



# Kubernetes API Resource

## Astra Automation

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# Kubernetes API Resource

## Kubernetes API Resource overview

The Kubernetes API Resource API provides read-only access to Kubernetes API resources to filter the ones supported by Astra on a given cluster.

## List the K8s API resources for a managed cluster

GET

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

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

### Parameters

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

Name	Type	In	Required	Description
limit	string	query	False	Indicates the maximum number of resources to return when listing a collection.  URL examples: "limit=2"  OpenAPI examples: "2"

## Response

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

Name	Type	Required	Description
items	array[Any of: <a href="#">apiResource_1.0_get_response_body</a> , array[]]	True	
metadata	<a href="#">type_astra_metadata_list</a>	True	

## Example response

```
{
  "type": "application/astra-apiResources",
  "version": "1.0",
  "items": [
    [
      "e280ff62-be35-4f31-a31b-a210a1ad1b33",
      "ClusterRole",
      "rbac.authorization.k8s.io/v1"
    ],
    [
      "e8507dad-d33f-44b3-9c15-ec55ba6f6473",
      "ClusterRoleBinding",
      "rbac.authorization.k8s.io/v1"
    ]
  ],
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

## Response

Status: 401, Unauthorized

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

### Example response

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

### Response

Status: 400, Bad request

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

### Example response

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

### Response

Status: 403, Forbidden

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

### Example response

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

### Error

Status: 404, Not found

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

### Example error response

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

# Definitions



## See Definitions

type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

type\_astra\_metadata

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

- Conforms to the Astra Metadata Schema

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

apiResource\_1.0\_get\_response\_body

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

Name	Type	Required	Description
apiVersion	string	True	JSON string representing the API version of the resource, as set in or by Kubernetes. APIVersion defines the versioned schema for this object representation. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: <a href="https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources">https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources</a>
kind	string	True	JSON string representing the kind of the resource, as set in or by Kubernetes. The kind field uses camel case and contains a string value representing the REST resource this object represents. Servers might infer this from the endpoint the client submits requests to. It cannot be updated. More info: <a href="https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds">https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds</a>
metadata	<a href="#">type_astra_metadata</a>	True	Client and service-specified metadata associated with the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema</li> </ul>

[type\\_astra\\_metadata\\_list](#)

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

invalidParams

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

## Retrieve a K8s API resource

GET

/accounts/{account\_id}/topology/v1/managedClusters/{managedCluster\_id}/apiResources/{apiResource\_id}

Returns the specific API resource in the JSON response body.

### Parameters

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

## Response

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

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: <ul style="list-style-type: none"><li>• "application/astra-apiResource"</li></ul>
version	string	True	Version of the resource. Defined values are: <ul style="list-style-type: none"><li>• "1.0"</li></ul>
id	string	True	Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"><li>• Conforms to the UUIDv4 Schema</li></ul>
apiVersion	string	True	JSON string representing the API version of the resource, as set in or by Kubernetes. APIVersion defines the versioned schema for this object representation. Servers should convert recognized schemas to the latest internal value, and may reject unrecognized values. More info: <a href="https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources">https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#resources</a>

Name	Type	Required	Description
kind	string	True	JSON string representing the kind of the resource, as set in or by Kubernetes. The kind field uses camel case and contains a string value representing the REST resource this object represents. Servers might infer this from the endpoint the client submits requests to. It cannot be updated. More info: <a href="https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds">https://git.k8s.io/community/contributors/devel/sig-architecture/api-conventions.md#types-kinds</a>
metadata	<a href="#">type_astra_metadata</a>	True	Client and service-specified metadata associated with the resource. Defined values are: <ul style="list-style-type: none"> <li>• Conforms to the Astra Metadata Schema</li> </ul>

### Example response

```
{
  "type": "application/astra-apiResource",
  "version": "1.0",
  "id": "e280ff62-be35-4f31-a31b-a210a1ad1b33",
  "kind": "ClusterRole",
  "apiVersion": "rbac.authorization.k8s.io/v1",
  "metadata": {
    "labels": [],
    "creationTimestamp": "2022-10-06T20:58:16.305662Z",
    "modificationTimestamp": "2022-10-06T20:58:16.305662Z",
    "createdBy": "8f84cf09-8036-51e4-b579-bd30cb07b269"
  }
}
```

## Response

Status: 401, Unauthorized

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

Name	Type	Required	Description
status	string	True	
correlationID	string	False	

### Example error response

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

### Definitions



## See Definitions

type\_astra\_label

Name	Type	Required	Description
name	string	True	
value	string	True	

type\_astra\_metadata

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

- Conforms to the Astra Metadata Schema

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

invalidParams

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

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