p>JSON array of JSON objects which lists additional details about the current protection 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
appDetectedType	string	False	<p>JSON string that uniquely represents the specific type of application that is detected. 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. 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. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum Items: 0</li> </ul>

Name	Type	Required	Description
storageClassMapping	array[ <a href="#">storageClassMapping</a> ]	False	<p>JSON array of JSON objects, each mapping a source storage class to a destination storage class for a restore operation. If no elements or not present, original source storage class names will be used. 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. 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. 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
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 (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. 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. Only returned if the application was restored from a backup. 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. 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. 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. Only returned if the application was restored from a snapshot. 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. 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. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
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 the 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>

Name	Type	Required	Description
restoreFilter	restoreFilter	False	JSON object containing a list of filters that describe which resources are included or excluded from a selective restore operation. Include and exclude are mutually exclusive, and a selective restore can only use one kind of filter.
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-app",
  "version": "2.2",
  "id": "39c1c79f-efab-5357-88fb-20e628c4dd96",
  "links": [
    {
      "rel": "canonical",
      "href": "/accounts/652f7a18-d4ed-47b2-b467-15bf2154d079/topology/v2/managedClusters/6a358976-c3ac-49aa-b043-9c9b425c90ac/apps/27467088-2e99-4bd8-aa9b-014d5f44a62f"
    },
    {
      "rel": "collection",
      "href": "/accounts/652f7a18-d4ed-47b2-b467-15bf2154d079/topology/v1/clouds/892814c9-77a1-46f3-b54a-82c34cdf0032/clusters/6a358976-c3ac-49aa-b043-9c9b425c90ac/namespaces/da78daf6-8e11-4220-a461-6b1d4a6dc231/apps"
    },
    {
      "rel": "related",
      "href": "/accounts/652f7a18-d4ed-47b2-b467-15bf2154d079/k8s/v1/apps/27467088-2e99-4bd8-aa9b-014d5f44a62f/appBackups",
      "type": "application/astra-appBackup",
      "title": "disruptiveBackup",
      "hints": {
        "allow": [],
        "permissions": [
          "appBackup-create"
        ]
      }
    },
    {
      "rel": "related",
      "href": "/accounts/652f7a18-d4ed-47b2-b467-15bf2154d079/k8s/v1/apps/27467088-2e99-4bd8-aa9b-014d5f44a62f/appBackups",
      "type": "application/astra-appBackup",
      "title": "nonDisruptiveBackup",
      "hints": {
        "allow": [
          "POST"
        ],
        "permissions": [
```

```

        "appBackup-create"
    ]
}
},
{
    "rel": "related",
    "href": "/accounts/652f7a18-d4ed-47b2-b467-15bf2154d079/k8s/v2/apps",
    "type": "application/astra-app",
    "title": "restore",
    "hints": {
        "allow": [
            "POST"
        ],
        "permissions": [
            "app-create"
        ]
    }
},
{
    "rel": "related",
    "href": "/accounts/652f7a18-d4ed-47b2-b467-15bf2154d079/k8s/v1/apps/27467088-2e99-4bd8-aa9b-014d5f44a62f/appSnaps",
    "type": "application/astra-appSnap",
    "title": "snapshot",
    "hints": {
        "allow": [
            "POST"
        ],
        "permissions": [
            "appSnap-create"
        ]
    }
},
{
    "rel": "related",
    "href": "/accounts/652f7a18-d4ed-47b2-b467-15bf2154d079/k8s/v2/apps",
    "type": "application/astra-app",
    "title": "clone",
    "hints": {
        "allow": [
            "POST"
        ],
        "permissions": [

```

```

        "app-create"
    ]
}
},
{
    "rel": "related",
    "href": "/accounts/652f7a18-d4ed-47b2-b467-15bf2154d079/k8s/v2/apps/27467088-2e99-4bd8-aa9b-014d5f44a62f",
    "type": "application/astra-app",
    "title": "inPlaceRestore",
    "hints": {
        "allow": [
            "PUT"
        ],
        "permissions": [
            "app-update"
        ]
    }
},
{
    "rel": "related",
    "href": "/accounts/652f7a18-d4ed-47b2-b467-15bf2154d079/k8s/v1/apps/27467088-2e99-4bd8-aa9b-014d5f44a62f/appMirrors",
    "type": "application/astra-appMirror",
    "title": "replication",
    "hints": {
        "allow": [
            "POST"
        ],
        "permissions": [
            "appMirror-create"
        ]
    }
},
],
"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	True	
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	True	
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	True	
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	True	
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

targetSchema

accept-post

accept-put

hints

Name	Type	Required	Description
status	string	False	
allow	array[string]	False	
accept-post	<a href="#">accept-post</a>	False	
permissions	array[string]	False	
accept-put	<a href="#">accept-put</a>	False	

type\_astra\_link

Name	Type	Required	Description
rel	string	True	
href	string	True	
type	string	False	
targetSchema	<a href="#">targetSchema</a>	False	
title	string	False	
hints	<a href="#">hints</a>	False	

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>

Name	Type	Required	Description
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. Each element in this array is a Kubernetes label selector string and follows the same grammar for those values. 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 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></li> </ul>

#### 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. Each element in this array is a Kubernetes label selector string and follows the grammar for those values. 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 Note that multiple selection operators can be included in a single selector, separated by commas. In that case, the results of the individual</li> </ul>

### type\_astra\_stateTransition

Name	Type	Required	Description
from	string	True	
to	array[string]	True	

### type\_astra\_stateDetail

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. 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. 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>

### storageClassMapping

Name	Type	Required	Description
source	string	True	<p>JSON string containing the name of the source storage class. Can also be '*' to specify all source storage classes. 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 if Storage Class name is used</li> <li>• '*' to specify all storage classes</li> </ul>
destination	string	True	<p>JSON string containing the name of the destination storage class. 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>

#### GVKN

Name	Type	Required	Description
group	string	False	<p>JSON string containing a group identifier assigned by Kubernetes.</p> <ul style="list-style-type: none"> <li>• This string is internally validated against Astra /apiResources</li> </ul>

Name	Type	Required	Description
version	string	False	<p>JSON string containing a version identifier assigned by Kubernetes.</p> <ul style="list-style-type: none"> <li>• This string is internally validated against Astra /apiResources</li> </ul>
kind	string	False	<p>JSON string containing a kind identifier assigned by Kubernetes.</p> <ul style="list-style-type: none"> <li>• This string is internally validated against Astra /apiResources</li> </ul>
namespaces	array[string]	False	<p>JSON array of JSON strings describing namespaces to include or exclude resources from. 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>
names	array[string]	False	<p>JSON array of JSON strings describing Kubernetes resource names to include or exclude from the selective restore. 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 describing Kubernetes label selectors used to include or exclude resources from the selective restore. Each element in this array is a Kubernetes label selector string and follows the same grammar for those values. 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 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></li> </ul>

#### restoreFilter

JSON object containing a list of filters that describe which resources are included or excluded from a selective restore operation. Include and exclude are mutually exclusive, and a selective restore can only use one kind of filter.

Name	Type	Required	Description
resourceSelectionCriteria	string	False	JSON string containing a value that indicates how resource filters select resources. Valid values are include or exclude.

Name	Type	Required	Description
GVKN	array[GVKN]	False	JSON array of JSON objects that describe resources to filter during a selective restore. A resource matches a single GVKN filter element if all of the specified filter fields match the corresponding resource field. Filter fields that are arrays (for example, namespaces and names) match if any of its elements match the corresponding resource field. The labelSelectors field requires that all selectors match. A resource that matches any filter in the array of GVKN filter objects is included or excluded from the restore based on the resourceSelectionCriteria value. Specifying empty GVKN objects results in a validation error.

#### 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	

Name	Type	Required	Description
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  • example: {{.Account}}
managedCluster_id	string	path	True	ID of the containing managedCluster resource
app_id	string	path	True	ID of the app collection to list

Name	Type	In	Required	Description
forceUpdate	string	header	False	Flag that enables destructive overwrites. Only include this when requesting an in-place restore (IPR).  • example: true

## 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-app"
version	string	True	Version of the resource. Defined values are:  • "2.0" • "2.1" • "2.2"
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 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. 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> <li>• "deleting" - The application is in the process of being deleted</li> </ul>

Name	Type	Required	Description
stateTransitions	array[ <a href="#">type_astra_stateTransition</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_stateDetail</a> ]	False	<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.</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. 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_stateDetail]	False	<p>JSON array of JSON objects which lists additional details about the current protection 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
appDetectedType	string	False	<p>JSON string that uniquely represents the specific type of application that is detected. 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. 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. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum Items: 0</li> </ul>

Name	Type	Required	Description
storageClassMapping	array[ <a href="#">storageClassMapping</a> ]	False	<p>JSON array of JSON objects, each mapping a source storage class to a destination storage class for a restore operation. If no elements or not present, original source storage class names will be used. 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. 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. 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
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 (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. 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. Only returned if the application was restored from a backup. 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. 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. Only returned if the application was restored from a snapshot. 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. 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. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
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 the 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>

Name	Type	Required	Description
restoreFilter	restoreFilter	False	JSON object containing a list of filters that describe which resources are included or excluded from a selective restore operation. Include and exclude are mutually exclusive, and a selective restore can only use one kind of filter.
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-app",
  "version": "2.2",
  "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	True	
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	True	
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	True	
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	True	
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	True	
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. Each element in this array is a Kubernetes label selector string and follows the same grammar for those values. 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 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></li> </ul>

#### namespaceScopedResources

Name	Type	Required	Description
namespace	string	False	<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]	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. Each element in this array is a Kubernetes label selector string and follows the grammar for those values. 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 Note that multiple selection operators can be included in a single selector, separated by commas. In that case, the results of the individual</li> </ul>

### type\_astra\_stateTransition

Name	Type	Required	Description
from	string	True	
to	array[string]	True	

### type\_astra\_stateDetail

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. 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. 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>

### storageClassMapping

Name	Type	Required	Description
source	string	False	<p>JSON string containing the name of the source storage class. Can also be '*' to specify all source storage classes. 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 if Storage Class name is used</li> <li>• '*' to specify all storage classes</li> </ul>
destination	string	False	<p>JSON string containing the name of the destination storage class. 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>

#### GVKN

Name	Type	Required	Description
group	string	False	<p>JSON string containing a group identifier assigned by Kubernetes.</p> <ul style="list-style-type: none"> <li>• This string is internally validated against Astra /apiResources</li> </ul>



Name	Type	Required	Description
version	string	False	<p>JSON string containing a version identifier assigned by Kubernetes.</p> <ul style="list-style-type: none"> <li>• This string is internally validated against Astra /apiResources</li> </ul>
kind	string	False	<p>JSON string containing a kind identifier assigned by Kubernetes.</p> <ul style="list-style-type: none"> <li>• This string is internally validated against Astra /apiResources</li> </ul>
namespaces	array[string]	False	<p>JSON array of JSON strings describing namespaces to include or exclude resources from. 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>
names	array[string]	False	<p>JSON array of JSON strings describing Kubernetes resource names to include or exclude from the selective restore. 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 describing Kubernetes label selectors used to include or exclude resources from the selective restore. Each element in this array is a Kubernetes label selector string and follows the same grammar for those values. 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 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></li> </ul>

#### restoreFilter

JSON object containing a list of filters that describe which resources are included or excluded from a selective restore operation. Include and exclude are mutually exclusive, and a selective restore can only use one kind of filter.

Name	Type	Required	Description
resourceSelectionCriteria	string	True	JSON string containing a value that indicates how resource filters select resources. Valid values are include or exclude.

Name	Type	Required	Description
GVKN	array[GVKN]	True	JSON array of JSON objects that describe resources to filter during a selective restore. A resource matches a single GVKN filter element if all of the specified filter fields match the corresponding resource field. Filter fields that are arrays (for example, namespaces and names) match if any of its elements match the corresponding resource field. The labelSelectors field requires that all selectors match. A resource that matches any filter in the array of GVKN filter objects is included or excluded from the restore based on the resourceSelectionCriteria value. Specifying empty GVKN objects results in a validation error.

#### 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	

Name	Type	Required	Description
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

- If the application is still running on a cluster, the application is no longer considered to be under management and will no longer appear under /apps.
- First, the application goes into the deleting state and then deletes all associated schedules, snapshots, backups, and the stored application state.

### 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
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	True	
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	True	
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	True	
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	True	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/91",
  "title": "Application not deleted",
  "detail": "The application 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	

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

### Example response

```
{
  "type": "https://astra.netapp.io/problems/112",
  "title": "Application not ready",
  "detail": "The application is currently unavailable.",
  "status": "409"
}
```

### Error

Status: 404, Not found

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	
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><li>"2.2"</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>
storageClassMapping	array[ <a href="#">storageClassMapping</a> ]	False	<p>JSON array of JSON objects, each mapping a source storage class to a destination storage class for a restore operation. If no elements or not present, original source storage class names will be used. 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. 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>
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>

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. 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. Only returned if the application was restored from a backup. 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. 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. 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. Only returned if the application was restored from a snapshot. 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. 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. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
restoreFilter	restoreFilter	False	<p>JSON object containing a list of filters that describe which resources are included or excluded from a selective restore operation. Include and exclude are mutually exclusive, and a selective restore can only use one kind of filter.</p>

Name	Type	Required	Description
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-app",
  "version": "2.2",
  "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> <li>"2.2"</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>
links	array[type_astra_link]	True	Links describing supported operations against the resource.
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> ]	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. 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> <li>• "deleting" - The application is in the process of being deleted</li> </ul>

Name	Type	Required	Description
stateTransitions	array[ <a href="#">type_astra_stateTransition</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_stateDetail</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.</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. 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_stateDetail]	True	<p>JSON array of JSON objects which lists additional details about the current protection 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
appDetectedType	string	False	<p>JSON string that uniquely represents the specific type of application that is detected. 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. 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. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum Items: 0</li> </ul>

Name	Type	Required	Description
storageClassMapping	array[ <a href="#">storageClassMapping</a> ]	False	<p>JSON array of JSON objects, each mapping a source storage class to a destination storage class for a restore operation. If no elements or not present, original source storage class names will be used. 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. 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. 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
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 (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. 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. Only returned if the application was restored from a backup. 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. 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. 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. Only returned if the application was restored from a snapshot. 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. 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. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
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 the 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>

Name	Type	Required	Description
restoreFilter	restoreFilter	False	JSON object containing a list of filters that describe which resources are included or excluded from a selective restore operation. Include and exclude are mutually exclusive, and a selective restore can only use one kind of filter.
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-app",
  "version": "2.2",
  "id": "39c1c79f-efab-5357-88fb-20e628c4dd96",
  "links": [],
  "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	True	
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	True	
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	True	
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	True	
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	True	
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. Each element in this array is a Kubernetes label selector string and follows the same grammar for those values. 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 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></li> </ul>

#### 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]	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. Each element in this array is a Kubernetes label selector string and follows the grammar for those values. 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 Note that multiple selection operators can be included in a single selector, separated by commas. In that case, the results of the individual</li> </ul>

## namespaceMapping

Name	Type	Required	Description
source	string	True	<p>JSON string containing the name of the namespace on the source cluster. 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. 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>

## storageClassMapping

Name	Type	Required	Description
source	string	True	<p>JSON string containing the name of the source storage class. Can also be '*' to specify all source storage classes. 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 if Storage Class name is used</li> <li>• '*' to specify all storage classes</li> </ul>

Name	Type	Required	Description
destination	string	True	<p>JSON string containing the name of the destination storage class. 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>

#### GVKN

Name	Type	Required	Description
group	string	False	<p>JSON string containing a group identifier assigned by Kubernetes.</p> <ul style="list-style-type: none"> <li>• This string is internally validated against Astra /apiResources</li> </ul>
version	string	False	<p>JSON string containing a version identifier assigned by Kubernetes.</p> <ul style="list-style-type: none"> <li>• This string is internally validated against Astra /apiResources</li> </ul>
kind	string	False	<p>JSON string containing a kind identifier assigned by Kubernetes.</p> <ul style="list-style-type: none"> <li>• This string is internally validated against Astra /apiResources</li> </ul>

Name	Type	Required	Description
namespaces	array[string]	False	<p>JSON array of JSON strings describing namespaces to include or exclude resources from. 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>
names	array[string]	False	<p>JSON array of JSON strings describing Kubernetes resource names to include or exclude from the selective restore. 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 describing Kubernetes label selectors used to include or exclude resources from the selective restore. Each element in this array is a Kubernetes label selector string and follows the same grammar for those values. 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 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></li> </ul>

#### restoreFilter

JSON object containing a list of filters that describe which resources are included or excluded from a selective restore operation. Include and exclude are mutually exclusive, and a selective restore can only use one kind of filter.

Name	Type	Required	Description
resourceSelectionCriteria	string	True	JSON string containing a value that indicates how resource filters select resources. Valid values are include or exclude.

Name	Type	Required	Description
GVKN	array[GVKN]	True	JSON array of JSON objects that describe resources to filter during a selective restore. A resource matches a single GVKN filter element if all of the specified filter fields match the corresponding resource field. Filter fields that are arrays (for example, namespaces and names) match if any of its elements match the corresponding resource field. The labelSelectors field requires that all selectors match. A resource that matches any filter in the array of GVKN filter objects is included or excluded from the restore based on the resourceSelectionCriteria value. Specifying empty GVKN objects results in a validation error.

#### 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	



Name	Type	Required	Description
createdBy	string	False	
modifiedBy	string	False	

targetSchema

accept-post

accept-put

hints

Name	Type	Required	Description
status	string	False	
allow	array[string]	False	
accept-post	<a href="#">accept-post</a>	False	
permissions	array[string]	False	
accept-put	<a href="#">accept-put</a>	False	

type\_astra\_link

Name	Type	Required	Description
rel	string	True	
href	string	True	
type	string	False	
targetSchema	<a href="#">targetSchema</a>	False	
title	string	False	
hints	<a href="#">hints</a>	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. Each element in this array is a Kubernetes label selector string and follows the grammar for those values. 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 Note that multiple selection operators can be included in a single selector, separated by commas. In that case, the results of the individual</li> </ul>

### type\_astra\_stateTransition

Name	Type	Required	Description
from	string	True	
to	array[string]	True	

### type\_astra\_stateDetail

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

### restoreFilter

JSON object containing a list of filters that describe which resources are included or excluded from a selective restore operation. Include and exclude are mutually exclusive, and a selective restore can only use one kind of filter.

Name	Type	Required	Description
resourceSelectionCriteria	string	False	JSON string containing a value that indicates how resource filters select resources. Valid values are include or exclude.

Name	Type	Required	Description
GVKN	array[GVKN]	False	JSON array of JSON objects that describe resources to filter during a selective restore. A resource matches a single GVKN filter element if all of the specified filter fields match the corresponding resource field. Filter fields that are arrays (for example, namespaces and names) match if any of its elements match the corresponding resource field. The labelSelectors field requires that all selectors match. A resource that matches any filter in the array of GVKN filter objects is included or excluded from the restore based on the resourceSelectionCriteria value. Specifying empty GVKN objects results in a validation error.

#### 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: {{.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="#">app_2.2_get_response_body</a> , array[]]	True	
metadata	<a href="#">type_astra_metadata_list</a>	True	

## Example response

```
{
  "type": "application/astra-apps",
  "version": "2.2",
  "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	True	
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	True	
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	True	
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	True	
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

targetSchema

accept-post

accept-put

hints

Name	Type	Required	Description
status	string	False	
allow	array[string]	False	
accept-post	<a href="#">accept-post</a>	False	
permissions	array[string]	False	
accept-put	<a href="#">accept-put</a>	False	

type\_astra\_link

Name	Type	Required	Description
rel	string	True	
href	string	True	
type	string	False	
targetSchema	<a href="#">targetSchema</a>	False	
title	string	False	
hints	<a href="#">hints</a>	False	

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>

Name	Type	Required	Description
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. Each element in this array is a Kubernetes label selector string and follows the same grammar for those values. 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 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></li> </ul>

#### 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. Each element in this array is a Kubernetes label selector string and follows the grammar for those values. 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 Note that multiple selection operators can be included in a single selector, separated by commas. In that case, the results of the individual</li> </ul>

### type\_astra\_stateTransition

Name	Type	Required	Description
from	string	True	
to	array[string]	True	

### type\_astra\_stateDetail

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. 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. 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>

### storageClassMapping



Name	Type	Required	Description
source	string	True	<p>JSON string containing the name of the source storage class. Can also be '*' to specify all source storage classes. 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 if Storage Class name is used</li> <li>• '*' to specify all storage classes</li> </ul>
destination	string	True	<p>JSON string containing the name of the destination storage class. 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>

#### GVKN

Name	Type	Required	Description
group	string	False	<p>JSON string containing a group identifier assigned by Kubernetes.</p> <ul style="list-style-type: none"> <li>• This string is internally validated against Astra /apiResources</li> </ul>

Name	Type	Required	Description
version	string	False	<p>JSON string containing a version identifier assigned by Kubernetes.</p> <ul style="list-style-type: none"> <li>• This string is internally validated against Astra /apiResources</li> </ul>
kind	string	False	<p>JSON string containing a kind identifier assigned by Kubernetes.</p> <ul style="list-style-type: none"> <li>• This string is internally validated against Astra /apiResources</li> </ul>
namespaces	array[string]	False	<p>JSON array of JSON strings describing namespaces to include or exclude resources from. 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>
names	array[string]	False	<p>JSON array of JSON strings describing Kubernetes resource names to include or exclude from the selective restore. 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 describing Kubernetes label selectors used to include or exclude resources from the selective restore. Each element in this array is a Kubernetes label selector string and follows the same grammar for those values. 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 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></li> </ul>

#### restoreFilter

JSON object containing a list of filters that describe which resources are included or excluded from a selective restore operation. Include and exclude are mutually exclusive, and a selective restore can only use one kind of filter.

Name	Type	Required	Description
resourceSelectionCriteria	string	False	JSON string containing a value that indicates how resource filters select resources. Valid values are include or exclude.

Name	Type	Required	Description
GVKN	array[GVKN]	False	JSON array of JSON objects that describe resources to filter during a selective restore. A resource matches a single GVKN filter element if all of the specified filter fields match the corresponding resource field. Filter fields that are arrays (for example, namespaces and names) match if any of its elements match the corresponding resource field. The labelSelectors field requires that all selectors match. A resource that matches any filter in the array of GVKN filter objects is included or excluded from the restore based on the resourceSelectionCriteria value. Specifying empty GVKN objects results in a validation error.

#### 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	

Name	Type	Required	Description
createdBy	string	False	
modifiedBy	string	False	

#### app\_2.2\_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-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> <li>• "2.2"</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>
links	array[ <a href="#">type_astra_link</a> ]	True	Links describing supported operations against the resource.
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>

Name	Type	Required	Description
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. 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> <li>• "deleting" - The application is in the process of being deleted</li> </ul>

Name	Type	Required	Description
stateTransitions	array[ <a href="#">type_astra_stateTransition</a> ]	False	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.
stateDetails	array[ <a href="#">type_astra_stateDetail</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.</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. 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_stateDe tail</a> ]	True	<p>JSON array of JSON objects which lists additional details about the current protection 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
appDetectedType	string	False	<p>JSON string that uniquely represents the specific type of application that is detected. 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. 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. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum Items: 0</li> </ul>

Name	Type	Required	Description
storageClassMapping	array[ <a href="#">storageClassMapping</a> ]	False	<p>JSON array of JSON objects, each mapping a source storage class to a destination storage class for a restore operation. If no elements or not present, original source storage class names will be used. 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. 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. 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
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 (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. 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. Only returned if the application was restored from a backup. 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. 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. Only returned if the application was restored from a snapshot. 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. 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. 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 the 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>
restoreFilter	<a href="#">restoreFilter</a>	False	<p>JSON object containing a list of filters that describe which resources are included or excluded from a selective restore operation. Include and exclude are mutually exclusive, and a selective restore can only use one kind of filter.</p>

Name	Type	Required	Description
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	
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 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 <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

## 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><li>"2.2"</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
links	array[ <a href="#">type_astra_link</a> ]	True	Links describing supported operations against the resource.
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. 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> <li>• "deleting" - The application is in the process of being deleted</li> </ul>

Name	Type	Required	Description
stateTransitions	array[ <a href="#">type_astra_stateTransition</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_stateDetail</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.</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. 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_stateDetail]	True	<p>JSON array of JSON objects which lists additional details about the current protection 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
appDetectedType	string	False	<p>JSON string that uniquely represents the specific type of application that is detected. 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. 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. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum Items: 0</li> </ul>



Name	Type	Required	Description
storageClassMapping	array[ <a href="#">storageClassMapping</a> ]	False	<p>JSON array of JSON objects, each mapping a source storage class to a destination storage class for a restore operation. If no elements or not present, original source storage class names will be used. 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. 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. 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
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 (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. 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. Only returned if the application was restored from a backup. 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. 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. 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. Only returned if the application was restored from a snapshot. 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. 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. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
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 the 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>

Name	Type	Required	Description
restoreFilter	restoreFilter	False	JSON object containing a list of filters that describe which resources are included or excluded from a selective restore operation. Include and exclude are mutually exclusive, and a selective restore can only use one kind of filter.
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-app",
  "version": "2.2",
  "id": "39c1c79f-efab-5357-88fb-20e628c4dd96",
  "links": [
    {
      "rel": "canonical",
      "href": "/accounts/652f7a18-d4ed-47b2-b467-15bf2154d079/topology/v2/managedClusters/6a358976-c3ac-49aa-b043-9c9b425c90ac/apps/27467088-2e99-4bd8-aa9b-014d5f44a62f"
    },
    {
      "rel": "collection",
      "href": "/accounts/652f7a18-d4ed-47b2-b467-15bf2154d079/topology/v1/clouds/892814c9-77a1-46f3-b54a-82c34cdf0032/clusters/6a358976-c3ac-49aa-b043-9c9b425c90ac/namespaces/da78daf6-8e11-4220-a461-6b1d4a6dc231/apps"
    },
    {
      "rel": "related",
      "href": "/accounts/652f7a18-d4ed-47b2-b467-15bf2154d079/k8s/v1/apps/27467088-2e99-4bd8-aa9b-014d5f44a62f/appBackups",
      "type": "application/astra-appBackup",
      "title": "disruptiveBackup",
      "hints": {
        "allow": [],
        "permissions": [
          "appBackup-create"
        ]
      }
    },
    {
      "rel": "related",
      "href": "/accounts/652f7a18-d4ed-47b2-b467-15bf2154d079/k8s/v1/apps/27467088-2e99-4bd8-aa9b-014d5f44a62f/appBackups",
      "type": "application/astra-appBackup",
      "title": "nonDisruptiveBackup",
      "hints": {
        "allow": [
          "POST"
        ],
        "permissions": [
```



```

        "appBackup-create"
    ]
}
},
{
    "rel": "related",
    "href": "/accounts/652f7a18-d4ed-47b2-b467-15bf2154d079/k8s/v2/apps",
    "type": "application/astra-app",
    "title": "restore",
    "hints": {
        "allow": [
            "POST"
        ],
        "permissions": [
            "app-create"
        ]
    }
},
{
    "rel": "related",
    "href": "/accounts/652f7a18-d4ed-47b2-b467-15bf2154d079/k8s/v1/apps/27467088-2e99-4bd8-aa9b-014d5f44a62f/appSnaps",
    "type": "application/astra-appSnap",
    "title": "snapshot",
    "hints": {
        "allow": [
            "POST"
        ],
        "permissions": [
            "appSnap-create"
        ]
    }
},
{
    "rel": "related",
    "href": "/accounts/652f7a18-d4ed-47b2-b467-15bf2154d079/k8s/v2/apps",
    "type": "application/astra-app",
    "title": "clone",
    "hints": {
        "allow": [
            "POST"
        ],
        "permissions": [

```

```

        "app-create"
    ]
}
},
{
    "rel": "related",
    "href": "/accounts/652f7a18-d4ed-47b2-b467-15bf2154d079/k8s/v2/apps/27467088-2e99-4bd8-aa9b-014d5f44a62f",
    "type": "application/astra-app",
    "title": "inPlaceRestore",
    "hints": {
        "allow": [
            "PUT"
        ],
        "permissions": [
            "app-update"
        ]
    }
},
{
    "rel": "related",
    "href": "/accounts/652f7a18-d4ed-47b2-b467-15bf2154d079/k8s/v1/apps/27467088-2e99-4bd8-aa9b-014d5f44a62f/appMirrors",
    "type": "application/astra-appMirror",
    "title": "replication",
    "hints": {
        "allow": [
            "POST"
        ],
        "permissions": [
            "appMirror-create"
        ]
    }
},
},
"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	True	
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	True	
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	True	
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	True	
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

targetSchema

accept-post

accept-put

hints

Name	Type	Required	Description
status	string	False	
allow	array[string]	False	
accept-post	<a href="#">accept-post</a>	False	
permissions	array[string]	False	
accept-put	<a href="#">accept-put</a>	False	

type\_astra\_link

Name	Type	Required	Description
rel	string	True	
href	string	True	
type	string	False	
targetSchema	<a href="#">targetSchema</a>	False	
title	string	False	
hints	<a href="#">hints</a>	False	

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>

Name	Type	Required	Description
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. Each element in this array is a Kubernetes label selector string and follows the same grammar for those values. 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 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></li> </ul>

#### 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. Each element in this array is a Kubernetes label selector string and follows the grammar for those values. 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 Note that multiple selection operators can be included in a single selector, separated by commas. In that case, the results of the individual</li> </ul>

### type\_astra\_stateTransition

Name	Type	Required	Description
from	string	True	
to	array[string]	True	

### type\_astra\_stateDetail

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. 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. 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>

### storageClassMapping

Name	Type	Required	Description
source	string	True	<p>JSON string containing the name of the source storage class. Can also be '*' to specify all source storage classes. 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 if Storage Class name is used</li> <li>• '*' to specify all storage classes</li> </ul>
destination	string	True	<p>JSON string containing the name of the destination storage class. 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>

#### GVKN

Name	Type	Required	Description
group	string	False	<p>JSON string containing a group identifier assigned by Kubernetes.</p> <ul style="list-style-type: none"> <li>• This string is internally validated against Astra /apiResources</li> </ul>

Name	Type	Required	Description
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>
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>
namespaces	array[string]	False	JSON array of JSON strings describing namespaces to include or exclude resources from. 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>
names	array[string]	False	JSON array of JSON strings describing Kubernetes resource names to include or exclude from the selective restore. 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>

Name	Type	Required	Description
labelSelectors	array[string]	False	<p>JSON array of JSON strings describing Kubernetes label selectors used to include or exclude resources from the selective restore. Each element in this array is a Kubernetes label selector string and follows the same grammar for those values. 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 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></li> </ul>

#### restoreFilter

JSON object containing a list of filters that describe which resources are included or excluded from a selective restore operation. Include and exclude are mutually exclusive, and a selective restore can only use one kind of filter.

Name	Type	Required	Description
resourceSelectionCriteria	string	False	JSON string containing a value that indicates how resource filters select resources. Valid values are include or exclude.

Name	Type	Required	Description
GVKN	array[GVKN]	False	JSON array of JSON objects that describe resources to filter during a selective restore. A resource matches a single GVKN filter element if all of the specified filter fields match the corresponding resource field. Filter fields that are arrays (for example, namespaces and names) match if any of its elements match the corresponding resource field. The labelSelectors field requires that all selectors match. A resource that matches any filter in the array of GVKN filter objects is included or excluded from the restore based on the resourceSelectionCriteria value. Specifying empty GVKN objects results in a validation error.

#### 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	

Name	Type	Required	Description
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	Flag that enables destructive overwrites. Only include this when requesting an in-place restore (IPR). <ul style="list-style-type: none"> <li>example: <code>true</code></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> <li>• "2.2"</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 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
namespaceScopedResources	array[namespaceScopedResources]	False	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. 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. 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> <li>• "deleting" - The application is in the process of being deleted</li> </ul>

Name	Type	Required	Description
stateTransitions	array[ <a href="#">type_astra_stateTransition</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_stateDetail</a> ]	False	<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.</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. 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_stateDetail]	False	<p>JSON array of JSON objects which lists additional details about the current protection 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
appDetectedType	string	False	<p>JSON string that uniquely represents the specific type of application that is detected. 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. 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. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum Items: 0</li> </ul>

Name	Type	Required	Description
storageClassMapping	array[ <a href="#">storageClassMapping</a> ]	False	<p>JSON array of JSON objects, each mapping a source storage class to a destination storage class for a restore operation. If no elements or not present, original source storage class names will be used. 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. 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. 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
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 (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. 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. Only returned if the application was restored from a backup. 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. 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. 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. Only returned if the application was restored from a snapshot. 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. 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. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
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 the 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>

Name	Type	Required	Description
restoreFilter	restoreFilter	False	JSON object containing a list of filters that describe which resources are included or excluded from a selective restore operation. Include and exclude are mutually exclusive, and a selective restore can only use one kind of filter.
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-app",
  "version": "2.2",
  "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	True	
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	True	
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	True	
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	True	
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	True	
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. Each element in this array is a Kubernetes label selector string and follows the same grammar for those values. 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 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></li> </ul>

#### namespaceScopedResources

Name	Type	Required	Description
namespace	string	False	<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]	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. Each element in this array is a Kubernetes label selector string and follows the grammar for those values. 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 Note that multiple selection operators can be included in a single selector, separated by commas. In that case, the results of the individual</li> </ul>

### type\_astra\_stateTransition

Name	Type	Required	Description
from	string	True	
to	array[string]	True	

### type\_astra\_stateDetail

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. 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. 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>

### storageClassMapping

Name	Type	Required	Description
source	string	False	<p>JSON string containing the name of the source storage class. Can also be '*' to specify all source storage classes. 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 if Storage Class name is used</li> <li>• '*' to specify all storage classes</li> </ul>
destination	string	False	<p>JSON string containing the name of the destination storage class. 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>

#### GVKN

Name	Type	Required	Description
group	string	False	<p>JSON string containing a group identifier assigned by Kubernetes.</p> <ul style="list-style-type: none"> <li>• This string is internally validated against Astra /apiResources</li> </ul>

Name	Type	Required	Description
version	string	False	<p>JSON string containing a version identifier assigned by Kubernetes.</p> <ul style="list-style-type: none"> <li>• This string is internally validated against Astra /apiResources</li> </ul>
kind	string	False	<p>JSON string containing a kind identifier assigned by Kubernetes.</p> <ul style="list-style-type: none"> <li>• This string is internally validated against Astra /apiResources</li> </ul>
namespaces	array[string]	False	<p>JSON array of JSON strings describing namespaces to include or exclude resources from. 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>
names	array[string]	False	<p>JSON array of JSON strings describing Kubernetes resource names to include or exclude from the selective restore. 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 describing Kubernetes label selectors used to include or exclude resources from the selective restore. Each element in this array is a Kubernetes label selector string and follows the same grammar for those values. 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 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></li> </ul>

#### restoreFilter

JSON object containing a list of filters that describe which resources are included or excluded from a selective restore operation. Include and exclude are mutually exclusive, and a selective restore can only use one kind of filter.

Name	Type	Required	Description
resourceSelectionCriteria	string	True	JSON string containing a value that indicates how resource filters select resources. Valid values are include or exclude.

Name	Type	Required	Description
GVKN	array[GVKN]	True	JSON array of JSON objects that describe resources to filter during a selective restore. A resource matches a single GVKN filter element if all of the specified filter fields match the corresponding resource field. Filter fields that are arrays (for example, namespaces and names) match if any of its elements match the corresponding resource field. The labelSelectors field requires that all selectors match. A resource that matches any filter in the array of GVKN filter objects is included or excluded from the restore based on the resourceSelectionCriteria value. Specifying empty GVKN objects results in a validation error.

#### 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	



Name	Type	Required	Description
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

- If the application is still running on a cluster, the application is no longer considered to be under management and will no longer appear under /apps.
- First, the application goes into the deleting state and then deletes all associated schedules, snapshots, backups, and the stored application 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>

Name	Type	In	Required	Description
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	True	
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	True	

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	True	
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	True	
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/91",
  "title": "Application not deleted",
  "detail": "The application 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	True	
status	string	True	
correlationID	string	False	

## Example response

```
{
  "type": "https://astra.netapp.io/problems/112",
  "title": "Application not ready",
  "detail": "The application is currently unavailable.",
  "status": "409"
}
```

## Error

Status: 404, Not found

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

## 版權資訊

Copyright © 2024 NetApp, Inc. 版權所有。台灣印製。非經版權所有人事先書面同意，不得將本受版權保護文件的任何部分以任何形式或任何方法（圖形、電子或機械）重製，包括影印、錄影、錄音或儲存至電子檢索系統中。

由 NetApp 版權資料衍伸之軟體必須遵守下列授權和免責聲明：

此軟體以 NETAPP「原樣」提供，不含任何明示或暗示的擔保，包括但不限於有關適售性或特定目的適用性之擔保，特此聲明。於任何情況下，就任何已造成或基於任何理論上責任之直接性、間接性、附隨性、特殊性、懲罰性或衍生性損害（包括但不限於替代商品或服務之採購；使用、資料或利潤上的損失；或企業營運中斷），無論是在使用此軟體時以任何方式所產生的契約、嚴格責任或侵權行為（包括疏忽或其他）等方面，NetApp 概不負責，即使已被告知有前述損害存在之可能性亦然。

NetApp 保留隨時變更本文所述之任何產品的權利，恕不另行通知。NetApp 不承擔因使用本文所述之產品而產生的責任或義務，除非明確經過 NetApp 書面同意。使用或購買此產品並不會在依據任何專利權、商標權或任何其他 NetApp 智慧財產權的情況下轉讓授權。

本手冊所述之產品受到一項（含）以上的美國專利、國外專利或申請中專利所保障。

有限權利說明：政府機關的使用、複製或公開揭露須受 DFARS 252.227-7013（2014 年 2 月）和 FAR 52.227-19（2007 年 12 月）中的「技術資料權利 - 非商業項目」條款 (b)(3) 小段所述之限制。

此處所含屬於商業產品和 / 或商業服務（如 FAR 2.101 所定義）的資料均為 NetApp, Inc. 所有。根據本協議提供的所有 NetApp 技術資料和電腦軟體皆屬於商業性質，並且完全由私人出資開發。美國政府對於該資料具有非專屬、非轉讓、非轉授權、全球性、有限且不可撤銷的使用權限，僅限於美國政府為傳輸此資料所訂合約所允許之範圍，並基於履行該合約之目的方可使用。除非本文另有規定，否則未經 NetApp Inc. 事前書面許可，不得逕行使用、揭露、重製、修改、履行或展示該資料。美國政府授予國防部之許可權利，僅適用於 DFARS 條款 252.227-7015(b)（2014 年 2 月）所述權利。

## 商標資訊

NETAPP、NETAPP 標誌及 <http://www.netapp.com/TM> 所列之標章均為 NetApp, Inc. 的商標。文中所涉及的所有其他公司或產品名稱，均為其各自所有者的商標，不得侵犯。