



# Cluster

## Astra Automation

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# Cluster

## Cluster overview

The Cluster API represents unmanaged Kubernetes clusters.

## Create a new cluster for a cloud

POST /accounts/{account\_id}/topology/v1/clouds/{cloud\_id}/clusters

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

### Parameters

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

### Request Body

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

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

Name	Type	Required	Description
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "1.0"</li> <li>• "1.1"</li> <li>• "1.2"</li> <li>• "1.3"</li> <li>• "1.4"</li> <li>• "1.5"</li> <li>• "1.6"</li> </ul>
name	string	False	JSON string containing a name for the cluster. If not specified, the Kubernetes name of the cluster will be used. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> <li>• This string is internally validated to prevent XSS, Unicode, directory traversal, and SQL-injection attacks</li> </ul>
accHost	string	False	JSON string that indicates that this cluster hosts the instance of Astra Control Center that is currently being accessed. Defined values are: <ul style="list-style-type: none"> <li>• "true" - This cluster is hosting the instance of Astra Control Center that is currently being accessed.</li> </ul>

Name	Type	Required	Description
credentialID	string	False	<p>JSON string containing a value indicating the ID of the credential that contains the kubeconfig file for the cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema If privateRouteID and connectorCapabilities with at least the relay option are provided, credentialID is optional. If they are not provided, credentialID is required, otherwise, an error is generated. If credentialID and a relay capable connector is provided, an error is generated.</li> </ul>
privateRouteID	string	False	<p>JSON string containing the location ID for private clusters.</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>
connectorCapabilities	array[string]	False	<p>Capabilities of the connector that is associated with this cluster. Optional for backwards compatibility. If not present, proxy is the assumed capability.</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-cluster",
  "version": "1.6",
  "name": "GKE-22",
  "credentialID": "6fa2f917-f730-41b8-9c15-17f531843b31"
}
```

### Response

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

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

Name	Type	Required	Description
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "1.0"</li> <li>• "1.1"</li> <li>• "1.2"</li> <li>• "1.3"</li> <li>• "1.4"</li> <li>• "1.5"</li> <li>• "1.6"</li> </ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the UUIDv4 Schema</li> </ul>
name	string	True	JSON string containing a name for the cluster. If not specified, the Kubernetes name of the cluster will be used. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> <li>• This string is internally validated to prevent XSS, Unicode, directory traversal, and SQL-injection attacks</li> </ul>

Name	Type	Required	Description
state	string	True	<p>JSON string containing a value indicating the operational state of the cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• "pending" - The cluster is scheduled for discovery</li> <li>• "discovering" - The cluster is in the process of being discovered</li> <li>• "provisioning" - The cluster is in the process of being provisioned</li> <li>• "running" - The cluster is running normally</li> <li>• "failed" - The cluster is in a permanent failure state</li> <li>• "removed" - The cluster is not currently accessible</li> <li>• "unknown" - The cluster state cannot be determined</li> </ul>
stateUnready	array[string]	True	<p>JSON array of JSON strings, each indicating a reason why the cluster is unable to transition to "running" state, when there are issues while in "running" state, or why it has transitioned to "failed" or "removed" state. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 127</li> </ul>



Name	Type	Required	Description
managedState	string	True	<p>JSON string containing a value indicating the management state of the cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• "pending" - The cluster is scheduled to be discovered or added</li> <li>• "ineligible" - The cluster is in "running" state, is not under management, and is not eligible for management. The reasons for this ineligibility are provided in the unready key value</li> <li>• "unmanaged" - The cluster is in "running" or "failed" state, is not under management, and is eligible for management</li> <li>• "managing" - The cluster is in "running" state and is in the process of being managed</li> <li>• "managed" - The cluster is in "running", "failed", or "removed" state, and is under management</li> </ul>

Name	Type	Required	Description
protectionState	string	True	<p>JSON string containing a value indicating the protection state of the cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• "full" - The clusters default storage class supports snapshots</li> <li>• "partial" - The cluster has only storageClasses that do not support snapshots</li> <li>• "atRisk" - The default storage class of the cluster does not support snapshots</li> </ul>
protectionStateDetails	array[type_astra_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>
restoreTargetSupported	string	False	<p>JSON string containing a value indicating the ability of the cluster to be a <i>target</i> of application data management operations. Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - Cluster is an eligible target for app data management operations.</li> <li>• "false" - Cluster is <i>not</i> an eligible target for app data management operations.</li> </ul>

Name	Type	Required	Description
snapshotSupported	string	False	<p>JSON string containing a value indicating the ability of the cluster to perform application data management backup-like operations. Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - Cluster is eligible to perform app data management operations.</li> <li>• "false" - Cluster is <i>not</i> eligible to perform app data management operations.</li> </ul>
managedStateUnready	array[string]	True	<p>JSON array of JSON strings, each indicating a reason why the cluster is ineligible to be managed, or that the cluster is managed but non-fatal errors were encountered while managing the cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 127</li> </ul>
managedTimestamp	string	False	<p>JSON string containing the timestamp indicating when the cluster was brought under management. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema This key is only returned when a cluster has a managedState of "managed".</li> </ul>

Name	Type	Required	Description
tridentVersion	string	False	<p>JSON string containing the version of Trident installed on the cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Software Version Schema</li> </ul>
acpVersion	string	False	<p>JSON string containing the version of Astra Control Provisioner installed on the cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Software Version Schema</li> </ul>
tridentManagedState	string	False	<p>JSON string containing one of a set of enumerated values indicating the management state of Trident on this cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• "managed" - Trident instance on the cluster is managed by Astra</li> <li>• "unmanaged" - Trident instance on the cluster is not managed by Astra</li> </ul>
tridentManagedStateDesired	string	False	<p>JSON string containing a value indicating the desired management state for Trident. Defined values are:</p> <ul style="list-style-type: none"> <li>• "managed" - Manage Trident on this cluster</li> <li>• "unmanaged" - Do not manage Trident on this cluster</li> </ul>

Name	Type	Required	Description
tridentManagedStateDetails	array[type_astra_stateDetail]	False	<p>JSON array of JSON objects that lists additional details about why the state transitioned to "managed" or "unmanaged". If no details are available, this array will be empty.</p> <ul style="list-style-type: none"> <li>• Minimum items: 0</li> </ul>
tridentManagedStateAllowed	array[string]	False	<p>States that can be requested in a given tridentManagedState. The following states can be requested in each defined state:</p> <ul style="list-style-type: none"> <li>• "managed": "managed"</li> <li>• "unmanaged": "unmanaged"</li> </ul>
inUse	string	True	<p>JSON string containing a value indicating if the cluster has any managed applications and therefore cannot be deleted. Defined values are:</p> <ul style="list-style-type: none"> <li>• "false" - The cluster is not managed or is managed but has no managed applications associated with it</li> <li>• "true" - The cluster is managed and has managed applications associated with it</li> </ul>

Name	Type	Required	Description
accHost	string	False	<p>JSON string that indicates that this cluster hosts the instance of Astra Control Center that is currently being accessed. Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - This cluster is hosting the instance of Astra Control Center that is currently being accessed.</li> </ul>
clusterType	string	True	<p>JSON string containing a value indicating the type of cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• "gke" - Kubernetes hosted on Google Kubernetes Engine</li> <li>• "aks" - Kubernetes hosted on Microsoft Azure Kubernetes Service</li> <li>• "eks" - Kubernetes hosted on Amazon Elastic Kubernetes Service</li> <li>• "rke" - The cluster is of type Rancher</li> <li>• "tanzu" -The cluster is of type Tanzu Kubernetes Grid</li> <li>• "openshift" - The cluster is of type OpenShift</li> <li>• "anthos" - The cluster is of type GKE Anthos</li> <li>• "kubernetes" - The cluster is generic Kubernetes</li> </ul>

Name	Type	Required	Description
clusterVersion	string	False	<p>JSON string containing a value indicating the semantic versioning representation of the cluster environment. For Kubernetes clusters, this is the Kubernetes version. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 31</li> </ul>
clusterVersionString	string	False	<p>JSON string containing a value indicating the extended versioning information for the cluster environment. For Kubernetes clusters, this is the full Kubernetes version. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 31</li> </ul>
clusterCreationTimestamp	string	False	<p>JSON string containing the timestamp indicating when the cluster was originally created. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>
namespaces	array[string]	False	<p>JSON array of JSON strings, each indicating a namespace within the cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 253</li> </ul>

Name	Type	Required	Description
defaultStorageClass	string	False	<p>JSON string containing a storage class ID that corresponds to the default storage class set in Kubernetes. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
cloudID	string	True	<p>JSON string containing a value indicating the ID of the cloud the cluster is running on. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
credentialID	string	False	<p>JSON string containing a value indicating the ID of the credential that contains the kubeconfig file for the cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema If privateRouteID and connectorCapabilities with at least the relay option are provided, credentialID is optional. If they are not provided, credentialID is required, otherwise, an error is generated. If credentialID and a relay capable connector is provided, an error is generated.</li> </ul>



Name	Type	Required	Description
location	string	False	<p>JSON string containing a value provided by the cloud that the cluster is running on, indicating the cloud-specific location of the cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>
isMultizonal	string	False	<p>JSON string containing a value provided by the cloud the cluster is running on, indicating whether the cluster spans two or more availability zones. Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - The cluster spans two or more availability zones</li> <li>• "false" - The cluster is wholly located within a single availability zone</li> </ul>
privateRouteID	string	False	<p>JSON string containing the location ID for private clusters.</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>
connectorCapabilities	array[string]	False	<p>Capabilities of the connector that is associated with this cluster. Optional for backwards compatibility. If not present, proxy is the assumed capability.</p>
apiServiceID	string	False	<p>JSON string containing the UUID from the Kubernetes (k8s) API service object. Used to uniquely identify a cluster.</p>

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

## Example response

```
{
  "type": "application/astra-cluster",
  "version": "1.6",
  "id": "b8c3bce9-5f8f-5f5a-a456-2b2eb6cfd2b6",
  "name": "GKE-22",
  "state": "running",
  "stateUnready": [],
  "managedState": "unmanaged",
  "managedStateUnready": [],
  "protectionState": "full",
  "protectionStateDetails": [],
  "tridentVersion": "23.10.0",
  "acpVersion": "23.10.0",
  "tridentManagedState": "managed",
  "tridentManagedStateDetails": [],
  "inUse": "false",
  "clusterType": "kubernetes",
  "clusterVersion": "1.91.1",
  "clusterVersionString": "1.19.1",
  "clusterCreationTimestamp": "2020-08-06T12:24:52.256624Z",
  "namespaces": [
    "kube-system",
    "kube-public",
    "my-app-1"
  ],
  "defaultStorageClass": "31c95aba-99d9-4987-b1bb-000dfce5952c",
  "cloudID": "548bdc1f-f00e-4a23-a062-83265d224d46",
  "credentialID": "6fa2f917-f730-41b8-9c15-17f531843b31",
  "location": "europe-west4",
  "isMultizonal": "false",
  "apiServiceID": "6bf33af2-872a-4553-a891-26b510c3edbe",
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

## Response

Status: 401, Unauthorized

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

### Example response

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

### Response

Status: 403, Forbidden

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	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/64",
  "title": "Storage classes not found",
  "detail": "Storage classes from Trident weren't found.",
  "status": "500"
}
```

## Error

Status: 404, Not found

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

type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

type\_astra\_metadata\_update

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

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

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

additionalDetails

type\_astra\_stateDetail

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	
additionalDetails	<a href="#">additionalDetails</a>	False	

invalidParams

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

invalidFields



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

## List the clusters for a cloud

GET /accounts/{account\_id}/topology/v1/clouds/{cloud\_id}/clusters

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

### Parameters

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

Name	Type	In	Required	Description
limit	string	query	False	<p>Indicates the maximum number of resources to return when listing a collection.</p> <p>URL examples: "limit=2"</p> <p>OpenAPI examples: "2"</p>
filter	string	query	False	<p>Indicates which fields should be matched in order to return a resource when listing a collection.</p> <p>Supported operators are:</p> <ul style="list-style-type: none"> <li>• eq - Equality</li> <li>• lt/gt - Less than/Greater than</li> <li>• lte/gte - Less than or equals to/Greater than or equals to</li> </ul> <p>URL example: "filter=field%20eq%20%27value%27"</p> <p>OpenAPI examples: "field eq 'value'"</p>

## Response

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

Name	Type	Required	Description
items	array[Any of: <a href="#">cluster_1.6_get_response_body</a> , array[]]	True	
metadata	<a href="#">type_astra_metadata_list</a>	True	

### Example response

```
{
  "type": "application/astra-clusters",
  "version": "1.6",
  "items": [
    [
      "0f284377-e5dc-4dcd-bacd-3197f2b8a347",
      "GKE-21",
      "managed"
    ],
    [
      "04dc80fa-d1d8-4850-a49f-3b70d0ec1369",
      "GKE-22",
      "unmanaged"
    ]
  ],
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

### Response

Status: 401, Unauthorized

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

additionalDetails

type\_astra\_stateDetail

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	
additionalDetails	<a href="#">additionalDetails</a>	False	

type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

type\_astra\_metadata\_update

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

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

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

cluster\_1.6\_get\_response\_body

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

Name	Type	Required	Description
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "1.0"</li> <li>• "1.1"</li> <li>• "1.2"</li> <li>• "1.3"</li> <li>• "1.4"</li> <li>• "1.5"</li> <li>• "1.6"</li> </ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the UUIDv4 Schema</li> </ul>
name	string	True	JSON string containing a name for the cluster. If not specified, the Kubernetes name of the cluster will be used. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> <li>• This string is internally validated to prevent XSS, Unicode, directory traversal, and SQL-injection attacks</li> </ul>



Name	Type	Required	Description
state	string	True	<p>JSON string containing a value indicating the operational state of the cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• "pending" - The cluster is scheduled for discovery</li> <li>• "discovering" - The cluster is in the process of being discovered</li> <li>• "provisioning" - The cluster is in the process of being provisioned</li> <li>• "running" - The cluster is running normally</li> <li>• "failed" - The cluster is in a permanent failure state</li> <li>• "removed" - The cluster is not currently accessible</li> <li>• "unknown" - The cluster state cannot be determined</li> </ul>
stateUnready	array[string]	True	<p>JSON array of JSON strings, each indicating a reason why the cluster is unable to transition to "running" state, when there are issues while in "running" state, or why it has transitioned to "failed" or "removed" state. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 127</li> </ul>

Name	Type	Required	Description
managedState	string	True	<p>JSON string containing a value indicating the management state of the cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• "pending" - The cluster is scheduled to be discovered or added</li> <li>• "ineligible" - The cluster is in "running" state, is not under management, and is not eligible for management. The reasons for this ineligibility are provided in the unready key value</li> <li>• "unmanaged" - The cluster is in "running" or "failed" state, is not under management, and is eligible for management</li> <li>• "managing" - The cluster is in "running" state and is in the process of being managed</li> <li>• "managed" - The cluster is in "running", "failed", or "removed" state, and is under management</li> </ul>

Name	Type	Required	Description
protectionState	string	True	<p>JSON string containing a value indicating the protection state of the cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• "full" - The clusters default storage class supports snapshots</li> <li>• "partial" - The cluster has only storageClasses that do not support snapshots</li> <li>• "atRisk" - The default storage class of the cluster does not support snapshots</li> </ul>
protectionStateDetails	array[type_astra_stateDe tail]	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>
restoreTargetSupported	string	False	<p>JSON string containing a value indicating the ability of the cluster to be a <i>target</i> of application data management operations. Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - Cluster is an eligible target for app data management operations.</li> <li>• "false" - Cluster is <i>not</i> an eligible target for app data management operations.</li> </ul>

Name	Type	Required	Description
snapshotSupported	string	False	<p>JSON string containing a value indicating the ability of the cluster to perform application data management backup-like operations. Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - Cluster is eligible to perform app data management operations.</li> <li>• "false" - Cluster is <i>not</i> eligible to perform app data management operations.</li> </ul>
managedStateUnready	array[string]	True	<p>JSON array of JSON strings, each indicating a reason why the cluster is ineligible to be managed, or that the cluster is managed but non-fatal errors were encountered while managing the cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 127</li> </ul>
managedTimestamp	string	False	<p>JSON string containing the timestamp indicating when the cluster was brought under management. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema This key is only returned when a cluster has a managedState of "managed".</li> </ul>

Name	Type	Required	Description
tridentVersion	string	False	<p>JSON string containing the version of Trident installed on the cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Software Version Schema</li> </ul>
acpVersion	string	False	<p>JSON string containing the version of Astra Control Provisioner installed on the cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Software Version Schema</li> </ul>
tridentManagedState	string	False	<p>JSON string containing one of a set of enumerated values indicating the management state of Trident on this cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• "managed" - Trident instance on the cluster is managed by Astra</li> <li>• "unmanaged" - Trident instance on the cluster is not managed by Astra</li> </ul>
tridentManagedStateDesired	string	False	<p>JSON string containing a value indicating the desired management state for Trident. Defined values are:</p> <ul style="list-style-type: none"> <li>• "managed" - Manage Trident on this cluster</li> <li>• "unmanaged" - Do not manage Trident on this cluster</li> </ul>

Name	Type	Required	Description
tridentManagedStateDetails	array[type_astra_stateDetail]	False	<p>JSON array of JSON objects that lists additional details about why the state transitioned to "managed" or "unmanaged". If no details are available, this array will be empty.</p> <ul style="list-style-type: none"> <li>• Minimum items: 0</li> </ul>
tridentManagedStateAllowed	array[string]	False	<p>States that can be requested in a given tridentManagedState. The following states can be requested in each defined state:</p> <ul style="list-style-type: none"> <li>• "managed": "managed"</li> <li>• "unmanaged": "unmanaged"</li> </ul>
inUse	string	True	<p>JSON string containing a value indicating if the cluster has any managed applications and therefore cannot be deleted. Defined values are:</p> <ul style="list-style-type: none"> <li>• "false" - The cluster is not managed or is managed but has no managed applications associated with it</li> <li>• "true" - The cluster is managed and has managed applications associated with it</li> </ul>

Name	Type	Required	Description
accHost	string	False	<p>JSON string that indicates that this cluster hosts the instance of Astra Control Center that is currently being accessed. Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - This cluster is hosting the instance of Astra Control Center that is currently being accessed.</li> </ul>
clusterType	string	True	<p>JSON string containing a value indicating the type of cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• "gke" - Kubernetes hosted on Google Kubernetes Engine</li> <li>• "aks" - Kubernetes hosted on Microsoft Azure Kubernetes Service</li> <li>• "eks" - Kubernetes hosted on Amazon Elastic Kubernetes Service</li> <li>• "rke" - The cluster is of type Rancher</li> <li>• "tanzu" -The cluster is of type Tanzu Kubernetes Grid</li> <li>• "openshift" - The cluster is of type OpenShift</li> <li>• "anthos" - The cluster is of type GKE Anthos</li> <li>• "kubernetes" - The cluster is generic Kubernetes</li> </ul>

Name	Type	Required	Description
clusterVersion	string	False	<p>JSON string containing a value indicating the semantic versioning representation of the cluster environment. For Kubernetes clusters, this is the Kubernetes version. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 31</li> </ul>
clusterVersionString	string	False	<p>JSON string containing a value indicating the extended versioning information for the cluster environment. For Kubernetes clusters, this is the full Kubernetes version. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 31</li> </ul>
clusterCreationTimestamp	string	False	<p>JSON string containing the timestamp indicating when the cluster was originally created. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>
namespaces	array[string]	False	<p>JSON array of JSON strings, each indicating a namespace within the cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 253</li> </ul>



Name	Type	Required	Description
defaultStorageClass	string	False	<p>JSON string containing a storage class ID that corresponds to the default storage class set in Kubernetes. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
cloudID	string	True	<p>JSON string containing a value indicating the ID of the cloud the cluster is running on. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
credentialID	string	False	<p>JSON string containing a value indicating the ID of the credential that contains the kubeconfig file for the cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema If privateRouteID and connectorCapabilities with at least the relay option are provided, credentialID is optional. If they are not provided, credentialID is required, otherwise, an error is generated. If credentialID and a relay capable connector is provided, an error is generated.</li> </ul>

Name	Type	Required	Description
location	string	False	<p>JSON string containing a value provided by the cloud that the cluster is running on, indicating the cloud-specific location of the cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>
isMultizonal	string	False	<p>JSON string containing a value provided by the cloud the cluster is running on, indicating whether the cluster spans two or more availability zones. Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - The cluster spans two or more availability zones</li> <li>• "false" - The cluster is wholly located within a single availability zone</li> </ul>
privateRouteID	string	False	<p>JSON string containing the location ID for private clusters.</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>
connectorCapabilities	array[string]	False	<p>Capabilities of the connector that is associated with this cluster. Optional for backwards compatibility. If not present, proxy is the assumed capability.</p>

Name	Type	Required	Description
apiServiceID	string	False	JSON string containing the UUID from the Kubernetes (k8s) API service object. Used to uniquely identify a cluster.
metadata	<a href="#">type_astra_metadata_update</a>	True	<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

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

## Retrieve a cluster for a cloud

GET /accounts/{account\_id}/topology/v1/clouds/{cloud\_id}/clusters/{cluster\_id}

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

### Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource  • example: {{.Account}}
cloud_id	string	path	True	ID of the containing cloud resource
cluster_id	string	path	True	ID of the cluster collection to list

### Response

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

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are:  • "application/astra-cluster"

Name	Type	Required	Description
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "1.0"</li> <li>• "1.1"</li> <li>• "1.2"</li> <li>• "1.3"</li> <li>• "1.4"</li> <li>• "1.5"</li> <li>• "1.6"</li> </ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the UUIDv4 Schema</li> </ul>
name	string	True	JSON string containing a name for the cluster. If not specified, the Kubernetes name of the cluster will be used. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> <li>• This string is internally validated to prevent XSS, Unicode, directory traversal, and SQL-injection attacks</li> </ul>

Name	Type	Required	Description
state	string	True	<p>JSON string containing a value indicating the operational state of the cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• "pending" - The cluster is scheduled for discovery</li> <li>• "discovering" - The cluster is in the process of being discovered</li> <li>• "provisioning" - The cluster is in the process of being provisioned</li> <li>• "running" - The cluster is running normally</li> <li>• "failed" - The cluster is in a permanent failure state</li> <li>• "removed" - The cluster is not currently accessible</li> <li>• "unknown" - The cluster state cannot be determined</li> </ul>
stateUnready	array[string]	True	<p>JSON array of JSON strings, each indicating a reason why the cluster is unable to transition to "running" state, when there are issues while in "running" state, or why it has transitioned to "failed" or "removed" state. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 127</li> </ul>

Name	Type	Required	Description
managedState	string	True	<p>JSON string containing a value indicating the management state of the cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• "pending" - The cluster is scheduled to be discovered or added</li> <li>• "ineligible" - The cluster is in "running" state, is not under management, and is not eligible for management. The reasons for this ineligibility are provided in the unready key value</li> <li>• "unmanaged" - The cluster is in "running" or "failed" state, is not under management, and is eligible for management</li> <li>• "managing" - The cluster is in "running" state and is in the process of being managed</li> <li>• "managed" - The cluster is in "running", "failed", or "removed" state, and is under management</li> </ul>

Name	Type	Required	Description
protectionState	string	True	<p>JSON string containing a value indicating the protection state of the cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• "full" - The clusters default storage class supports snapshots</li> <li>• "partial" - The cluster has only storageClasses that do not support snapshots</li> <li>• "atRisk" - The default storage class of the cluster does not support snapshots</li> </ul>
protectionStateDetails	array[type_astra_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>
restoreTargetSupported	string	False	<p>JSON string containing a value indicating the ability of the cluster to be a <i>target</i> of application data management operations. Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - Cluster is an eligible target for app data management operations.</li> <li>• "false" - Cluster is <i>not</i> an eligible target for app data management operations.</li> </ul>



Name	Type	Required	Description
snapshotSupported	string	False	<p>JSON string containing a value indicating the ability of the cluster to perform application data management backup-like operations. Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - Cluster is eligible to perform app data management operations.</li> <li>• "false" - Cluster is <i>not</i> eligible to perform app data management operations.</li> </ul>
managedStateUnready	array[string]	True	<p>JSON array of JSON strings, each indicating a reason why the cluster is ineligible to be managed, or that the cluster is managed but non-fatal errors were encountered while managing the cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 127</li> </ul>
managedTimestamp	string	False	<p>JSON string containing the timestamp indicating when the cluster was brought under management. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema This key is only returned when a cluster has a managedState of "managed".</li> </ul>

Name	Type	Required	Description
tridentVersion	string	False	<p>JSON string containing the version of Trident installed on the cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Software Version Schema</li> </ul>
acpVersion	string	False	<p>JSON string containing the version of Astra Control Provisioner installed on the cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Software Version Schema</li> </ul>
tridentManagedState	string	False	<p>JSON string containing one of a set of enumerated values indicating the management state of Trident on this cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• "managed" - Trident instance on the cluster is managed by Astra</li> <li>• "unmanaged" - Trident instance on the cluster is not managed by Astra</li> </ul>
tridentManagedStateDesired	string	False	<p>JSON string containing a value indicating the desired management state for Trident. Defined values are:</p> <ul style="list-style-type: none"> <li>• "managed" - Manage Trident on this cluster</li> <li>• "unmanaged" - Do not manage Trident on this cluster</li> </ul>

Name	Type	Required	Description
tridentManagedStateDetails	array[type_astra_stateDetail]	False	<p>JSON array of JSON objects that lists additional details about why the state transitioned to "managed" or "unmanaged". If no details are available, this array will be empty.</p> <ul style="list-style-type: none"> <li>• Minimum items: 0</li> </ul>
tridentManagedStateAllowed	array[string]	False	<p>States that can be requested in a given tridentManagedState. The following states can be requested in each defined state:</p> <ul style="list-style-type: none"> <li>• "managed": "managed"</li> <li>• "unmanaged": "unmanaged"</li> </ul>
inUse	string	True	<p>JSON string containing a value indicating if the cluster has any managed applications and therefore cannot be deleted. Defined values are:</p> <ul style="list-style-type: none"> <li>• "false" - The cluster is not managed or is managed but has no managed applications associated with it</li> <li>• "true" - The cluster is managed and has managed applications associated with it</li> </ul>

Name	Type	Required	Description
accHost	string	False	<p>JSON string that indicates that this cluster hosts the instance of Astra Control Center that is currently being accessed. Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - This cluster is hosting the instance of Astra Control Center that is currently being accessed.</li> </ul>
clusterType	string	True	<p>JSON string containing a value indicating the type of cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• "gke" - Kubernetes hosted on Google Kubernetes Engine</li> <li>• "aks" - Kubernetes hosted on Microsoft Azure Kubernetes Service</li> <li>• "eks" - Kubernetes hosted on Amazon Elastic Kubernetes Service</li> <li>• "rke" - The cluster is of type Rancher</li> <li>• "tanzu" -The cluster is of type Tanzu Kubernetes Grid</li> <li>• "openshift" - The cluster is of type OpenShift</li> <li>• "anthos" - The cluster is of type GKE Anthos</li> <li>• "kubernetes" - The cluster is generic Kubernetes</li> </ul>

Name	Type	Required	Description
clusterVersion	string	False	<p>JSON string containing a value indicating the semantic versioning representation of the cluster environment. For Kubernetes clusters, this is the Kubernetes version. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 31</li> </ul>
clusterVersionString	string	False	<p>JSON string containing a value indicating the extended versioning information for the cluster environment. For Kubernetes clusters, this is the full Kubernetes version. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 31</li> </ul>
clusterCreationTimestamp	string	False	<p>JSON string containing the timestamp indicating when the cluster was originally created. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>
namespaces	array[string]	False	<p>JSON array of JSON strings, each indicating a namespace within the cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 253</li> </ul>

Name	Type	Required	Description
defaultStorageClass	string	False	<p>JSON string containing a storage class ID that corresponds to the default storage class set in Kubernetes. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
cloudID	string	True	<p>JSON string containing a value indicating the ID of the cloud the cluster is running on. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
credentialID	string	False	<p>JSON string containing a value indicating the ID of the credential that contains the kubeconfig file for the cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema If privateRouteID and connectorCapabilities with at least the relay option are provided, credentialID is optional. If they are not provided, credentialID is required, otherwise, an error is generated. If credentialID and a relay capable connector is provided, an error is generated.</li> </ul>

Name	Type	Required	Description
location	string	False	<p>JSON string containing a value provided by the cloud that the cluster is running on, indicating the cloud-specific location of the cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>
isMultizonal	string	False	<p>JSON string containing a value provided by the cloud the cluster is running on, indicating whether the cluster spans two or more availability zones. Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - The cluster spans two or more availability zones</li> <li>• "false" - The cluster is wholly located within a single availability zone</li> </ul>
privateRouteID	string	False	<p>JSON string containing the location ID for private clusters.</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>
connectorCapabilities	array[string]	False	<p>Capabilities of the connector that is associated with this cluster. Optional for backwards compatibility. If not present, proxy is the assumed capability.</p>
apiServiceID	string	False	<p>JSON string containing the UUID from the Kubernetes (k8s) API service object. Used to uniquely identify a cluster.</p>

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



## Example response

```
{
  "type": "application/astra-cluster",
  "version": "1.6",
  "id": "b8c3bce9-5f8f-5f5a-a456-2b2eb6cfd2b6",
  "name": "GKE-22",
  "state": "running",
  "stateUnready": [],
  "managedState": "unmanaged",
  "managedStateUnready": [],
  "protectionState": "full",
  "protectionStateDetails": [],
  "tridentVersion": "23.10.0",
  "acpVersion": "23.10.0",
  "tridentManagedState": "managed",
  "tridentManagedStateDetails": [],
  "inUse": "false",
  "clusterType": "kubernetes",
  "clusterVersion": "1.91.1",
  "clusterVersionString": "1.19.1",
  "clusterCreationTimestamp": "2020-08-06T12:24:52.256624Z",
  "namespaces": [
    "kube-system",
    "kube-public",
    "my-app-1"
  ],
  "defaultStorageClass": "31c95aba-99d9-4987-b1bb-000dfce5952c",
  "cloudID": "548bdc1f-f00e-4a23-a062-83265d224d46",
  "credentialID": "6fa2f917-f730-41b8-9c15-17f531843b31",
  "location": "europe-west4",
  "isMultizonal": "false",
  "apiServiceID": "6bf33af2-872a-4553-a891-26b510c3edbe",
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

## Response

Status: 401, Unauthorized

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

Name	Type	Required	Description
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/65",
  "title": "Cluster GET not performed",
  "detail": "The cluster GET call didn't perform the lookup operation
on the cluster.",
  "status": "500"
}
```

### Error

Status: 404, Not found

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

additionalDetails

type\_astra\_stateDetail

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	
additionalDetails	<a href="#">additionalDetails</a>	False	

type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

type\_astra\_metadata\_update

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

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

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

invalidParams

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

# Modify a cluster for a cloud

PUT /accounts/{account\_id}/topology/v1/clouds/{cloud\_id}/clusters/{cluster\_id}

Replaces the entire stored resource with the supplied JSON request body while preserving key values that are not user-modifiable.

## Side Effects

- If the cluster is in a managed state, an update to credentialID will eventually trigger another attempt to collect the cluster.

## Parameters

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

## Request Body

Replaces the entire stored resource with the supplied JSON request body while preserving key values that are not user-modifiable.

## Side Effects

- If the cluster is in a managed state, an update to credentialID will eventually trigger another attempt to collect the cluster.

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

Name	Type	Required	Description
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "1.0"</li> <li>• "1.1"</li> <li>• "1.2"</li> <li>• "1.3"</li> <li>• "1.4"</li> <li>• "1.5"</li> <li>• "1.6"</li> </ul>
id	string	False	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the UUIDv4 Schema</li> </ul>
name	string	False	JSON string containing a name for the cluster. If not specified, the Kubernetes name of the cluster will be used. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> <li>• This string is internally validated to prevent XSS, Unicode, directory traversal, and SQL-injection attacks</li> </ul>

Name	Type	Required	Description
state	string	False	<p>JSON string containing a value indicating the operational state of the cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• "pending" - The cluster is scheduled for discovery</li> <li>• "discovering" - The cluster is in the process of being discovered</li> <li>• "provisioning" - The cluster is in the process of being provisioned</li> <li>• "running" - The cluster is running normally</li> <li>• "failed" - The cluster is in a permanent failure state</li> <li>• "removed" - The cluster is not currently accessible</li> <li>• "unknown" - The cluster state cannot be determined</li> </ul>
stateUnready	array[string]	False	<p>JSON array of JSON strings, each indicating a reason why the cluster is unable to transition to "running" state, when there are issues while in "running" state, or why it has transitioned to "failed" or "removed" state. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 127</li> </ul>



Name	Type	Required	Description
managedState	string	False	<p>JSON string containing a value indicating the management state of the cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• "pending" - The cluster is scheduled to be discovered or added</li> <li>• "ineligible" - The cluster is in "running" state, is not under management, and is not eligible for management. The reasons for this ineligibility are provided in the unready key value</li> <li>• "unmanaged" - The cluster is in "running" or "failed" state, is not under management, and is eligible for management</li> <li>• "managing" - The cluster is in "running" state and is in the process of being managed</li> <li>• "managed" - The cluster is in "running", "failed", or "removed" state, and is under management</li> </ul>

Name	Type	Required	Description
protectionState	string	False	<p>JSON string containing a value indicating the protection state of the cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• "full" - The clusters default storage class supports snapshots</li> <li>• "partial" - The cluster has only storageClasses that do not support snapshots</li> <li>• "atRisk" - The default storage class of the cluster does not support snapshots</li> </ul>
protectionStateDetails	array[type_astra_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>
restoreTargetSupported	string	False	<p>JSON string containing a value indicating the ability of the cluster to be a <i>target</i> of application data management operations. Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - Cluster is an eligible target for app data management operations.</li> <li>• "false" - Cluster is <i>not</i> an eligible target for app data management operations.</li> </ul>

Name	Type	Required	Description
snapshotSupported	string	False	<p>JSON string containing a value indicating the ability of the cluster to perform application data management backup-like operations. Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - Cluster is eligible to perform app data management operations.</li> <li>• "false" - Cluster is <i>not</i> eligible to perform app data management operations.</li> </ul>
managedStateUnready	array[string]	False	<p>JSON array of JSON strings, each indicating a reason why the cluster is ineligible to be managed, or that the cluster is managed but non-fatal errors were encountered while managing the cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 127</li> </ul>
managedTimestamp	string	False	<p>JSON string containing the timestamp indicating when the cluster was brought under management. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema This key is only returned when a cluster has a managedState of "managed".</li> </ul>

Name	Type	Required	Description
tridentVersion	string	False	<p>JSON string containing the version of Trident installed on the cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Software Version Schema</li> </ul>
acpVersion	string	False	<p>JSON string containing the version of Astra Control Provisioner installed on the cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Software Version Schema</li> </ul>
tridentManagedState	string	False	<p>JSON string containing one of a set of enumerated values indicating the management state of Trident on this cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• "managed" - Trident instance on the cluster is managed by Astra</li> <li>• "unmanaged" - Trident instance on the cluster is not managed by Astra</li> </ul>
tridentManagedStateDesired	string	False	<p>JSON string containing a value indicating the desired management state for Trident. Defined values are:</p> <ul style="list-style-type: none"> <li>• "managed" - Manage Trident on this cluster</li> <li>• "unmanaged" - Do not manage Trident on this cluster</li> </ul>

Name	Type	Required	Description
tridentManagedStateDetails	array[type_astra_stateDetail]	False	<p>JSON array of JSON objects that lists additional details about why the state transitioned to "managed" or "unmanaged". If no details are available, this array will be empty.</p> <ul style="list-style-type: none"> <li>• Minimum items: 0</li> </ul>
tridentManagedStateAllowed	array[string]	False	<p>States that can be requested in a given tridentManagedState. The following states can be requested in each defined state:</p> <ul style="list-style-type: none"> <li>• "managed": "managed"</li> <li>• "unmanaged": "unmanaged"</li> </ul>
inUse	string	False	<p>JSON string containing a value indicating if the cluster has any managed applications and therefore cannot be deleted. Defined values are:</p> <ul style="list-style-type: none"> <li>• "false" - The cluster is not managed or is managed but has no managed applications associated with it</li> <li>• "true" - The cluster is managed and has managed applications associated with it</li> </ul>

Name	Type	Required	Description
accHost	string	False	<p>JSON string that indicates that this cluster hosts the instance of Astra Control Center that is currently being accessed. Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - This cluster is hosting the instance of Astra Control Center that is currently being accessed.</li> </ul>
clusterType	string	False	<p>JSON string containing a value indicating the type of cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• "gke" - Kubernetes hosted on Google Kubernetes Engine</li> <li>• "aks" - Kubernetes hosted on Microsoft Azure Kubernetes Service</li> <li>• "eks" - Kubernetes hosted on Amazon Elastic Kubernetes Service</li> <li>• "rke" - The cluster is of type Rancher</li> <li>• "tanzu" -The cluster is of type Tanzu Kubernetes Grid</li> <li>• "openshift" - The cluster is of type OpenShift</li> <li>• "anthos" - The cluster is of type GKE Anthos</li> <li>• "kubernetes" - The cluster is generic Kubernetes</li> </ul>

Name	Type	Required	Description
clusterVersion	string	False	<p>JSON string containing a value indicating the semantic versioning representation of the cluster environment. For Kubernetes clusters, this is the Kubernetes version. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 31</li> </ul>
clusterVersionString	string	False	<p>JSON string containing a value indicating the extended versioning information for the cluster environment. For Kubernetes clusters, this is the full Kubernetes version. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 31</li> </ul>
clusterCreationTimestamp	string	False	<p>JSON string containing the timestamp indicating when the cluster was originally created. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>
namespaces	array[string]	False	<p>JSON array of JSON strings, each indicating a namespace within the cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 253</li> </ul>

Name	Type	Required	Description
defaultStorageClass	string	False	<p>JSON string containing a storage class ID that corresponds to the default storage class set in Kubernetes. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
cloudID	string	False	<p>JSON string containing a value indicating the ID of the cloud the cluster is running on. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
credentialID	string	False	<p>JSON string containing a value indicating the ID of the credential that contains the kubeconfig file for the cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema If privateRouteID and connectorCapabilities with at least the relay option are provided, credentialID is optional. If they are not provided, credentialID is required, otherwise, an error is generated. If credentialID and a relay capable connector is provided, an error is generated.</li> </ul>



Name	Type	Required	Description
location	string	False	<p>JSON string containing a value provided by the cloud that the cluster is running on, indicating the cloud-specific location of the cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>
isMultizonal	string	False	<p>JSON string containing a value provided by the cloud the cluster is running on, indicating whether the cluster spans two or more availability zones. Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - The cluster spans two or more availability zones</li> <li>• "false" - The cluster is wholly located within a single availability zone</li> </ul>
privateRouteID	string	False	<p>JSON string containing the location ID for private clusters.</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>
connectorCapabilities	array[string]	False	<p>Capabilities of the connector that is associated with this cluster. Optional for backwards compatibility. If not present, proxy is the assumed capability.</p>
apiServiceID	string	False	<p>JSON string containing the UUID from the Kubernetes (k8s) API service object. Used to uniquely identify a cluster.</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-cluster",
  "version": "1.6"
}
```

### Response

Status: 204, Indicates if the cluster resource was updated.

### Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	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: 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/65",
  "title": "Cluster GET not performed",
  "detail": "The cluster GET call didn't perform the lookup operation on the cluster.",
  "status": "500"
}
```

## Error

Status: 404, Not found

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

additionalDetails

type\_astra\_stateDetail

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	
additionalDetails	<a href="#">additionalDetails</a>	False	

type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

type\_astra\_metadata\_update

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

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

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

invalidParams

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

# Delete a cluster for a cloud

DELETE /accounts/{account\_id}/topology/v1/clouds/{cloud\_id}/clusters/{cluster\_id}

Removes the specified Cluster API resource.

## Side Effects

- Internal data structures are cleaned up.

## Parameters

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

## Response

Status: 204, Indicates if the cluster resource was deleted.

## Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	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/1",
  "title": "Resource not found",
  "detail": "The resource specified in the request URI wasn't found.",
  "status": "404"
}
```

## Definitions

### See Definitions

invalidParams

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

## List all clusters

GET /accounts/{account\_id}/topology/v1/clusters

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

### Parameters

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

Name	Type	In	Required	Description
limit	string	query	False	<p>Indicates the maximum number of resources to return when listing a collection.</p> <p>URL examples: "limit=2"</p> <p>OpenAPI examples: "2"</p>
filter	string	query	False	<p>Indicates which fields should be matched in order to return a resource when listing a collection.</p> <p>Supported operators are:</p> <ul style="list-style-type: none"> <li>• eq - Equality</li> <li>• lt/gt - Less than/Greater than</li> <li>• lte/gte - Less than or equals to/Greater than or equals to</li> </ul> <p>URL example: "filter=field%20eq%20%27value%27"</p> <p>OpenAPI examples: "field eq 'value'"</p>

## Response

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

Name	Type	Required	Description
items	array[Any of: <a href="#">cluster_1.6_get_response_body</a> , array[]]	True	
metadata	<a href="#">type_astra_metadata_list</a>	True	

### Example response

```
{
  "type": "application/astra-clusters",
  "version": "1.6",
  "items": [
    [
      "0f284377-e5dc-4dcd-bacd-3197f2b8a347",
      "GKE-21",
      "managed"
    ],
    [
      "04dc80fa-d1d8-4850-a49f-3b70d0ec1369",
      "GKE-22",
      "unmanaged"
    ]
  ],
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

### Response

Status: 401, Unauthorized

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

additionalDetails

type\_astra\_stateDetail

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	
additionalDetails	<a href="#">additionalDetails</a>	False	

type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

type\_astra\_metadata\_update

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

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

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

cluster\_1.6\_get\_response\_body

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



Name	Type	Required	Description
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "1.0"</li> <li>• "1.1"</li> <li>• "1.2"</li> <li>• "1.3"</li> <li>• "1.4"</li> <li>• "1.5"</li> <li>• "1.6"</li> </ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the UUIDv4 Schema</li> </ul>
name	string	True	JSON string containing a name for the cluster. If not specified, the Kubernetes name of the cluster will be used. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> <li>• This string is internally validated to prevent XSS, Unicode, directory traversal, and SQL-injection attacks</li> </ul>

Name	Type	Required	Description
state	string	True	<p>JSON string containing a value indicating the operational state of the cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• "pending" - The cluster is scheduled for discovery</li> <li>• "discovering" - The cluster is in the process of being discovered</li> <li>• "provisioning" - The cluster is in the process of being provisioned</li> <li>• "running" - The cluster is running normally</li> <li>• "failed" - The cluster is in a permanent failure state</li> <li>• "removed" - The cluster is not currently accessible</li> <li>• "unknown" - The cluster state cannot be determined</li> </ul>
stateUnready	array[string]	True	<p>JSON array of JSON strings, each indicating a reason why the cluster is unable to transition to "running" state, when there are issues while in "running" state, or why it has transitioned to "failed" or "removed" state. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 127</li> </ul>

Name	Type	Required	Description
managedState	string	True	<p>JSON string containing a value indicating the management state of the cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• "pending" - The cluster is scheduled to be discovered or added</li> <li>• "ineligible" - The cluster is in "running" state, is not under management, and is not eligible for management. The reasons for this ineligibility are provided in the unready key value</li> <li>• "unmanaged" - The cluster is in "running" or "failed" state, is not under management, and is eligible for management</li> <li>• "managing" - The cluster is in "running" state and is in the process of being managed</li> <li>• "managed" - The cluster is in "running", "failed", or "removed" state, and is under management</li> </ul>

Name	Type	Required	Description
protectionState	string	True	<p>JSON string containing a value indicating the protection state of the cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>"full" - The clusters default storage class supports snapshots</li> <li>"partial" - The cluster has only storageClasses that do not support snapshots</li> <li>"atRisk" - The default storage class of the cluster does not support snapshots</li> </ul>
protectionStateDetails	array[type_astra_stateDe tail]	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>
restoreTargetSupported	string	False	<p>JSON string containing a value indicating the ability of the cluster to be a <i>target</i> of application data management operations. Defined values are:</p> <ul style="list-style-type: none"> <li>"true" - Cluster is an eligible target for app data management operations.</li> <li>"false" - Cluster is <i>not</i> an eligible target for app data management operations.</li> </ul>

Name	Type	Required	Description
snapshotSupported	string	False	<p>JSON string containing a value indicating the ability of the cluster to perform application data management backup-like operations. Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - Cluster is eligible to perform app data management operations.</li> <li>• "false" - Cluster is <i>not</i> eligible to perform app data management operations.</li> </ul>
managedStateUnready	array[string]	True	<p>JSON array of JSON strings, each indicating a reason why the cluster is ineligible to be managed, or that the cluster is managed but non-fatal errors were encountered while managing the cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 127</li> </ul>
managedTimestamp	string	False	<p>JSON string containing the timestamp indicating when the cluster was brought under management. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema This key is only returned when a cluster has a managedState of "managed".</li> </ul>

Name	Type	Required	Description
tridentVersion	string	False	<p>JSON string containing the version of Trident installed on the cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Software Version Schema</li> </ul>
acpVersion	string	False	<p>JSON string containing the version of Astra Control Provisioner installed on the cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Software Version Schema</li> </ul>
tridentManagedState	string	False	<p>JSON string containing one of a set of enumerated values indicating the management state of Trident on this cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• "managed" - Trident instance on the cluster is managed by Astra</li> <li>• "unmanaged" - Trident instance on the cluster is not managed by Astra</li> </ul>
tridentManagedStateDesired	string	False	<p>JSON string containing a value indicating the desired management state for Trident. Defined values are:</p> <ul style="list-style-type: none"> <li>• "managed" - Manage Trident on this cluster</li> <li>• "unmanaged" - Do not manage Trident on this cluster</li> </ul>

Name	Type	Required	Description
tridentManagedStateDetails	array[type_astra_stateDetail]	False	<p>JSON array of JSON objects that lists additional details about why the state transitioned to "managed" or "unmanaged". If no details are available, this array will be empty.</p> <ul style="list-style-type: none"> <li>• Minimum items: 0</li> </ul>
tridentManagedStateAllowed	array[string]	False	<p>States that can be requested in a given tridentManagedState. The following states can be requested in each defined state:</p> <ul style="list-style-type: none"> <li>• "managed": "managed"</li> <li>• "unmanaged": "unmanaged"</li> </ul>
inUse	string	True	<p>JSON string containing a value indicating if the cluster has any managed applications and therefore cannot be deleted. Defined values are:</p> <ul style="list-style-type: none"> <li>• "false" - The cluster is not managed or is managed but has no managed applications associated with it</li> <li>• "true" - The cluster is managed and has managed applications associated with it</li> </ul>

Name	Type	Required	Description
accHost	string	False	<p>JSON string that indicates that this cluster hosts the instance of Astra Control Center that is currently being accessed. Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - This cluster is hosting the instance of Astra Control Center that is currently being accessed.</li> </ul>
clusterType	string	True	<p>JSON string containing a value indicating the type of cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• "gke" - Kubernetes hosted on Google Kubernetes Engine</li> <li>• "aks" - Kubernetes hosted on Microsoft Azure Kubernetes Service</li> <li>• "eks" - Kubernetes hosted on Amazon Elastic Kubernetes Service</li> <li>• "rke" - The cluster is of type Rancher</li> <li>• "tanzu" -The cluster is of type Tanzu Kubernetes Grid</li> <li>• "openshift" - The cluster is of type OpenShift</li> <li>• "anthos" - The cluster is of type GKE Anthos</li> <li>• "kubernetes" - The cluster is generic Kubernetes</li> </ul>



Name	Type	Required	Description
clusterVersion	string	False	<p>JSON string containing a value indicating the semantic versioning representation of the cluster environment. For Kubernetes clusters, this is the Kubernetes version. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 31</li> </ul>
clusterVersionString	string	False	<p>JSON string containing a value indicating the extended versioning information for the cluster environment. For Kubernetes clusters, this is the full Kubernetes version. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 31</li> </ul>
clusterCreationTimestamp	string	False	<p>JSON string containing the timestamp indicating when the cluster was originally created. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>
namespaces	array[string]	False	<p>JSON array of JSON strings, each indicating a namespace within the cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 253</li> </ul>

Name	Type	Required	Description
defaultStorageClass	string	False	<p>JSON string containing a storage class ID that corresponds to the default storage class set in Kubernetes. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
cloudID	string	True	<p>JSON string containing a value indicating the ID of the cloud the cluster is running on. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
credentialID	string	False	<p>JSON string containing a value indicating the ID of the credential that contains the kubeconfig file for the cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema If privateRouteID and connectorCapabilities with at least the relay option are provided, credentialID is optional. If they are not provided, credentialID is required, otherwise, an error is generated. If credentialID and a relay capable connector is provided, an error is generated.</li> </ul>

Name	Type	Required	Description
location	string	False	<p>JSON string containing a value provided by the cloud that the cluster is running on, indicating the cloud-specific location of the cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>
isMultizonal	string	False	<p>JSON string containing a value provided by the cloud the cluster is running on, indicating whether the cluster spans two or more availability zones. Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - The cluster spans two or more availability zones</li> <li>• "false" - The cluster is wholly located within a single availability zone</li> </ul>
privateRouteID	string	False	<p>JSON string containing the location ID for private clusters.</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>
connectorCapabilities	array[string]	False	<p>Capabilities of the connector that is associated with this cluster. Optional for backwards compatibility. If not present, proxy is the assumed capability.</p>

Name	Type	Required	Description
apiServiceID	string	False	JSON string containing the UUID from the Kubernetes (k8s) API service object. Used to uniquely identify a cluster.
metadata	<a href="#">type_astra_metadata_update</a>	True	<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

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

## Retrieve a cluster

GET /accounts/{account\_id}/topology/v1/clusters/{cluster\_id}

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

### Parameters

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

### Response

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

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

Name	Type	Required	Description
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "1.0"</li> <li>• "1.1"</li> <li>• "1.2"</li> <li>• "1.3"</li> <li>• "1.4"</li> <li>• "1.5"</li> <li>• "1.6"</li> </ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the UUIDv4 Schema</li> </ul>
name	string	True	JSON string containing a name for the cluster. If not specified, the Kubernetes name of the cluster will be used. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> <li>• This string is internally validated to prevent XSS, Unicode, directory traversal, and SQL-injection attacks</li> </ul>

Name	Type	Required	Description
state	string	True	<p>JSON string containing a value indicating the operational state of the cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• "pending" - The cluster is scheduled for discovery</li> <li>• "discovering" - The cluster is in the process of being discovered</li> <li>• "provisioning" - The cluster is in the process of being provisioned</li> <li>• "running" - The cluster is running normally</li> <li>• "failed" - The cluster is in a permanent failure state</li> <li>• "removed" - The cluster is not currently accessible</li> <li>• "unknown" - The cluster state cannot be determined</li> </ul>
stateUnready	array[string]	True	<p>JSON array of JSON strings, each indicating a reason why the cluster is unable to transition to "running" state, when there are issues while in "running" state, or why it has transitioned to "failed" or "removed" state. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 127</li> </ul>

Name	Type	Required	Description
managedState	string	True	<p>JSON string containing a value indicating the management state of the cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• "pending" - The cluster is scheduled to be discovered or added</li> <li>• "ineligible" - The cluster is in "running" state, is not under management, and is not eligible for management. The reasons for this ineligibility are provided in the unready key value</li> <li>• "unmanaged" - The cluster is in "running" or "failed" state, is not under management, and is eligible for management</li> <li>• "managing" - The cluster is in "running" state and is in the process of being managed</li> <li>• "managed" - The cluster is in "running", "failed", or "removed" state, and is under management</li> </ul>



Name	Type	Required	Description
protectionState	string	True	<p>JSON string containing a value indicating the protection state of the cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• "full" - The clusters default storage class supports snapshots</li> <li>• "partial" - The cluster has only storageClasses that do not support snapshots</li> <li>• "atRisk" - The default storage class of the cluster does not support snapshots</li> </ul>
protectionStateDetails	array[type_astra_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>
restoreTargetSupported	string	False	<p>JSON string containing a value indicating the ability of the cluster to be a <i>target</i> of application data management operations. Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - Cluster is an eligible target for app data management operations.</li> <li>• "false" - Cluster is <i>not</i> an eligible target for app data management operations.</li> </ul>

Name	Type	Required	Description
snapshotSupported	string	False	<p>JSON string containing a value indicating the ability of the cluster to perform application data management backup-like operations. Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - Cluster is eligible to perform app data management operations.</li> <li>• "false" - Cluster is <i>not</i> eligible to perform app data management operations.</li> </ul>
managedStateUnready	array[string]	True	<p>JSON array of JSON strings, each indicating a reason why the cluster is ineligible to be managed, or that the cluster is managed but non-fatal errors were encountered while managing the cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 127</li> </ul>
managedTimestamp	string	False	<p>JSON string containing the timestamp indicating when the cluster was brought under management. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema This key is only returned when a cluster has a managedState of "managed".</li> </ul>

Name	Type	Required	Description
tridentVersion	string	False	<p>JSON string containing the version of Trident installed on the cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Software Version Schema</li> </ul>
acpVersion	string	False	<p>JSON string containing the version of Astra Control Provisioner installed on the cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Software Version Schema</li> </ul>
tridentManagedState	string	False	<p>JSON string containing one of a set of enumerated values indicating the management state of Trident on this cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• "managed" - Trident instance on the cluster is managed by Astra</li> <li>• "unmanaged" - Trident instance on the cluster is not managed by Astra</li> </ul>
tridentManagedStateDesired	string	False	<p>JSON string containing a value indicating the desired management state for Trident. Defined values are:</p> <ul style="list-style-type: none"> <li>• "managed" - Manage Trident on this cluster</li> <li>• "unmanaged" - Do not manage Trident on this cluster</li> </ul>

Name	Type	Required	Description
tridentManagedStateDetails	array[type_astra_stateDetail]	False	<p>JSON array of JSON objects that lists additional details about why the state transitioned to "managed" or "unmanaged". If no details are available, this array will be empty.</p> <ul style="list-style-type: none"> <li>• Minimum items: 0</li> </ul>
tridentManagedStateAllowed	array[string]	False	<p>States that can be requested in a given tridentManagedState. The following states can be requested in each defined state:</p> <ul style="list-style-type: none"> <li>• "managed": "managed"</li> <li>• "unmanaged": "unmanaged"</li> </ul>
inUse	string	True	<p>JSON string containing a value indicating if the cluster has any managed applications and therefore cannot be deleted. Defined values are:</p> <ul style="list-style-type: none"> <li>• "false" - The cluster is not managed or is managed but has no managed applications associated with it</li> <li>• "true" - The cluster is managed and has managed applications associated with it</li> </ul>

Name	Type	Required	Description
accHost	string	False	<p>JSON string that indicates that this cluster hosts the instance of Astra Control Center that is currently being accessed. Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - This cluster is hosting the instance of Astra Control Center that is currently being accessed.</li> </ul>
clusterType	string	True	<p>JSON string containing a value indicating the type of cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• "gke" - Kubernetes hosted on Google Kubernetes Engine</li> <li>• "aks" - Kubernetes hosted on Microsoft Azure Kubernetes Service</li> <li>• "eks" - Kubernetes hosted on Amazon Elastic Kubernetes Service</li> <li>• "rke" - The cluster is of type Rancher</li> <li>• "tanzu" -The cluster is of type Tanzu Kubernetes Grid</li> <li>• "openshift" - The cluster is of type OpenShift</li> <li>• "anthos" - The cluster is of type GKE Anthos</li> <li>• "kubernetes" - The cluster is generic Kubernetes</li> </ul>

Name	Type	Required	Description
clusterVersion	string	False	<p>JSON string containing a value indicating the semantic versioning representation of the cluster environment. For Kubernetes clusters, this is the Kubernetes version. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 31</li> </ul>
clusterVersionString	string	False	<p>JSON string containing a value indicating the extended versioning information for the cluster environment. For Kubernetes clusters, this is the full Kubernetes version. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 31</li> </ul>
clusterCreationTimestamp	string	False	<p>JSON string containing the timestamp indicating when the cluster was originally created. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>
namespaces	array[string]	False	<p>JSON array of JSON strings, each indicating a namespace within the cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 253</li> </ul>

Name	Type	Required	Description
defaultStorageClass	string	False	<p>JSON string containing a storage class ID that corresponds to the default storage class set in Kubernetes. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
cloudID	string	True	<p>JSON string containing a value indicating the ID of the cloud the cluster is running on. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
credentialID	string	False	<p>JSON string containing a value indicating the ID of the credential that contains the kubeconfig file for the cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema If privateRouteID and connectorCapabilities with at least the relay option are provided, credentialID is optional. If they are not provided, credentialID is required, otherwise, an error is generated. If credentialID and a relay capable connector is provided, an error is generated.</li> </ul>

Name	Type	Required	Description
location	string	False	<p>JSON string containing a value provided by the cloud that the cluster is running on, indicating the cloud-specific location of the cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>
isMultizonal	string	False	<p>JSON string containing a value provided by the cloud the cluster is running on, indicating whether the cluster spans two or more availability zones. Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - The cluster spans two or more availability zones</li> <li>• "false" - The cluster is wholly located within a single availability zone</li> </ul>
privateRouteID	string	False	<p>JSON string containing the location ID for private clusters.</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>
connectorCapabilities	array[string]	False	<p>Capabilities of the connector that is associated with this cluster. Optional for backwards compatibility. If not present, proxy is the assumed capability.</p>
apiServiceID	string	False	<p>JSON string containing the UUID from the Kubernetes (k8s) API service object. Used to uniquely identify a cluster.</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>

## Example response

```
{
  "type": "application/astra-cluster",
  "version": "1.6",
  "id": "b8c3bce9-5f8f-5f5a-a456-2b2eb6cfd2b6",
  "name": "GKE-22",
  "state": "running",
  "stateUnready": [],
  "managedState": "unmanaged",
  "managedStateUnready": [],
  "protectionState": "full",
  "protectionStateDetails": [],
  "tridentVersion": "23.10.0",
  "acpVersion": "23.10.0",
  "tridentManagedState": "managed",
  "tridentManagedStateDetails": [],
  "inUse": "false",
  "clusterType": "kubernetes",
  "clusterVersion": "1.91.1",
  "clusterVersionString": "1.19.1",
  "clusterCreationTimestamp": "2020-08-06T12:24:52.256624Z",
  "namespaces": [
    "kube-system",
    "kube-public",
    "my-app-1"
  ],
  "defaultStorageClass": "31c95aba-99d9-4987-b1bb-000dfce5952c",
  "cloudID": "548bdc1f-f00e-4a23-a062-83265d224d46",
  "credentialID": "6fa2f917-f730-41b8-9c15-17f531843b31",
  "location": "europe-west4",
  "isMultizonal": "false",
  "apiServiceID": "6bf33af2-872a-4553-a891-26b510c3edbe",
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

## Response

Status: 401, Unauthorized

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

Name	Type	Required	Description
status	string	True	
correlationID	string	False	

### Example response

```
{
  "type": "https://astra.netapp.io/problems/65",
  "title": "Cluster GET not performed",
  "detail": "The cluster GET call didn't perform the lookup operation
on the cluster.",
  "status": "500"
}
```

### Error

Status: 404, Not found

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

additionalDetails

type\_astra\_stateDetail

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	
additionalDetails	<a href="#">additionalDetails</a>	False	

type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

type\_astra\_metadata\_update

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

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

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

invalidParams

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

# Modify a cluster

PUT /accounts/{account\_id}/topology/v1/clusters/{cluster\_id}

Replaces the entire stored resource with the supplied JSON request body while preserving key values that are not user-modifiable.

## Side Effects

- If the cluster is in a managed state, an update to credentialID will eventually trigger another attempt to collect the cluster.

## Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource  • example: {{.Account}}
cluster_id	string	path	True	ID of the cluster collection to list

## Request Body

Replaces the entire stored resource with the supplied JSON request body while preserving key values that are not user-modifiable.

## Side Effects

- If the cluster is in a managed state, an update to credentialID will eventually trigger another attempt to collect the cluster.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are:  • "application/astra-cluster"

Name	Type	Required	Description
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"> <li>• "1.0"</li> <li>• "1.1"</li> <li>• "1.2"</li> <li>• "1.3"</li> <li>• "1.4"</li> <li>• "1.5"</li> <li>• "1.6"</li> </ul>
id	string	False	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the UUIDv4 Schema</li> </ul>
name	string	False	JSON string containing a name for the cluster. If not specified, the Kubernetes name of the cluster will be used. Defined values are: <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> <li>• This string is internally validated to prevent XSS, Unicode, directory traversal, and SQL-injection attacks</li> </ul>



Name	Type	Required	Description
state	string	False	<p>JSON string containing a value indicating the operational state of the cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• "pending" - The cluster is scheduled for discovery</li> <li>• "discovering" - The cluster is in the process of being discovered</li> <li>• "provisioning" - The cluster is in the process of being provisioned</li> <li>• "running" - The cluster is running normally</li> <li>• "failed" - The cluster is in a permanent failure state</li> <li>• "removed" - The cluster is not currently accessible</li> <li>• "unknown" - The cluster state cannot be determined</li> </ul>
stateUnready	array[string]	False	<p>JSON array of JSON strings, each indicating a reason why the cluster is unable to transition to "running" state, when there are issues while in "running" state, or why it has transitioned to "failed" or "removed" state. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 127</li> </ul>

Name	Type	Required	Description
managedState	string	False	<p>JSON string containing a value indicating the management state of the cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• "pending" - The cluster is scheduled to be discovered or added</li> <li>• "ineligible" - The cluster is in "running" state, is not under management, and is not eligible for management. The reasons for this ineligibility are provided in the unready key value</li> <li>• "unmanaged" - The cluster is in "running" or "failed" state, is not under management, and is eligible for management</li> <li>• "managing" - The cluster is in "running" state and is in the process of being managed</li> <li>• "managed" - The cluster is in "running", "failed", or "removed" state, and is under management</li> </ul>

Name	Type	Required	Description
protectionState	string	False	<p>JSON string containing a value indicating the protection state of the cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• "full" - The clusters default storage class supports snapshots</li> <li>• "partial" - The cluster has only storageClasses that do not support snapshots</li> <li>• "atRisk" - The default storage class of the cluster does not support snapshots</li> </ul>
protectionStateDetails	array[ <a href="#">type_astra_stateDetail</a> ]	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>
restoreTargetSupported	string	False	<p>JSON string containing a value indicating the ability of the cluster to be a <i>target</i> of application data management operations. Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - Cluster is an eligible target for app data management operations.</li> <li>• "false" - Cluster is <i>not</i> an eligible target for app data management operations.</li> </ul>

Name	Type	Required	Description
snapshotSupported	string	False	<p>JSON string containing a value indicating the ability of the cluster to perform application data management backup-like operations. Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - Cluster is eligible to perform app data management operations.</li> <li>• "false" - Cluster is <i>not</i> eligible to perform app data management operations.</li> </ul>
managedStateUnready	array[string]	False	<p>JSON array of JSON strings, each indicating a reason why the cluster is ineligible to be managed, or that the cluster is managed but non-fatal errors were encountered while managing the cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 127</li> </ul>
managedTimestamp	string	False	<p>JSON string containing the timestamp indicating when the cluster was brought under management. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema This key is only returned when a cluster has a managedState of "managed".</li> </ul>

Name	Type	Required	Description
tridentVersion	string	False	<p>JSON string containing the version of Trident installed on the cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Software Version Schema</li> </ul>
acpVersion	string	False	<p>JSON string containing the version of Astra Control Provisioner installed on the cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Software Version Schema</li> </ul>
tridentManagedState	string	False	<p>JSON string containing one of a set of enumerated values indicating the management state of Trident on this cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• "managed" - Trident instance on the cluster is managed by Astra</li> <li>• "unmanaged" - Trident instance on the cluster is not managed by Astra</li> </ul>
tridentManagedStateDesired	string	False	<p>JSON string containing a value indicating the desired management state for Trident. Defined values are:</p> <ul style="list-style-type: none"> <li>• "managed" - Manage Trident on this cluster</li> <li>• "unmanaged" - Do not manage Trident on this cluster</li> </ul>

Name	Type	Required	Description
tridentManagedStateDetails	array[type_astra_stateDetail]	False	<p>JSON array of JSON objects that lists additional details about why the state transitioned to "managed" or "unmanaged". If no details are available, this array will be empty.</p> <ul style="list-style-type: none"> <li>• Minimum items: 0</li> </ul>
tridentManagedStateAllowed	array[string]	False	<p>States that can be requested in a given tridentManagedState. The following states can be requested in each defined state:</p> <ul style="list-style-type: none"> <li>• "managed": "managed"</li> <li>• "unmanaged": "unmanaged"</li> </ul>
inUse	string	False	<p>JSON string containing a value indicating if the cluster has any managed applications and therefore cannot be deleted. Defined values are:</p> <ul style="list-style-type: none"> <li>• "false" - The cluster is not managed or is managed but has no managed applications associated with it</li> <li>• "true" - The cluster is managed and has managed applications associated with it</li> </ul>

Name	Type	Required	Description
accHost	string	False	<p>JSON string that indicates that this cluster hosts the instance of Astra Control Center that is currently being accessed. Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - This cluster is hosting the instance of Astra Control Center that is currently being accessed.</li> </ul>
clusterType	string	False	<p>JSON string containing a value indicating the type of cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• "gke" - Kubernetes hosted on Google Kubernetes Engine</li> <li>• "aks" - Kubernetes hosted on Microsoft Azure Kubernetes Service</li> <li>• "eks" - Kubernetes hosted on Amazon Elastic Kubernetes Service</li> <li>• "rke" - The cluster is of type Rancher</li> <li>• "tanzu" -The cluster is of type Tanzu Kubernetes Grid</li> <li>• "openshift" - The cluster is of type OpenShift</li> <li>• "anthos" - The cluster is of type GKE Anthos</li> <li>• "kubernetes" - The cluster is generic Kubernetes</li> </ul>

Name	Type	Required	Description
clusterVersion	string	False	<p>JSON string containing a value indicating the semantic versioning representation of the cluster environment. For Kubernetes clusters, this is the Kubernetes version. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 31</li> </ul>
clusterVersionString	string	False	<p>JSON string containing a value indicating the extended versioning information for the cluster environment. For Kubernetes clusters, this is the full Kubernetes version. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 31</li> </ul>
clusterCreationTimestamp	string	False	<p>JSON string containing the timestamp indicating when the cluster was originally created. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the ISO-8601 Date Time Schema</li> </ul>
namespaces	array[string]	False	<p>JSON array of JSON strings, each indicating a namespace within the cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 253</li> </ul>



Name	Type	Required	Description
defaultStorageClass	string	False	<p>JSON string containing a storage class ID that corresponds to the default storage class set in Kubernetes. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
cloudID	string	False	<p>JSON string containing a value indicating the ID of the cloud the cluster is running on. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema</li> </ul>
credentialID	string	False	<p>JSON string containing a value indicating the ID of the credential that contains the kubeconfig file for the cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• Conforms to the Astra Identifier Schema If privateRouteID and connectorCapabilities with at least the relay option are provided, credentialID is optional. If they are not provided, credentialID is required, otherwise, an error is generated. If credentialID and a relay capable connector is provided, an error is generated.</li> </ul>

Name	Type	Required	Description
location	string	False	<p>JSON string containing a value provided by the cloud that the cluster is running on, indicating the cloud-specific location of the cluster. Defined values are:</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 63</li> </ul>
isMultizonal	string	False	<p>JSON string containing a value provided by the cloud the cluster is running on, indicating whether the cluster spans two or more availability zones. Defined values are:</p> <ul style="list-style-type: none"> <li>• "true" - The cluster spans two or more availability zones</li> <li>• "false" - The cluster is wholly located within a single availability zone</li> </ul>
privateRouteID	string	False	<p>JSON string containing the location ID for private clusters.</p> <ul style="list-style-type: none"> <li>• Minimum length: 1</li> <li>• Maximum length: 255</li> </ul>
connectorCapabilities	array[string]	False	<p>Capabilities of the connector that is associated with this cluster. Optional for backwards compatibility. If not present, proxy is the assumed capability.</p>
apiServiceID	string	False	<p>JSON string containing the UUID from the Kubernetes (k8s) API service object. Used to uniquely identify a cluster.</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-cluster",
  "version": "1.6"
}
```

### Response

Status: 204, Indicates if the cluster resource was updated.

### Response

Status: 401, Unauthorized

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	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: 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/65",
  "title": "Cluster GET not performed",
  "detail": "The cluster GET call didn't perform the lookup operation on the cluster.",
  "status": "500"
}
```

## Error

Status: 404, Not found

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

additionalDetails

type\_astra\_stateDetail

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	
additionalDetails	<a href="#">additionalDetails</a>	False	

type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

type\_astra\_metadata\_update

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

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

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

invalidParams

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

# Delete a cluster

DELETE /accounts/{account\_id}/topology/v1/clusters/{cluster\_id}

Removes the specified Cluster API resource.

## Side Effects

- Internal data structures are cleaned up.

## Parameters

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

## Response

Status: 204, Indicates if the cluster 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"
}
```

### 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

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