



# 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<br><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.<br><br>URL examples:<br>"include=id",<br>"include=id,name"<br><br>OpenAPI examples:<br>"id"<br><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.<br><br>URL examples:<br>"limit=2"<br><br>OpenAPI examples:<br>"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[ <a href="#">Any of: apiResource_1.0_get_response_body, array[]</a> ] | 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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