# **■** NetApp

# Managed cluster

**Astra Automation** 

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# Managed cluster

# Managed cluster overview

The Managed Cluster API represents managed Kubernetes clusters.

# Create a new managed cluster

POST /accounts/{account id}/topology/v1/managedClusters

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

#### **Parameters**

| Name       | Туре   | In   | Required | Description   |
|------------|--------|------|----------|---|
| account_id | string | path | True     | ID of the containing account resource • example: {{.Account}} |

# **Request Body**

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

| Name    | Туре   | Required | Description  |
|---------|--------|----------|--|
| type    | string | True     | Media type of the resource. Defined values are:  • "application/astramanagedCluster"             |
| version | string | True     | Version of the resource. Defined values are:  • "1.0"  • "1.1"  • "1.2"                          |
| id      | string | True     | Globally unique identifier of the resource. Defined values are:  • Conforms to the UUIDv4 Schema |

| Name                           | Туре                        | Required | Description  |
|--------------------------------|-----------------------------|----------|--|
| tridentManagedStateDesir<br>ed | string                      | False    | JSON string containing a value indicating the desired management state for Trident. Defined values are:  • "managed" - Manage Trident on this cluster  • "unmanaged" - Do not manage Trident on this cluster   |
| defaultStorageClass            | string                      | False    | JSON string containing a storage class ID that corresponds to the default storage class, as set in Kubernetes. Defined values are:  • Conforms to the Astra Identifier Schema If not included, it has not yet been discovered.   |
| metadata                       | type_astra_metadata_upd ate | False    | 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. |

#### **Example request**

```
"type": "application/astra-managedCluster",
   "version": "1.2",
   "id": "6f2fa469-cdae-54be-a451-d0e94a47fa62",
   "defaultStorageClass": "e280ff62-be35-4f31-a31b-a210a1ad1b33",
   "tridentManagedStateDesired": "managed"
}
```

# Response

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

| Name    | Туре   | Required | Description  |
|---------|--------|----------|--|
| type    | string | True     | Media type of the resource. Defined values are:  • "application/astramanagedCluster"             |
| version | string | True     | Version of the resource. Defined values are:  • "1.0"  • "1.1"  • "1.2"                          |
| id      | string | True     | Globally unique identifier of the resource. Defined values are:  • Conforms to the UUIDv4 Schema |

| Name  | Туре   | Required | Description   |
|-------|--------|----------|---|
| name  | string | True     | JSON string containing a name for the cluster. Defined values are:  • Minimum length: 1  • Maximum length: 63  • This string is internally validated to prevent XSS, Unicode, directory traversal, and SQL-injection attacks.   |
| state | string | True     | JSON string containing a value indicating the operational state of the cluster. Defined values are:  • "pending" - The cluster is scheduled for discovery  • "discovering" - The cluster is in the process of being discovered  • "provisioning" - The cluster is in the process of being provisioned  • "running" - The cluster is running normally  • "failed" - The cluster is in a permanent failure state  • "removed" - The cluster is not currently accessible  • "unknown" - The cluster's state cannot be determined |

| Name                   | Туре          | Required | Description   |
|------------------------|---------------|----------|---|
| restoreTargetSupported | string        | False    | JSON string containing a value indicating the managed cluster's ability to be a target of application data management operations. Defined values are:  • "true" - Cluster is an eligible target for app data management operations.  • "false" - Cluster is not an eligible target for app data management operations.    |
| snapshotSupported      | string        | False    | JSON string containing a value indicating the managed cluster's ability to perform application data management backup-like operations.  Defined values are:  • "true" - Cluster is an eligible to perform app data management operations.  • "false" - Cluster is not eligible to perform app data management operations. |
| stateUnready           | array[string] | True     | JSON array of JSON strings, each indicating a reason why the cluster is unable to transition to "running" state, when there are issues while in "running" state, or why it has transitioned to the "failed" or "removed" state. Defined values are:  • Minimum length: 1  • Maximum length: 127                           |

| Name         | Туре   | Required | Description   |
|--------------|--------|----------|---|
| managedState | string | True     | JSON string containing a value indicating the management state of the cluster. Defined values are:  |
|              |        |          | <ul> <li>"pending" - The<br/>cluster is scheduled to<br/>be discovered or<br/>added</li> </ul>  |
|              |        |          | <ul> <li>"ineligible" - The cluster is in a         "running" state, is not under management,         and is not eligible for management. The         reason or reasons for this ineligibility are         provided in the         unready key's value</li> </ul> |
|              |        |          | <ul> <li>"unmanaged" - The<br/>cluster is in a<br/>"running" or "failed"<br/>state, is not under<br/>management, and is<br/>eligible for<br/>management</li> </ul>  |
|              |        |          | <ul> <li>"managing" - The<br/>cluster is in a<br/>"running" state and is<br/>in the process of<br/>being managed</li> </ul>   |
|              |        |          | <ul> <li>"managed" - The<br/>cluster is in a<br/>"running", "failed", or<br/>"removed" state and is<br/>under management</li> </ul>   |

| Name                   | Туре                           | Required | Description  |
|------------------------|--------------------------------|----------|--|
| protectionState        | string                         | True     | JSON string containing a value indicating the protection state of the cluster. Defined values are:   |
|                        |                                |          | "full" - The cluster's<br>default storage class<br>supports snapshots  |
|                        |                                |          | <ul> <li>"partial" - The cluster<br/>has only storage<br/>classes that do not<br/>support snapshots</li> </ul>   |
|                        |                                |          | "atRisk" - The<br>cluster's default<br>storage class does<br>not support snapshots   |
| protectionStateDetails | array[type_astra_stateDet ail] | True     | JSON array of JSON objects that 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:  • Minimum Items: 0 |
|                        |                                |          | · Willimum items. 0  |
| managedStateUnready    | array[string]                  | True     | JSON array of JSON strings, each indicating a reason why the cluster is ineligible to be managed. Defined values are:  • Minimum length: 1   |
|                        |                                |          | Maximum length: 127  |

| Name                | Туре   | Required | Description  |
|---------------------|--------|----------|--|
| managedTimestamp    | string | True     | JSON string containing the timestamp indicating when the cluster was brought under management. Defined values are:  • Conforms to the ISO-8601 Date Time Schema This key is only returned when a cluster has a managedState of "managed".  |
| tridentVersion      | string | False    | JSON string containing the version of Trident installed on the cluster. Defined values are:  • Conforms to the Software Version Schema   |
| tridentManagedState | string | False    | JSON string containing one of a set of enumerated values indicating the management state of Trident on this cluster. Defined values are:  • "managed" - Trident instance on the cluster is managed by Astra  • "unmanaged" - Trident instance on the cluster is not managed by Astra |

| Name                           | Туре                           | Required | Description  |
|--------------------------------|--------------------------------|----------|--|
| tridentManagedStateDesir<br>ed | string                         | False    | JSON string containing a value indicating the desired management state for Trident. Defined values are:  • "managed" - Manage Trident on this cluster  • "unmanaged" - Do not manage Trident on this cluster |
| tridentManagedStateDetai<br>Is | array[type_astra_stateDet ail] | False    | JSON array of JSON objects that lists additional details about why "state" transitioned to "managed" or "unmanaged". If no details are available, this array will be empty.  • Minimum Items: 0              |
| tridentManagedStateAllow ed    | array[string]                  | False    | States that can be requested in a given tridentManagedState. The following states can be requested in each defined state:  • "managed":     "managed":     "unmanaged":     "unmanaged":                     |

| Name    | Туре   | Required | Description   |
|---------|--------|----------|---|
| inUse   | string | True     | JSON string containing a value indicating whether the cluster has any managed applications and therefore cannot be deleted. Defined values are:  • "false" - The cluster is not managed, or it is managed but has no managed applications associated with it  • "true" - The cluster is managed and has managed applications associated with it |
| 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:  • "true" - This cluster is hosting the instance of Astra Control Center that is currently being accessed.  |

| Name           | Туре   | Required | Description   |
|----------------|--------|----------|---|
| clusterType    | string | True     | JSON string containing a value indicating the type of cluster. Defined values are:  • "gke" - Kubernetes hosted on Google Kubernetes Engine • "aks" - Kubernetes hosted on Microsoft Azure Kubernetes Service • "eks" - Kubernetes hosted on Amazon Elastic Kubernetes Service • "rke" - The cluster is of type Rancher • "tanzu" -The cluster is of type Tanzu Kubernetes Grid • "openshift" - The cluster is of type OpenShift • "kubernetes" - The cluster is generic Kubernetes |
| clusterVersion | string | True     | JSON string containing the semantic versioning representation of the cluster environment. For Kubernetes clusters, this is the Kubernetes version. Defined values are:  • Minimum length: 1  • Maximum length: 31   |

| Name                     | Туре          | Required | Description   |
|--------------------------|---------------|----------|---|
| clusterVersionString     | string        | True     | 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:  • Minimum length: 1  • Maximum length: 31 |
| clusterCreationTimestamp | string        | False    | JSON string containing the timestamp indicating when the cluster was originally created. Defined values are:  • Conforms to the ISO- 8601 Date Time Schema  |
| namespaces               | array[string] | False    | JSON array of JSON strings, each indicating a namespace within the cluster. Defined values are:  • Minimum length: 1  • Maximum length: 253   |
| defaultStorageClass      | string        | False    | JSON string containing a storage class ID that corresponds to the default storage class, as set in Kubernetes. Defined values are:  • Conforms to the Astra Identifier Schema If not included, it has not yet been discovered.          |

| Name         | Туре   | Required | Description  |
|--------------|--------|----------|--|
| cloudID      | string | True     | JSON string containing a value indicating the ID of the cloud the cluster is running on. Defined values are:  • Conforms to the Astra Identifier Schema  |
| credentialID | string | False    | JSON string containing a value indicating the ID of the credential that contains the kubeconfig file for the cluster. Defined values are:  • Conforms to the Astra Identifier Schema   |
| location     | string | False    | JSON string containing a value provided by the cloud the cluster is running on, indicating the cloud-specific location of the cluster. Defined values are:  • Minimum length: 1  • Maximum length: 63  |
| isMultizonal | string | True     | 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:  • "true" - The cluster spans two or more availability zones  • "false" - The cluster is wholly located within a single availability zone |

| Name           | Туре                        | Required | Description  |
|----------------|-----------------------------|----------|--|
| privateRouteID | string                      | False    | JSON string containing the locationID for private clusters.  • Minimum length: 1  • Maximum length: 255  |
| apiServiceID   | string                      | False    | JSON string containing<br>the UUID from the<br>Kubernetes (k8s) api<br>service object. Used to<br>uniquely identify a cluster.   |
| metadata       | type_astra_metadata_upd ate | True     | 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. |

```
"type": "application/astra-managedCluster",
"version": "1.2",
"id": "6f2fa469-cdae-54be-a451-d0e94a47fa62",
"name": "GKE-22",
"state": "running",
"stateUnready": [],
"managedState": "managed",
"managedStateUnready": [],
"managedTimestamp": "2020-08-06T12:24:52.256624Z",
"protectionState": "full",
"protectionStateDetails": [],
"tridentVersion": "21.07.2",
"tridentManagedState": "managed",
"tridentManagedStateDesired": "managed",
"tridentManagedStateDetails": [],
"inUse": "false",
"clusterType": "kubernetes",
"clusterVersion": "1.91.1",
"clusterVersionString": "1.19.1",
"clusterCreationTimestamp": "2020-08-06T12:24:52.256624Z",
"namespaces": [
  "kube-system",
 "kube-public",
 "my-app-1"
],
"defaultStorageClass": "e280ff62-be35-4f31-a31b-a210a1ad1b33",
"cloudID": "548bdc1f-f00e-4a23-a062-83265d224d46",
"credentialID": "055e365a-2215-40de-aecb-a4070a7e6f1e",
"location": "europe-west4",
"isMultizonal": "false",
"apiServiceID": "6bf33af2-872a-4553-a891-26b510c3edbe",
"metadata": {
  "labels": [],
  "creationTimestamp": "2022-10-06T20:58:16.305662Z",
  "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
  "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
}
```

## Response

```
Status: 401, Unauthorized
```

| Name          | Туре   | 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"
}
```

```
Status: 400, Bad request
```

| Name          | Туре                 | 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 |

```
{
  "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          | Туре                 | 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"
}
```

```
Status: 403, Forbidden
```

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

```
{
  "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          | Туре   | 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  | Туре   | 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                  | Туре                    | Required | Description |
|-----------------------|-------------------------|----------|-------------|
| labels                | array[type_astra_label] | False    |             |
| creationTimestamp     | string                  | False    |             |
| modificationTimestamp | string                  | False    |             |
| createdBy             | string                  | False    |             |
| modifiedBy            | string                  | False    |             |

#### type\_astra\_stateDetail

| Name   | Туре   | Required | Description |
|--------|--------|----------|-------------|
| type   | string | True     |             |
| title  | string | True     |             |
| detail | string | True     |             |

#### invalidParams

| Name   | Туре   | Required | Description                               |
|--------|--------|----------|---|
| name   | string | True     | Name of the invalid query parameter       |
| reason | string | True     | Reason why the query parameter is invalid |

#### invalidFields

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

# List all managed clusters

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

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

#### **Parameters**

| Name       | Туре   | In    | Required | Description   |
|------------|--------|-------|----------|---|
| account_id | string | path  | True     | ID of the containing account resource • example: {{.Account}}   |
| include    | string | query | False    | Indicates which fields should be returned when listing a collection.  URL examples: "include=id", "include=id,name"  OpenAPI examples: "id"  • example: id,name,manage dState |

| Name   | Туре   | In    | Required | Description   |
|--------|--------|-------|----------|---|
| limit  | string | query | False    | Indicates the maximum number of resources to return when listing a collection.  URL examples: "limit=2"  OpenAPI examples: "2"  |
| filter | string | query | False    | Indicates which fields should be matched in order to return a resource when listing a collection.  Supported operators are:  • eq - Equality • It/gt - Less than/Greater than • Ite/gte - Less than or equals to/Greater than or equals to/Greater than or equals to  URL example: "filter=field%20eq%20%27value%27"  OpenAPI examples: "field eq 'value" |

### 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     | Туре  | Required | Description |
|----------|---|----------|-------------|
| items    | array[Any of:<br>managedCluster_1.2_get_<br>response_body, array[]] | True     |             |
| metadata | type_astra_metadata_list  | True     |             |

```
"type": "application/astra-managedClusters",
"version": "1.2",
"items": [
    "0f284377-e5dc-4dcd-bacd-3197f2b8a347",
   "GKE-21",
   "managed"
 ],
    "04dc80fa-d1d8-4850-a49f-3b70d0ec1369",
    "GKE-22",
    "unmanaged"
 ]
],
"metadata": {
 "labels": [],
  "creationTimestamp": "2022-10-06T20:58:16.305662Z",
  "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
  "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
}
```

```
Status: 401, Unauthorized
```

| Name   | Туре   | Required | Description |
|--------|--------|----------|-------------|
| type   | string | True     |             |
| title  | string | True     |             |
| detail | string | True     |             |
| status | string | True     |             |

| Name          | Туре   | Required | Description |
|---------------|--------|----------|-------------|
| correlationID | string | False    |             |

```
"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          | Туре                 | 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"
}
```

Status: 403, Forbidden

| Name          | Туре   | 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          | Туре   | 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\_stateDetail

| Name   | Туре   | Required | Description |
|--------|--------|----------|-------------|
| type   | string | True     |             |
| title  | string | True     |             |
| detail | string | True     |             |

type\_astra\_label

| Name  | Туре   | 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                  | Туре                    | Required | Description |
|-----------------------|-------------------------|----------|-------------|
| labels                | array[type_astra_label] | False    |             |
| creationTimestamp     | string                  | False    |             |
| modificationTimestamp | string                  | False    |             |
| createdBy             | string                  | False    |             |
| modifiedBy            | string                  | False    |             |

managedCluster\_1.2\_get\_response\_body

| Name | Туре   | Required | Description  |
|------|--------|----------|--|
| type | string | True     | Media type of the resource. Defined values are:  • "application/astramanagedCluster" |

| Name    | Туре   | Required | Description   |
|---------|--------|----------|---|
| version | string | True     | Version of the resource. Defined values are:  • "1.0"  • "1.1"  • "1.2"   |
| id      | string | True     | Globally unique identifier of the resource. Defined values are:  • Conforms to the UUIDv4 Schema  |
| name    | string | True     | JSON string containing a name for the cluster. Defined values are:  • Minimum length: 1  • Maximum length: 63  • This string is internally validated to prevent XSS, Unicode, directory traversal, and SQL-injection attacks. |

| Name                   | Туре   | Required | Description   |
|------------------------|--------|----------|---|
| state                  | string | True     | JSON string containing a value indicating the operational state of the cluster. Defined values are:  • "pending" - The cluster is scheduled for discovery  • "discovering" - The cluster is in the process of being discovered  • "provisioning" - The cluster is in the process of being provisioned  • "running" - The cluster is running normally  • "failed" - The cluster is in a permanent failure state  • "removed" - The cluster is not currently accessible  • "unknown" - The cluster's state cannot be determined |
| restoreTargetSupported | string | False    | JSON string containing a value indicating the managed cluster's ability to be a target of application data management operations. Defined values are:  • "true" - Cluster is an eligible target for app data management operations.  • "false" - Cluster is not an eligible target for app data management operations.  |

| Name              | Туре          | Required | Description  |
|-------------------|---------------|----------|--|
| snapshotSupported | string        | False    | JSON string containing a value indicating the managed cluster's ability to perform application data management backup-like operations. Defined values are:  • "true" - Cluster is an eligible to perform app data management operations.  • "false" - Cluster is not eligible to perform app data management operations. |
| stateUnready      | array[string] | True     | JSON array of JSON strings, each indicating a reason why the cluster is unable to transition to "running" state, when there are issues while in "running" state, or why it has transitioned to the "failed" or "removed" state. Defined values are:  • Minimum length: 1  • Maximum length: 127                          |

| Name         | Туре   | Required | Description   |
|--------------|--------|----------|---|
| managedState | string | True     | JSON string containing a value indicating the management state of the cluster. Defined values are:  • "pending" - The cluster is scheduled  |
|              |        |          | to be discovered or added   |
|              |        |          | "ineligible" - The cluster is in a "running" state, is not under management, and is not eligible for management. The reason or reasons for this ineligibility are provided in the unready key's value |
|              |        |          | <ul> <li>"unmanaged" - The<br/>cluster is in a<br/>"running" or "failed"<br/>state, is not under<br/>management, and is<br/>eligible for<br/>management</li> </ul>                                    |
|              |        |          | <ul> <li>"managing" - The<br/>cluster is in a<br/>"running" state and<br/>is in the process of<br/>being managed</li> </ul>   |
|              |        |          | <ul> <li>"managed" - The<br/>cluster is in a<br/>"running", "failed", or<br/>"removed" state and<br/>is under<br/>management</li> </ul>   |

| Name                   | Туре                           | Required | Description  |
|------------------------|--------------------------------|----------|--|
| protectionState        | string                         | True     | JSON string containing a value indicating the protection state of the cluster. Defined values are:  • "full" - The cluster's default storage class supports snapshots  • "partial" - The cluster has only storage classes that do not support snapshots  • "atRisk" - The cluster's default storage class does not support snapshots |
| protectionStateDetails | array[type_astra_stateDe tail] | True     | JSON array of JSON objects that 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:  • Minimum Items: 0   |
| managedStateUnready    | array[string]                  | True     | JSON array of JSON strings, each indicating a reason why the cluster is ineligible to be managed. Defined values are:  • Minimum length: 1  • Maximum length: 127  |

| Name                | Туре   | Required | Description  |
|---------------------|--------|----------|--|
| managedTimestamp    | string | True     | JSON string containing the timestamp indicating when the cluster was brought under management. Defined values are:  • Conforms to the ISO-8601 Date Time Schema This key is only returned when a cluster has a managedState of "managed".  |
| tridentVersion      | string | False    | JSON string containing the version of Trident installed on the cluster. Defined values are:  • Conforms to the Software Version Schema   |
| tridentManagedState | string | False    | JSON string containing one of a set of enumerated values indicating the management state of Trident on this cluster. Defined values are:  • "managed" - Trident instance on the cluster is managed by Astra  • "unmanaged" - Trident instance on the cluster is not managed by Astra |

| Name                           | Туре                           | Required | Description  |
|--------------------------------|--------------------------------|----------|--|
| tridentManagedStateDes ired    | string                         | False    | JSON string containing a value indicating the desired management state for Trident. Defined values are:  • "managed" - Manage Trident on this cluster  • "unmanaged" - Do not manage Trident on this cluster |
| tridentManagedStateDet ails    | array[type_astra_stateDe tail] | False    | JSON array of JSON objects that lists additional details about why "state" transitioned to "managed" or "unmanaged". If no details are available, this array will be empty.  • Minimum Items: 0              |
| tridentManagedStateAllo<br>wed | array[string]                  | False    | States that can be requested in a given tridentManagedState. The following states can be requested in each defined state:  • "managed":     "managed"  • "unmanaged":     "unmanaged"                        |

| Name    | Туре   | Required | Description   |
|---------|--------|----------|---|
| inUse   | string | True     | JSON string containing a value indicating whether the cluster has any managed applications and therefore cannot be deleted. Defined values are:  • "false" - The cluster is not managed, or it is managed but has no managed applications associated with it  • "true" - The cluster is managed and has managed applications associated with it |
| 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:  • "true" - This cluster is hosting the instance of Astra Control Center that is currently being accessed.  |

| Name           | Туре   | Required | Description   |
|----------------|--------|----------|---|
| clusterType    | string | True     | JSON string containing a value indicating the type of cluster. Defined values are:  • "gke" - Kubernetes hosted on Google Kubernetes Engine  • "aks" - Kubernetes hosted on Microsoft Azure Kubernetes Service  • "eks" - Kubernetes hosted on Amazon Elastic Kubernetes Service  • "rke" - The cluster is of type Rancher  • "tanzu" -The cluster is of type Tanzu Kubernetes Grid  • "openshift" - The cluster is of type OpenShift  • "kubernetes" - The cluster is generic Kubernetes |
| clusterVersion | string | True     | JSON string containing the semantic versioning representation of the cluster environment. For Kubernetes clusters, this is the Kubernetes version. Defined values are:  • Minimum length: 1  • Maximum length: 31   |

| Name                         | Туре          | Required | Description   |
|------------------------------|---------------|----------|---|
| clusterVersionString         | string        | True     | 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:  • Minimum length: 1  • Maximum length: 31 |
| clusterCreationTimestam<br>p | string        | False    | JSON string containing the timestamp indicating when the cluster was originally created. Defined values are:  • Conforms to the ISO-8601 Date Time Schema   |
| namespaces                   | array[string] | False    | JSON array of JSON strings, each indicating a namespace within the cluster. Defined values are:  • Minimum length: 1  • Maximum length: 253   |
| defaultStorageClass          | string        | False    | JSON string containing a storage class ID that corresponds to the default storage class, as set in Kubernetes. Defined values are:  • Conforms to the Astra Identifier Schema If not included, it has not yet been discovered.          |

| Name         | Туре   | Required | Description   |
|--------------|--------|----------|---|
| cloudID      | string | True     | JSON string containing a value indicating the ID of the cloud the cluster is running on. Defined values are:  • Conforms to the Astra Identifier Schema   |
| credentialID | string | False    | JSON string containing a value indicating the ID of the credential that contains the kubeconfig file for the cluster. Defined values are:  • Conforms to the Astra Identifier Schema  |
| location     | string | False    | JSON string containing a value provided by the cloud the cluster is running on, indicating the cloud-specific location of the cluster. Defined values are:  • Minimum length: 1  • Maximum length: 63   |
| isMultizonal | string | True     | 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:  "true" - The cluster spans two or more availability zones  "false" - The cluster is wholly located within a single availability zone |

| Name           | Туре                        | Required | Description  |
|----------------|-----------------------------|----------|--|
| privateRouteID | string                      | False    | JSON string containing the locationID for private clusters.  • Minimum length: 1  • Maximum length: 255  |
| apiServiceID   | string                      | False    | JSON string containing<br>the UUID from the<br>Kubernetes (k8s) api<br>service object. Used to<br>uniquely identify a<br>cluster.  |
| metadata       | type_astra_metadata_up date | True     | 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. |

## type\_astra\_metadata\_list

| Name                  | Туре                    | Required | Description |
|-----------------------|-------------------------|----------|-------------|
| continue              | string                  | False    |             |
| count                 | number                  | False    |             |
| labels                | array[type_astra_label] | False    |             |
| creationTimestamp     | string                  | False    |             |
| modificationTimestamp | string                  | False    |             |
| createdBy             | string                  | False    |             |
| modifiedBy            | string                  | False    |             |

| Name   | Туре   | Required | Description                               |
|--------|--------|----------|---|
| name   | string | True     | Name of the invalid query parameter       |
| reason | string | True     | Reason why the query parameter is invalid |

# Retrieve a managed cluster

GET /accounts/{account\_id}/topology/v1/managedClusters/{managedCluster\_id}

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

### **Parameters**

| Name              | Туре   | In   | Required | Description  |
|-------------------|--------|------|----------|--|
| account_id        | string | path | True     | ID of the containing account resource  • example: {{.Account}} |
| managedCluster_id | string | path | True     | ID of the managedCluster collection to list                    |

## Response

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

| Name | Туре   | Required | Description  |
|------|--------|----------|--|
| type | string | True     | Media type of the resource. Defined values are:  • "application/astramanagedCluster" |

| Name    | Туре   | Required | Description   |
|---------|--------|----------|---|
| version | string | True     | Version of the resource. Defined values are:  • "1.0"  • "1.1"  • "1.2"   |
| id      | string | True     | Globally unique identifier of the resource. Defined values are:  • Conforms to the UUIDv4 Schema  |
| name    | string | True     | JSON string containing a name for the cluster. Defined values are:  • Minimum length: 1  • Maximum length: 63  • This string is internally validated to prevent XSS, Unicode, directory traversal, and SQL-injection attacks. |

| Name                   | Туре   | Required | Description   |
|------------------------|--------|----------|---|
| state                  | string | True     | JSON string containing a value indicating the operational state of the cluster. Defined values are:  • "pending" - The cluster is scheduled for discovery  • "discovering" - The cluster is in the process of being discovered  • "provisioning" - The cluster is in the process of being provisioned  • "running" - The cluster is running normally  • "failed" - The cluster is in a permanent failure state  • "removed" - The cluster is not currently accessible  • "unknown" - The cluster's state cannot be determined |
| restoreTargetSupported | string | False    | JSON string containing a value indicating the managed cluster's ability to be a target of application data management operations. Defined values are:  • "true" - Cluster is an eligible target for app data management operations.  • "false" - Cluster is not an eligible target for app data management operations.  |

| Name              | Туре          | Required | Description   |
|-------------------|---------------|----------|---|
| snapshotSupported | string        | False    | JSON string containing a value indicating the managed cluster's ability to perform application data management backup-like operations.  Defined values are:  • "true" - Cluster is an eligible to perform app data management operations.  • "false" - Cluster is not eligible to perform app data management operations. |
| stateUnready      | array[string] | True     | JSON array of JSON strings, each indicating a reason why the cluster is unable to transition to "running" state, when there are issues while in "running" state, or why it has transitioned to the "failed" or "removed" state. Defined values are:  • Minimum length: 1  • Maximum length: 127                           |

| Name         | Туре   | Required | Description  |
|--------------|--------|----------|--|
| managedState | string | True     | JSON string containing a value indicating the management state of the cluster. Defined values are:  • "pending" - The cluster is scheduled to be discovered or added   |
|              |        |          | • "ineligible" - The cluster is in a "running" state, is not under management, and is not eligible for management. The reason or reasons for this ineligibility are provided in the unready key's value              |
|              |        |          | "unmanaged" - The cluster is in a "running" or "failed" state, is not under management, and is eligible for management   |
|              |        |          | <ul> <li>"managing" - The cluster is in a "running" state and is in the process of being managed</li> <li>"managed" - The cluster is in a "running", "failed", or "removed" state and is under management</li> </ul> |

| Name                   | Туре                           | Required | Description   |
|------------------------|--------------------------------|----------|---|
| protectionState        | string                         | True     | JSON string containing a value indicating the protection state of the cluster. Defined values are:  • "full" - The cluster's default storage class supports snapshots  • "partial" - The cluster has only storage classes that do not support snapshots  • "atRisk" - The |
|                        |                                |          | cluster's default<br>storage class does<br>not support snapshots  |
| protectionStateDetails | array[type_astra_stateDet ail] | True     | JSON array of JSON objects that 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:  • Minimum Items: 0                                  |
| managedStateUnready    | array[string]                  | True     | JSON array of JSON strings, each indicating a reason why the cluster is ineligible to be managed. Defined values are:  • Minimum length: 1  • Maximum length: 127   |

| Name                | Туре   | Required | Description  |
|---------------------|--------|----------|--|
| managedTimestamp    | string | True     | JSON string containing the timestamp indicating when the cluster was brought under management. Defined values are:  • Conforms to the ISO-8601 Date Time Schema This key is only returned when a cluster has a managedState of "managed".  |
| tridentVersion      | string | False    | JSON string containing the version of Trident installed on the cluster. Defined values are:  • Conforms to the Software Version Schema   |
| tridentManagedState | string | False    | JSON string containing one of a set of enumerated values indicating the management state of Trident on this cluster. Defined values are:  • "managed" - Trident instance on the cluster is managed by Astra  • "unmanaged" - Trident instance on the cluster is not managed by Astra |

| Name                           | Туре                           | Required | Description  |
|--------------------------------|--------------------------------|----------|--|
| tridentManagedStateDesir<br>ed | string                         | False    | JSON string containing a value indicating the desired management state for Trident. Defined values are:  • "managed" - Manage Trident on this cluster  • "unmanaged" - Do not manage Trident on this cluster |
| tridentManagedStateDetai<br>Is | array[type_astra_stateDet ail] | False    | JSON array of JSON objects that lists additional details about why "state" transitioned to "managed" or "unmanaged". If no details are available, this array will be empty.  • Minimum Items: 0              |
| tridentManagedStateAllow<br>ed | array[string]                  | False    | States that can be requested in a given tridentManagedState. The following states can be requested in each defined state:  • "managed":     "managed":     "unmanaged":     "unmanaged":                     |

| Name    | Туре   | Required | Description   |
|---------|--------|----------|---|
| inUse   | string | True     | JSON string containing a value indicating whether the cluster has any managed applications and therefore cannot be deleted. Defined values are:  • "false" - The cluster is not managed, or it is managed but has no managed applications associated with it  • "true" - The cluster is managed and has managed applications associated with it |
| 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:  • "true" - This cluster is hosting the instance of Astra Control Center that is currently being accessed.  |

| Name           | Туре   | Required | Description   |
|----------------|--------|----------|---|
| clusterType    | string | True     | JSON string containing a value indicating the type of cluster. Defined values are:  • "gke" - Kubernetes hosted on Google Kubernetes Engine  • "aks" - Kubernetes hosted on Microsoft Azure Kubernetes Service  • "eks" - Kubernetes hosted on Amazon Elastic Kubernetes Service  • "rke" - The cluster is of type Rancher  • "tanzu" -The cluster is of type Tanzu Kubernetes Grid  • "openshift" - The cluster is of type OpenShift  • "kubernetes" - The cluster is generic Kubernetes |
| clusterVersion | string | True     | JSON string containing the semantic versioning representation of the cluster environment. For Kubernetes clusters, this is the Kubernetes version. Defined values are:  • Minimum length: 1  • Maximum length: 31   |

| Name                     | Туре          | Required | Description   |
|--------------------------|---------------|----------|---|
| clusterVersionString     | string        | True     | 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:  • Minimum length: 1  • Maximum length: 31 |
| clusterCreationTimestamp | string        | False    | JSON string containing the timestamp indicating when the cluster was originally created. Defined values are:  • Conforms to the ISO- 8601 Date Time Schema  |
| namespaces               | array[string] | False    | JSON array of JSON strings, each indicating a namespace within the cluster. Defined values are:  • Minimum length: 1  • Maximum length: 253   |
| defaultStorageClass      | string        | False    | JSON string containing a storage class ID that corresponds to the default storage class, as set in Kubernetes. Defined values are:  • Conforms to the Astra Identifier Schema If not included, it has not yet been discovered.          |

| Name         | Туре   | Required | Description  |
|--------------|--------|----------|--|
| cloudID      | string | True     | JSON string containing a value indicating the ID of the cloud the cluster is running on. Defined values are:  • Conforms to the Astra Identifier Schema  |
| credentiaIID | string | False    | JSON string containing a value indicating the ID of the credential that contains the kubeconfig file for the cluster. Defined values are:  • Conforms to the Astra Identifier Schema   |
| location     | string | False    | JSON string containing a value provided by the cloud the cluster is running on, indicating the cloud-specific location of the cluster. Defined values are:  • Minimum length: 1  • Maximum length: 63  |
| isMultizonal | string | True     | 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:  • "true" - The cluster spans two or more availability zones  • "false" - The cluster is wholly located within a single availability zone |

| Name           | Туре                        | Required | Description  |
|----------------|-----------------------------|----------|--|
| privateRouteID | string                      | False    | JSON string containing the locationID for private clusters.  • Minimum length: 1  • Maximum length: 255  |
| apiServiceID   | string                      | False    | JSON string containing<br>the UUID from the<br>Kubernetes (k8s) api<br>service object. Used to<br>uniquely identify a cluster.   |
| metadata       | type_astra_metadata_upd ate | True     | 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. |

```
"type": "application/astra-managedCluster",
"version": "1.2",
"id": "6f2fa469-cdae-54be-a451-d0e94a47fa62",
"name": "GKE-22",
"state": "running",
"stateUnready": [],
"managedState": "managed",
"managedStateUnready": [],
"managedTimestamp": "2020-08-06T12:24:52.256624Z",
"protectionState": "full",
"protectionStateDetails": [],
"tridentVersion": "21.07.2",
"tridentManagedState": "managed",
"tridentManagedStateDesired": "managed",
"tridentManagedStateDetails": [],
"inUse": "true",
"clusterType": "kubernetes",
"clusterVersion": "1.91.1",
"clusterVersionString": "1.19.1",
"clusterCreationTimestamp": "2020-08-06T12:24:52.256624Z",
"namespaces": [
  "kube-system",
 "kube-public",
 "my-app-1"
],
"defaultStorageClass": "e280ff62-be35-4f31-a31b-a210a1ad1b33",
"cloudID": "548bdc1f-f00e-4a23-a062-83265d224d46",
"credentialID": "055e365a-2215-40de-aecb-a4070a7e6f1e",
"location": "europe-west4",
"isMultizonal": "false",
"apiServiceID": "6bf33af2-872a-4553-a891-26b510c3edbe",
"metadata": {
  "labels": [],
  "creationTimestamp": "2022-10-06T20:58:16.305662Z",
  "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
  "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
}
```

### Response

```
Status: 401, Unauthorized
```

| Name          | Туре   | 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          | Туре                 | 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 |

```
{
  "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          | Туре   | 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   | Туре   | Required | Description |
|--------|--------|----------|-------------|
| type   | string | True     |             |
| title  | string | True     |             |
| detail | string | True     |             |

| Name          | Туре   | Required | Description |
|---------------|--------|----------|-------------|
| status        | string | True     |             |
| correlationID | string | False    |             |

### **Example error response**

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

### **Definitions**

#### **See Definitions**

type\_astra\_stateDetail

| Name   | Туре   | Required | Description |
|--------|--------|----------|-------------|
| type   | string | True     |             |
| title  | string | True     |             |
| detail | string | True     |             |

type\_astra\_label

| Name  | Туре   | 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                  | Туре                    | Required | Description |
|-----------------------|-------------------------|----------|-------------|
| labels                | array[type_astra_label] | False    |             |
| creationTimestamp     | string                  | False    |             |
| modificationTimestamp | string                  | False    |             |
| createdBy             | string                  | False    |             |
| modifiedBy            | string                  | False    |             |

#### invalidParams

| Name   | Туре   | Required | Description                               |
|--------|--------|----------|---|
| name   | string | True     | Name of the invalid query parameter       |
| reason | string | True     | Reason why the query parameter is invalid |

# Modify a managed cluster

PUT /accounts/{account id}/topology/v1/managedClusters/{managedCluster id}

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

#### **Side Effects**

• When defaultStorageClass is changed, the Kubernetes default storage class will be updated.

### **Parameters**

| Name              | Туре   | In   | Required | Description  |
|-------------------|--------|------|----------|--|
| account_id        | string | path | True     | ID of the containing account resource  • example: {{.Account}} |
| managedCluster_id | string | path | True     | ID of the managedCluster collection to list                    |

### **Request Body**

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

#### **Side Effects**

• When defaultStorageClass is changed, the Kubernetes default storage class will be updated.

| Name    | Туре   | Required | Description  |
|---------|--------|----------|--|
| type    | string | True     | Media type of the resource. Defined values are:  • "application/astramanagedCluster" |
| version | string | True     | Version of the resource. Defined values are:  • "1.0"  • "1.1"  • "1.2"              |

| Name | Туре   | Required | Description   |
|------|--------|----------|---|
| id   | string | False    | Globally unique identifier of the resource. Defined values are:  • Conforms to the UUIDv4 Schema  |
| name | string | False    | JSON string containing a name for the cluster. Defined values are:  • Minimum length: 1  • Maximum length: 63  • This string is internally validated to prevent XSS, Unicode, directory traversal, and SQL-injection attacks. |

| Name                   | Туре   | Required | Description   |
|------------------------|--------|----------|---|
| state                  | string | False    | JSON string containing a value indicating the operational state of the cluster. Defined values are:  • "pending" - The cluster is scheduled for discovery  • "discovering" - The cluster is in the process of being discovered  • "provisioning" - The cluster is in the process of being provisioned  • "running" - The cluster is running normally  • "failed" - The cluster is in a permanent failure state  • "removed" - The cluster is not currently accessible  • "unknown" - The cluster's state cannot be determined |
| restoreTargetSupported | string | False    | JSON string containing a value indicating the managed cluster's ability to be a target of application data management operations. Defined values are:  • "true" - Cluster is an eligible target for app data management operations.  • "false" - Cluster is not an eligible target for app data management operations.  |

| Name              | Туре          | Required | Description   |
|-------------------|---------------|----------|---|
| snapshotSupported | string        | False    | JSON string containing a value indicating the managed cluster's ability to perform application data management backup-like operations.  Defined values are:  • "true" - Cluster is an eligible to perform app data management operations.  • "false" - Cluster is not eligible to perform app data management operations. |
| stateUnready      | array[string] | False    | JSON array of JSON strings, each indicating a reason why the cluster is unable to transition to "running" state, when there are issues while in "running" state, or why it has transitioned to the "failed" or "removed" state. Defined values are:  • Minimum length: 1  • Maximum length: 127                           |

| Name         | Туре   | Required | Description   |
|--------------|--------|----------|---|
| managedState | string | False    | JSON string containing a value indicating the management state of the cluster. Defined values are:  |
|              |        |          | <ul> <li>"pending" - The<br/>cluster is scheduled to<br/>be discovered or<br/>added</li> </ul>  |
|              |        |          | <ul> <li>"ineligible" - The cluster is in a         "running" state, is not under management, and is not eligible for management. The reason or reasons for this ineligibility are provided in the unready key's value</li> </ul> |
|              |        |          | <ul> <li>"unmanaged" - The<br/>cluster is in a<br/>"running" or "failed"<br/>state, is not under<br/>management, and is<br/>eligible for<br/>management</li> </ul>  |
|              |        |          | <ul> <li>"managing" - The<br/>cluster is in a<br/>"running" state and is<br/>in the process of<br/>being managed</li> </ul>   |
|              |        |          | "managed" - The cluster is in a "running", "failed", or "removed" state and is under management   |

| Name                   | Туре                           | Required | Description  |
|------------------------|--------------------------------|----------|--|
| protectionState        | string                         | False    | JSON string containing a value indicating the protection state of the cluster. Defined values are:  • "full" - The cluster's   |
|                        |                                |          | default storage class<br>supports snapshots  |
|                        |                                |          | <ul> <li>"partial" - The cluster<br/>has only storage<br/>classes that do not<br/>support snapshots</li> </ul>   |
|                        |                                |          | "atRisk" - The<br>cluster's default<br>storage class does<br>not support snapshots   |
| protectionStateDetails | array[type_astra_stateDet ail] | False    | JSON array of JSON objects that 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:  • Minimum Items: 0 |
| managedStateUnready    | array[string]                  | False    | JSON array of JSON   |
|                        |                                |          | strings, each indicating a reason why the cluster is ineligible to be managed. Defined values are:   |
|                        |                                |          | <ul><li> Minimum length: 1</li><li> Maximum length: 127</li></ul>  |

| Name                | Туре   | Required | Description  |
|---------------------|--------|----------|--|
| managedTimestamp    | string | False    | JSON string containing the timestamp indicating when the cluster was brought under management. Defined values are:  • Conforms to the ISO-8601 Date Time Schema This key is only returned when a cluster has a managedState of "managed".  |
| tridentVersion      | string | False    | JSON string containing the version of Trident installed on the cluster. Defined values are:  • Conforms to the Software Version Schema   |
| tridentManagedState | string | False    | JSON string containing one of a set of enumerated values indicating the management state of Trident on this cluster. Defined values are:  • "managed" - Trident instance on the cluster is managed by Astra  • "unmanaged" - Trident instance on the cluster is not managed by Astra |

| Name                           | Туре                           | Required | Description  |
|--------------------------------|--------------------------------|----------|--|
| tridentManagedStateDesir<br>ed | string                         | False    | JSON string containing a value indicating the desired management state for Trident. Defined values are:  • "managed" - Manage Trident on this cluster  • "unmanaged" - Do not manage Trident on this cluster |
| tridentManagedStateDetai<br>Is | array[type_astra_stateDet ail] | False    | JSON array of JSON objects that lists additional details about why "state" transitioned to "managed" or "unmanaged". If no details are available, this array will be empty.  • Minimum Items: 0              |
| tridentManagedStateAllow ed    | array[string]                  | False    | States that can be requested in a given tridentManagedState. The following states can be requested in each defined state:  • "managed":     "managed":     "unmanaged":     "unmanaged":                     |

| Name    | Туре   | Required | Description   |
|---------|--------|----------|---|
| inUse   | string | False    | JSON string containing a value indicating whether the cluster has any managed applications and therefore cannot be deleted. Defined values are:  • "false" - The cluster is not managed, or it is managed but has no managed applications associated with it  • "true" - The cluster is managed and has managed applications associated with it |
| 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:  • "true" - This cluster is hosting the instance of Astra Control Center that is currently being accessed.  |

| Name           | Туре   | Required | Description   |
|----------------|--------|----------|---|
| clusterType    | string | False    | JSON string containing a value indicating the type of cluster. Defined values are:  • "gke" - Kubernetes hosted on Google Kubernetes Engine  • "aks" - Kubernetes hosted on Microsoft Azure Kubernetes Service  • "eks" - Kubernetes hosted on Amazon Elastic Kubernetes Service  • "rke" - The cluster is of type Rancher  • "tanzu" -The cluster is of type Tanzu Kubernetes Grid  • "openshift" - The cluster is of type OpenShift  • "kubernetes" - The cluster is generic Kubernetes |
| clusterVersion | string | False    | JSON string containing the semantic versioning representation of the cluster environment. For Kubernetes clusters, this is the Kubernetes version. Defined values are:  • Minimum length: 1  • Maximum length: 31   |

| Name                     | Туре          | Required | Description   |
|--------------------------|---------------|----------|---|
| clusterVersionString     | string        | False    | 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:  • Minimum length: 1  • Maximum length: 31 |
| clusterCreationTimestamp | string        | False    | JSON string containing the timestamp indicating when the cluster was originally created. Defined values are:  • Conforms to the ISO- 8601 Date Time Schema  |
| namespaces               | array[string] | False    | JSON array of JSON strings, each indicating a namespace within the cluster. Defined values are:  • Minimum length: 1  • Maximum length: 253   |
| defaultStorageClass      | string        | False    | JSON string containing a storage class ID that corresponds to the default storage class, as set in Kubernetes. Defined values are:  • Conforms to the Astra Identifier Schema If not included, it has not yet been discovered.          |

| Name         | Туре   | Required | Description  |
|--------------|--------|----------|--|
| cloudID      | string | False    | JSON string containing a value indicating the ID of the cloud the cluster is running on. Defined values are:  • Conforms to the Astra Identifier Schema  |
| credentialID | string | False    | JSON string containing a value indicating the ID of the credential that contains the kubeconfig file for the cluster. Defined values are:  • Conforms to the Astra Identifier Schema   |
| location     | string | False    | JSON string containing a value provided by the cloud the cluster is running on, indicating the cloud-specific location of the cluster. Defined values are:  • Minimum length: 1  • Maximum length: 63  |
| isMultizonal | string | False    | 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:  • "true" - The cluster spans two or more availability zones  • "false" - The cluster is wholly located within a single availability zone |

| Name           | Туре                        | Required | Description  |
|----------------|-----------------------------|----------|--|
| privateRouteID | string                      | False    | JSON string containing the locationID for private clusters.  • Minimum length: 1  • Maximum length: 255  |
| apiServiceID   | string                      | False    | JSON string containing<br>the UUID from the<br>Kubernetes (k8s) api<br>service object. Used to<br>uniquely identify a cluster.   |
| metadata       | type_astra_metadata_upd ate | False    | 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. |

### **Example request**

```
{
  "type": "application/astra-managedCluster",
  "version": "1.2",
  "defaultStorageClass": "0b146cda-7fc1-4f32-804c-8130a38a7e1c"
}
```

## Response

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

### Response

```
Status: 401, Unauthorized
```

| Name          | Туре   | 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          | Туре                 | 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 |

```
{
  "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          | Туре                 | 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          | Туре   | Required | Description |
|---------------|--------|----------|-------------|
| type          | string | True     |             |
| title         | string | True     |             |
| detail        | string | True     |             |
| status        | string | True     |             |
| correlationID | string | False    |             |

```
{
  "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          | Туре   | 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

type\_astra\_stateDetail

| Name   | Туре   | Required | Description |
|--------|--------|----------|-------------|
| type   | string | True     |             |
| title  | string | True     |             |
| detail | string | True     |             |

type\_astra\_label

| Name  | Туре   | 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                  | Туре                    | Required | Description |
|-----------------------|-------------------------|----------|-------------|
| labels                | array[type_astra_label] | False    |             |
| creationTimestamp     | string                  | False    |             |
| modificationTimestamp | string                  | False    |             |
| createdBy             | string                  | False    |             |
| modifiedBy            | string                  | False    |             |

#### invalidParams

| Name   | Туре   | Required | Description                               |
|--------|--------|----------|---|
| name   | string | True     | Name of the invalid query parameter       |
| reason | string | True     | Reason why the query parameter is invalid |

invalidFields

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

# Delete a managed cluster

DELETE /accounts/{account\_id}/topology/v1/managedClusters/{managedCluster\_id}

Removes the specified Managed Cluster API resource.

#### **Side Effects**

• Internal data structures are cleaned up.

#### **Parameters**

| Name              | Туре   | In   | Required | Description  |
|-------------------|--------|------|----------|--|
| account_id        | string | path | True     | ID of the containing account resource  • example: {{.Account}} |
| managedCluster_id | string | path | True     | ID of the managedCluster collection to list                    |

### Response

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

# Response

Status: 401, Unauthorized

| Name  | Туре   | Required | Description |
|-------|--------|----------|-------------|
| type  | string | True     |             |
| title | string | True     |             |

| Name          | Туре   | Required | Description |
|---------------|--------|----------|-------------|
| detail        | string | True     |             |
| status        | string | True     |             |
| correlationID | string | False    |             |

```
{
  "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          | Туре                 | 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          | Туре   | 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          | Туре   | 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   | Туре   | 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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