



# Kubernetes API Resource

## Astra Automation

NetApp  
December 01, 2023

# 目次

Kubernetes API Resource .....	1
Kubernetes API Resource overview .....	1
List the K8s API resources for a managed cluster .....	1
Retrieve a K8s API resource .....	9

# 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

## 著作権に関する情報

Copyright © 2023 NetApp, Inc. All Rights Reserved. Printed in the U.S.このドキュメントは著作権によって保護されています。著作権所有者の書面による事前承諾がある場合を除き、画像媒体、電子媒体、および写真複写、記録媒体、テープ媒体、電子検索システムへの組み込みを含む機械媒体など、いかなる形式および方法による複製も禁止します。

ネットアップの著作物から派生したソフトウェアは、次に示す使用許諾条項および免責条項の対象となります。

このソフトウェアは、ネットアップによって「現状のまま」提供されています。ネットアップは明示的な保証、または商品性および特定目的に対する適合性の暗示的保証を含み、かつこれに限定されないいかなる暗示的な保証も行いません。ネットアップは、代替品または代替サービスの調達、使用不能、データ損失、利益損失、業務中断を含み、かつこれに限定されない、このソフトウェアの使用により生じたすべての直接的損害、間接的損害、偶発的損害、特別損害、懲罰的損害、必然的損害の発生に対して、損失の発生の可能性が通知されていたとしても、その発生理由、根拠とする責任論、契約の有無、厳格責任、不法行為（過失またはそうでない場合を含む）にかかわらず、一切の責任を負いません。

ネットアップは、ここに記載されているすべての製品に対する変更を随時、予告なく行う権利を保有します。ネットアップによる明示的な書面による合意がある場合を除き、ここに記載されている製品の使用により生じる責任および義務に対して、ネットアップは責任を負いません。この製品の使用または購入は、ネットアップの特許権、商標権、または他の知的所有権に基づくライセンスの供与とはみなされません。

このマニュアルに記載されている製品は、1つ以上の米国特許、その他の国の特許、および出願中の特許によって保護されている場合があります。

権利の制限について：政府による使用、複製、開示は、DFARS 252.227-7013（2014年2月）およびFAR 5252.227-19（2007年12月）のRights in Technical Data -Noncommercial Items（技術データ - 非商用品目に関する諸権利）条項の(b)(3)項、に規定された制限が適用されます。

本書に含まれるデータは商用製品および/または商用サービス（FAR 2.101の定義に基づく）に関係し、データの所有権はNetApp, Inc.にあります。本契約に基づき提供されるすべてのネットアップの技術データおよびコンピュータソフトウェアは、商用目的であり、私費のみで開発されたものです。米国政府は本データに対し、非独占的かつ移転およびサブライセンス不可で、全世界を対象とする取り消し不能の制限付き使用权を有し、本データの提供の根拠となった米国政府契約に関連し、当該契約の裏付けとする場合にのみ本データを使用できます。前述の場合を除き、NetApp, Inc.の書面による許可を事前に得ることなく、本データを使用、開示、転載、改変するほか、上演または展示することはできません。国防総省にかかる米国政府のデータ使用权については、DFARS 252.227-7015(b)項（2014年2月）で定められた権利のみが認められます。

## 商標に関する情報

NetApp、NetAppのロゴ、<http://www.netapp.com/TM>に記載されているマークは、NetApp, Inc.の商標です。その他の会社名と製品名は、それを所有する各社の商標である場合があります。