



Volume

Astra Automation

NetApp
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Volume

Volume overview

The Volume API provides CRUD (Create-Read-Update-Delete) access to volume resources in order to provide visibility into Kubernetes volumes associated with applications.

List the volumes for a managed cluster

GET

`/accounts/{account_id}/topology/v1/managedClusters/{managedCluster_id}/volumes`

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">example: {{.Account}} |
| 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">example: id,name |

| 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: volume_1.2_get_response_body , array[]] | True | |
| metadata | type_astra_metadata_list | True | |

Example response

```
{
  "type": "application/astra-volumes",
  "version": "1.2",
  "items": [
    [
      "24fe6e79-bf8d-45c9-96af-ef1d11fbd4a0",
      "myVolume"
    ],
    [
      "20a370f4-957f-446a-9126-08853d01933a",
      "secondVol"
    ],
    [
      "48e349a2-5bcd-4c59-896c-12b8240e634b",
      "smallVol"
    ]
  ],
  "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 | False | |
| 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 | False | |
| 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 | False | |
| 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 | False | |
| 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_stateDetails

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

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 | |

volume_1.2_get_response_body

| Name | Type | Required | Description |
|---------|--------|----------|--|
| type | string | True | Media type of the resource. Defined values are: <ul style="list-style-type: none">• "application/astra-volume" |
| version | string | True | Version of the resource. Defined values are: <ul style="list-style-type: none">• "1.0"• "1.1"• "1.2" |

| Name | Type | Required | Description |
|----------------|--------|----------|---|
| id | string | True | Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> • Conforms to the UUIDv4 Schema |
| name | string | True | JSON string containing the name of the volume. Defined values are: <ul style="list-style-type: none"> • Minimum length: 1 • Maximum length: 255 |
| state | string | False | JSON string containing a value indicating the operational state of the volume. |
| size | string | False | JSON string containing the size of the volume. |
| used | number | False | JSON number containing the number of bytes of quota used by the provisioned volume. |
| usedPercentage | number | False | JSON number containing the percentage of volume used. |
| total | number | False | JSON number containing the total bytes of volumes provisioned. |
| creationToken | string | False | JSON string containing the creation token of the volume. Defined values are: <ul style="list-style-type: none"> • Minimum length: 1 • Maximum length: 255 |

| Name | Type | Required | Description |
|------------------|--------|----------|--|
| snapshotPossible | string | False | <p>JSON string indicating whether the driver can perform a snapshot of the volume. Defined values are:</p> <ul style="list-style-type: none"> • "true" - Driver can take a snapshot of the volume • "false" - Driver cannot take a snapshot of the volume |
| storageClass | string | False | <p>JSON string containing the storage class for the volume.</p> <ul style="list-style-type: none"> • Defined values are: • Minimum length: 1 • Maximum length: 255 |
| pvcName | string | False | <p>JSON string containing the PersistentVolumeClaim (PVC) name of the volume.</p> <ul style="list-style-type: none"> • Defined values are: • Minimum length: 1 • Maximum length: 255 |
| internalName | string | False | <p>JSON string containing the internal name of the volume on the target storage cluster, if available. This name is obtained from the Kubernetes CSI driver.</p> <ul style="list-style-type: none"> • Defined values are: • Minimum length: 1 • Maximum length: 255 |

| Name | Type | Required | Description |
|------------------|---------------|----------|--|
| appsUsing | array[string] | True | <p>JSON array of JSON strings, each containing the ID of an application that is using the volume. Defined values are:</p> <ul style="list-style-type: none"> • Conforms to the Astra Identifier Schema |
| storageBackendID | string | False | <p>JSON string containing the ID of the storage backend that provides the volume. Defined values are:</p> <ul style="list-style-type: none"> • Conforms to the Astra Identifier Schema |
| orchestrator | string | False | <p>JSON string containing the orchestrator for this volume. This will be defined for Astra Data Store volumes. Defined values are:</p> <ul style="list-style-type: none"> • "trident" - Trident has provisioned this volume • "vasa" - NetApp VASA Provider has provisioned this volume • "other" - The volume has been provisioned manually or the orchestrator is not known |
| serviceLevel | string | False | <p>JSON string containing the quality of service (QoS) policy defined for this volume at the storage backend level. This will be defined for Astra Data Store volumes.</p> |

| Name | Type | Required | Description |
|--------------|--------|----------|---|
| exportPolicy | string | False | JSON string containing the export policy associated with this volume. This will be defined for Astra Data Store volumes. |
| nodeId | string | False | JSON string containing the node ID serving the volume. This will be defined for Astra Data Store volumes. Defined values are: <ul data-bbox="1166 646 1393 751" style="list-style-type: none">• Conforms to the Astra Identifier Schema |

| Name | Type | Required | Description |
|--------------------|--|----------|--|
| healthState | string | False | <p>JSON string containing a value indicating the health state of the volume. This will be defined for Astra Data Store volumes. Defined values are:</p> <ul style="list-style-type: none"> • "indeterminate" - The health of the resource cannot be determined (for example, due to lack of connectivity) • "normal" - The resource has no known issues and can provide services in accordance with the interface specification • "warning" - The resource has known issues that do not prevent it providing services in accordance with the interface specification • "critical" - The resource has known issues that prevent it from providing services in accordance with the interface specification |
| healthStateDetails | array[type_astra_stateDetails] | True | <p>JSON array of JSON objects that lists additional details about the current health. If no details are available, this array will be empty.</p> <ul style="list-style-type: none"> • Minimum Items: 0 |

| Name | Type | Required | Description |
|----------|-------------------------------------|----------|---|
| metadata | type_astra_metadata | True | Client and service-specified metadata associated with the resource. Defined values are: <ul style="list-style-type: none"> Conforms to the Astra Metadata Schema |

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 volume for a managed cluster

GET

/accounts/{account_id}/topology/v1/managedClusters/{managedCluster_id}/volumes/{volume_id}

Returns the stored Volume 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"> example: <code>{{.Account}}</code> |
| managedCluster_id | string | path | True | ID of the containing managedCluster resource |
| volume_id | string | path | True | ID of the volume collection to list |

Response

Status: 200, Returns the stored Volume 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"> "application/astra-volume" |
| version | string | True | Version of the resource. Defined values are: <ul style="list-style-type: none"> "1.0" "1.1" "1.2" |
| id | string | True | Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> Conforms to the UUIDv4 Schema |

| Name | Type | Required | Description |
|----------------|--------|----------|---|
| name | string | True | JSON string containing the name of the volume. Defined values are: <ul style="list-style-type: none"> • Minimum length: 1 • Maximum length: 255 |
| state | string | False | JSON string containing a value indicating the operational state of the volume. |
| size | string | False | JSON string containing the size of the volume. |
| used | number | False | JSON number containing the number of bytes of quota used by the provisioned volume. |
| usedPercentage | number | False | JSON number containing the percentage of volume used. |
| total | number | False | JSON number containing the total bytes of volumes provisioned. |
| creationToken | string | False | JSON string containing the creation token of the volume. Defined values are: <ul style="list-style-type: none"> • Minimum length: 1 • Maximum length: 255 |

| Name | Type | Required | Description |
|------------------|--------|----------|--|
| snapshotPossible | string | False | <p>JSON string indicating whether the driver can perform a snapshot of the volume. Defined values are:</p> <ul style="list-style-type: none"> • "true" - Driver can take a snapshot of the volume • "false" - Driver cannot take a snapshot of the volume |
| storageClass | string | False | <p>JSON string containing the storage class for the volume.</p> <ul style="list-style-type: none"> • Defined values are: • Minimum length: 1 • Maximum length: 255 |
| pvcName | string | False | <p>JSON string containing the PersistentVolumeClaim (PVC) name of the volume.</p> <ul style="list-style-type: none"> • Defined values are: • Minimum length: 1 • Maximum length: 255 |
| internalName | string | False | <p>JSON string containing the internal name of the volume on the target storage cluster, if available. This name is obtained from the Kubernetes CSI driver.</p> <ul style="list-style-type: none"> • Defined values are: • Minimum length: 1 • Maximum length: 255 |

| Name | Type | Required | Description |
|------------------|---------------|----------|--|
| appsUsing | array[string] | True | <p>JSON array of JSON strings, each containing the ID of an application that is using the volume. Defined values are:</p> <ul style="list-style-type: none"> • Conforms to the Astra Identifier Schema |
| storageBackendID | string | False | <p>JSON string containing the ID of the storage backend that provides the volume. Defined values are:</p> <ul style="list-style-type: none"> • Conforms to the Astra Identifier Schema |
| orchestrator | string | False | <p>JSON string containing the orchestrator for this volume. This will be defined for Astra Data Store volumes. Defined values are:</p> <ul style="list-style-type: none"> • "trident" - Trident has provisioned this volume • "vasa" - NetApp VASA Provider has provisioned this volume • "other" - The volume has been provisioned manually or the orchestrator is not known |
| serviceLevel | string | False | <p>JSON string containing the quality of service (QoS) policy defined for this volume at the storage backend level. This will be defined for Astra Data Store volumes.</p> |

| Name | Type | Required | Description |
|--------------|--------|----------|--|
| exportPolicy | string | False | JSON string containing the export policy associated with this volume. This will be defined for Astra Data Store volumes. |
| nodeId | string | False | <p>JSON string containing the node ID serving the volume. This will be defined for Astra Data Store volumes. Defined values are:</p> <ul style="list-style-type: none"> • Conforms to the Astra Identifier Schema |
| healthState | string | False | <p>JSON string containing a value indicating the health state of the volume. This will be defined for Astra Data Store volumes. Defined values are:</p> <ul style="list-style-type: none"> • "indeterminate" - The health of the resource cannot be determined (for example, due to lack of connectivity) • "normal" - The resource has no known issues and can provide services in accordance with the interface specification • "warning" - The resource has known issues that do not prevent it providing services in accordance with the interface specification • "critical" - The resource has known issues that prevent it from providing services in accordance with the interface specification |

| Name | Type | Required | Description |
|--------------------|--------------------------------|----------|---|
| healthStateDetails | array[type_astra_stateDetails] | True | <p>JSON array of JSON objects that lists additional details about the current health. If no details are available, this array will be empty.</p> <ul style="list-style-type: none"> • Minimum Items: 0 |
| metadata | type_astra_metadata | True | <p>Client and service-specified metadata associated with the resource. Defined values are:</p> <ul style="list-style-type: none"> • Conforms to the Astra Metadata Schema |

Example response

```
{
  "type": "application/astra-volume",
  "version": "1.2",
  "id": "ab5c9fb8-ddba-526f-8bd3-8d5b72cf4f7f",
  "name": "myVolume",
  "state": "ready",
  "size": "512 GiB",
  "used": 10000000000,
  "usedPercentage": 10,
  "total": 10000000000,
  "creationToken": "ba7d4e0c-6ae3-4b6e-859d-9463e7ca4b4e",
  "snapshotPossible": "true",
  "storageClass": "gold",
  "pvcName": "myVolume",
  "internalName": "trident_sd234234_23424_897d_876sd65w",
  "appsUsing": [],
  "orchestrator": "trident",
  "serviceLevel": "gold",
  "exportPolicy": "astra-vp-default",
  "nodeId": "94d16dd2-9beb-4edb-ab58-1a00e9a90052",
  "healthState": "normal",
  "healthStateDetails": [],
  "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 | False | |
| status | string | True | |

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

Example response

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

Response

Status: 400, Bad request

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

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

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 |

List the volumes for a storage backend

GET

/accounts/{account_id}/topology/v1/storageBackends/{storageBackend_id}/volumes

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">example: {{.Account}} |
| storageBackend_id | string | path | True | ID of the containing storageBackend 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">example: id,name |
| 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: volume_1.2_get_response_body , array[]] | True | |
| metadata | type_astra_metadata_list | True | |

Example response

```
{
  "type": "application/astra-volumes",
  "version": "1.2",
  "items": [
    [
      "24fe6e79-bf8d-45c9-96af-ef1d11fbd4a0",
      "myVolume"
    ],
    [
      "20a370f4-957f-446a-9126-08853d01933a",
      "secondVol"
    ],
    [
      "48e349a2-5bcd-4c59-896c-12b8240e634b",
      "smallVol"
    ]
  ],
  "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 | False | |

| Name | Type | Required | Description |
|---------------|--------|----------|-------------|
| 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 | False | |
| 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 | False | |
| 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 | False | |
| 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_stateDetails

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

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 | |

volume_1.2_get_response_body

| Name | Type | Required | Description |
|---------|--------|----------|--|
| type | string | True | Media type of the resource. Defined values are: <ul style="list-style-type: none">• "application/astra-volume" |
| version | string | True | Version of the resource. Defined values are: <ul style="list-style-type: none">• "1.0"• "1.1"• "1.2" |

| Name | Type | Required | Description |
|----------------|--------|----------|---|
| id | string | True | Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> • Conforms to the UUIDv4 Schema |
| name | string | True | JSON string containing the name of the volume. Defined values are: <ul style="list-style-type: none"> • Minimum length: 1 • Maximum length: 255 |
| state | string | False | JSON string containing a value indicating the operational state of the volume. |
| size | string | False | JSON string containing the size of the volume. |
| used | number | False | JSON number containing the number of bytes of quota used by the provisioned volume. |
| usedPercentage | number | False | JSON number containing the percentage of volume used. |
| total | number | False | JSON number containing the total bytes of volumes provisioned. |
| creationToken | string | False | JSON string containing the creation token of the volume. Defined values are: <ul style="list-style-type: none"> • Minimum length: 1 • Maximum length: 255 |

| Name | Type | Required | Description |
|------------------|--------|----------|--|
| snapshotPossible | string | False | <p>JSON string indicating whether the driver can perform a snapshot of the volume. Defined values are:</p> <ul style="list-style-type: none"> • "true" - Driver can take a snapshot of the volume • "false" - Driver cannot take a snapshot of the volume |
| storageClass | string | False | <p>JSON string containing the storage class for the volume.</p> <ul style="list-style-type: none"> • Defined values are: • Minimum length: 1 • Maximum length: 255 |
| pvcName | string | False | <p>JSON string containing the PersistentVolumeClaim (PVC) name of the volume.</p> <ul style="list-style-type: none"> • Defined values are: • Minimum length: 1 • Maximum length: 255 |
| internalName | string | False | <p>JSON string containing the internal name of the volume on the target storage cluster, if available. This name is obtained from the Kubernetes CSI driver.</p> <ul style="list-style-type: none"> • Defined values are: • Minimum length: 1 • Maximum length: 255 |

| Name | Type | Required | Description |
|------------------|---------------|----------|--|
| appsUsing | array[string] | True | <p>JSON array of JSON strings, each containing the ID of an application that is using the volume. Defined values are:</p> <ul style="list-style-type: none"> • Conforms to the Astra Identifier Schema |
| storageBackendID | string | False | <p>JSON string containing the ID of the storage backend that provides the volume. Defined values are:</p> <ul style="list-style-type: none"> • Conforms to the Astra Identifier Schema |
| orchestrator | string | False | <p>JSON string containing the orchestrator for this volume. This will be defined for Astra Data Store volumes. Defined values are:</p> <ul style="list-style-type: none"> • "trident" - Trident has provisioned this volume • "vasa" - NetApp VASA Provider has provisioned this volume • "other" - The volume has been provisioned manually or the orchestrator is not known |
| serviceLevel | string | False | <p>JSON string containing the quality of service (QoS) policy defined for this volume at the storage backend level. This will be defined for Astra Data Store volumes.</p> |

| Name | Type | Required | Description |
|--------------|--------|----------|---|
| exportPolicy | string | False | JSON string containing the export policy associated with this volume. This will be defined for Astra Data Store volumes. |
| nodeId | string | False | JSON string containing the node ID serving the volume. This will be defined for Astra Data Store volumes. Defined values are: <ul data-bbox="1166 646 1393 751" style="list-style-type: none">• Conforms to the Astra Identifier Schema |

| Name | Type | Required | Description |
|--------------------|--------------------------------|----------|--|
| healthState | string | False | <p>JSON string containing a value indicating the health state of the volume. This will be defined for Astra Data Store volumes. Defined values are:</p> <ul style="list-style-type: none"> • "indeterminate" - The health of the resource cannot be determined (for example, due to lack of connectivity) • "normal" - The resource has no known issues and can provide services in accordance with the interface specification • "warning" - The resource has known issues that do not prevent it providing services in accordance with the interface specification • "critical" - The resource has known issues that prevent it from providing services in accordance with the interface specification |
| healthStateDetails | array[type_astra_stateDetails] | True | <p>JSON array of JSON objects that lists additional details about the current health. If no details are available, this array will be empty.</p> <ul style="list-style-type: none"> • Minimum Items: 0 |

| Name | Type | Required | Description |
|----------|-------------------------------------|----------|---|
| metadata | type_astra_metadata | True | Client and service-specified metadata associated with the resource. Defined values are: <ul style="list-style-type: none"> Conforms to the Astra Metadata Schema |

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 volume for a storage backend

GET

/accounts/{account_id}/topology/v1/storageBackends/{storageBackend_id}/volumes/{volume_id}

Returns the stored Volume 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"> example: <code>{{.Account}}</code> |
| storageBackend_id | string | path | True | ID of the containing storageBackend resource |
| volume_id | string | path | True | ID of the volume collection to list |

Response

Status: 200, Returns the stored Volume 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"> "application/astra-volume" |
| version | string | True | Version of the resource. Defined values are: <ul style="list-style-type: none"> "1.0" "1.1" "1.2" |
| id | string | True | Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> Conforms to the UUIDv4 Schema |

| Name | Type | Required | Description |
|----------------|--------|----------|---|
| name | string | True | JSON string containing the name of the volume. Defined values are: <ul style="list-style-type: none"> • Minimum length: 1 • Maximum length: 255 |
| state | string | False | JSON string containing a value indicating the operational state of the volume. |
| size | string | False | JSON string containing the size of the volume. |
| used | number | False | JSON number containing the number of bytes of quota used by the provisioned volume. |
| usedPercentage | number | False | JSON number containing the percentage of volume used. |
| total | number | False | JSON number containing the total bytes of volumes provisioned. |
| creationToken | string | False | JSON string containing the creation token of the volume. Defined values are: <ul style="list-style-type: none"> • Minimum length: 1 • Maximum length: 255 |

| Name | Type | Required | Description |
|------------------|--------|----------|--|
| snapshotPossible | string | False | <p>JSON string indicating whether the driver can perform a snapshot of the volume. Defined values are:</p> <ul style="list-style-type: none"> • "true" - Driver can take a snapshot of the volume • "false" - Driver cannot take a snapshot of the volume |
| storageClass | string | False | <p>JSON string containing the storage class for the volume.</p> <ul style="list-style-type: none"> • Defined values are: • Minimum length: 1 • Maximum length: 255 |
| pvcName | string | False | <p>JSON string containing the PersistentVolumeClaim (PVC) name of the volume.</p> <ul style="list-style-type: none"> • Defined values are: • Minimum length: 1 • Maximum length: 255 |
| internalName | string | False | <p>JSON string containing the internal name of the volume on the target storage cluster, if available. This name is obtained from the Kubernetes CSI driver.</p> <ul style="list-style-type: none"> • Defined values are: • Minimum length: 1 • Maximum length: 255 |

| Name | Type | Required | Description |
|------------------|---------------|----------|--|
| appsUsing | array[string] | True | <p>JSON array of JSON strings, each containing the ID of an application that is using the volume. Defined values are:</p> <ul style="list-style-type: none"> • Conforms to the Astra Identifier Schema |
| storageBackendID | string | False | <p>JSON string containing the ID of the storage backend that provides the volume. Defined values are:</p> <ul style="list-style-type: none"> • Conforms to the Astra Identifier Schema |
| orchestrator | string | False | <p>JSON string containing the orchestrator for this volume. This will be defined for Astra Data Store volumes. Defined values are:</p> <ul style="list-style-type: none"> • "trident" - Trident has provisioned this volume • "vasa" - NetApp VASA Provider has provisioned this volume • "other" - The volume has been provisioned manually or the orchestrator is not known |
| serviceLevel | string | False | <p>JSON string containing the quality of service (QoS) policy defined for this volume at the storage backend level. This will be defined for Astra Data Store volumes.</p> |

| Name | Type | Required | Description |
|--------------|--------|----------|--|
| exportPolicy | string | False | JSON string containing the export policy associated with this volume. This will be defined for Astra Data Store volumes. |
| nodeId | string | False | <p>JSON string containing the node ID serving the volume. This will be defined for Astra Data Store volumes. Defined values are:</p> <ul style="list-style-type: none"> • Conforms to the Astra Identifier Schema |
| healthState | string | False | <p>JSON string containing a value indicating the health state of the volume. This will be defined for Astra Data Store volumes. Defined values are:</p> <ul style="list-style-type: none"> • "indeterminate" - The health of the resource cannot be determined (for example, due to lack of connectivity) • "normal" - The resource has no known issues and can provide services in accordance with the interface specification • "warning" - The resource has known issues that do not prevent it providing services in accordance with the interface specification • "critical" - The resource has known issues that prevent it from providing services in accordance with the interface specification |

| Name | Type | Required | Description |
|--------------------|--------------------------------|----------|---|
| healthStateDetails | array[type_astra_stateDetails] | True | <p>JSON array of JSON objects that lists additional details about the current health. If no details are available, this array will be empty.</p> <ul style="list-style-type: none"> • Minimum Items: 0 |
| metadata | type_astra_metadata | True | <p>Client and service-specified metadata associated with the resource. Defined values are:</p> <ul style="list-style-type: none"> • Conforms to the Astra Metadata Schema |

Example response

```
{
  "type": "application/astra-volume",
  "version": "1.2",
  "id": "ab5c9fb8-ddba-526f-8bd3-8d5b72cf4f7f",
  "name": "myVolume",
  "state": "ready",
  "size": "512 GiB",
  "used": 10000000000,
  "usedPercentage": 10,
  "total": 10000000000,
  "creationToken": "ba7d4e0c-6ae3-4b6e-859d-9463e7ca4b4e",
  "snapshotPossible": "true",
  "storageClass": "gold",
  "pvcName": "myVolume",
  "internalName": "trident_sd234234_23424_897d_876sd65w",
  "appsUsing": [],
  "orchestrator": "trident",
  "serviceLevel": "gold",
  "exportPolicy": "astra-vp-default",
  "nodeId": "94d16dd2-9beb-4edb-ab58-1a00e9a90052",
  "healthState": "normal",
  "healthStateDetails": [],
  "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 | False | |
| status | string | True | |

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

Example response

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

Response

Status: 400, Bad request

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

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

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 |

List all volumes

GET /accounts/{account_id}/topology/v1/volumes

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">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" <ul style="list-style-type: none">example: id,name |
| 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: volume_1.2_get_response_body , array[]] | True | |
| metadata | type_astra_metadata_list | True | |

Example response

```
{
  "type": "application/astra-volumes",
  "version": "1.2",
  "items": [
    [
      "24fe6e79-bf8d-45c9-96af-ef1d11fbd4a0",
      "myVolume"
    ],
    [
      "20a370f4-957f-446a-9126-08853d01933a",
      "secondVol"
    ],
    [
      "48e349a2-5bcd-4c59-896c-12b8240e634b",
      "smallVol"
    ]
  ],
  "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 | False | |

| Name | Type | Required | Description |
|---------------|--------|----------|-------------|
| 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 | False | |
| 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 | False | |
| 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 | False | |
| 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_stateDetails

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

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 | |

volume_1.2_get_response_body

| Name | Type | Required | Description |
|---------|--------|----------|--|
| type | string | True | Media type of the resource. Defined values are: <ul style="list-style-type: none">• "application/astra-volume" |
| version | string | True | Version of the resource. Defined values are: <ul style="list-style-type: none">• "1.0"• "1.1"• "1.2" |

| Name | Type | Required | Description |
|----------------|--------|----------|---|
| id | string | True | Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> • Conforms to the UUIDv4 Schema |
| name | string | True | JSON string containing the name of the volume. Defined values are: <ul style="list-style-type: none"> • Minimum length: 1 • Maximum length: 255 |
| state | string | False | JSON string containing a value indicating the operational state of the volume. |
| size | string | False | JSON string containing the size of the volume. |
| used | number | False | JSON number containing the number of bytes of quota used by the provisioned volume. |
| usedPercentage | number | False | JSON number containing the percentage of volume used. |
| total | number | False | JSON number containing the total bytes of volumes provisioned. |
| creationToken | string | False | JSON string containing the creation token of the volume. Defined values are: <ul style="list-style-type: none"> • Minimum length: 1 • Maximum length: 255 |

| Name | Type | Required | Description |
|------------------|--------|----------|--|
| snapshotPossible | string | False | <p>JSON string indicating whether the driver can perform a snapshot of the volume. Defined values are:</p> <ul style="list-style-type: none"> • "true" - Driver can take a snapshot of the volume • "false" - Driver cannot take a snapshot of the volume |
| storageClass | string | False | <p>JSON string containing the storage class for the volume.</p> <ul style="list-style-type: none"> • Defined values are: • Minimum length: 1 • Maximum length: 255 |
| pvcName | string | False | <p>JSON string containing the PersistentVolumeClaim (PVC) name of the volume.</p> <ul style="list-style-type: none"> • Defined values are: • Minimum length: 1 • Maximum length: 255 |
| internalName | string | False | <p>JSON string containing the internal name of the volume on the target storage cluster, if available. This name is obtained from the Kubernetes CSI driver.</p> <ul style="list-style-type: none"> • Defined values are: • Minimum length: 1 • Maximum length: 255 |

| Name | Type | Required | Description |
|------------------|---------------|----------|--|
| appsUsing | array[string] | True | <p>JSON array of JSON strings, each containing the ID of an application that is using the volume. Defined values are:</p> <ul style="list-style-type: none"> • Conforms to the Astra Identifier Schema |
| storageBackendID | string | False | <p>JSON string containing the ID of the storage backend that provides the volume. Defined values are:</p> <ul style="list-style-type: none"> • Conforms to the Astra Identifier Schema |
| orchestrator | string | False | <p>JSON string containing the orchestrator for this volume. This will be defined for Astra Data Store volumes. Defined values are:</p> <ul style="list-style-type: none"> • "trident" - Trident has provisioned this volume • "vasa" - NetApp VASA Provider has provisioned this volume • "other" - The volume has been provisioned manually or the orchestrator is not known |
| serviceLevel | string | False | <p>JSON string containing the quality of service (QoS) policy defined for this volume at the storage backend level. This will be defined for Astra Data Store volumes.</p> |

| Name | Type | Required | Description |
|--------------|--------|----------|--|
| exportPolicy | string | False | JSON string containing the export policy associated with this volume. This will be defined for Astra Data Store volumes. |
| nodeId | string | False | <p>JSON string containing the node ID serving the volume. This will be defined for Astra Data Store volumes. Defined values are:</p> <ul style="list-style-type: none"> • Conforms to the Astra Identifier Schema |

| Name | Type | Required | Description |
|--------------------|--|----------|--|
| healthState | string | False | <p>JSON string containing a value indicating the health state of the volume. This will be defined for Astra Data Store volumes. Defined values are:</p> <ul style="list-style-type: none"> • "indeterminate" - The health of the resource cannot be determined (for example, due to lack of connectivity) • "normal" - The resource has no known issues and can provide services in accordance with the interface specification • "warning" - The resource has known issues that do not prevent it providing services in accordance with the interface specification • "critical" - The resource has known issues that prevent it from providing services in accordance with the interface specification |
| healthStateDetails | array[type_astra_stateDetails] | True | <p>JSON array of JSON objects that lists additional details about the current health. If no details are available, this array will be empty.</p> <ul style="list-style-type: none"> • Minimum Items: 0 |

| Name | Type | Required | Description |
|----------|-------------------------------------|----------|---|
| metadata | type_astra_metadata | True | Client and service-specified metadata associated with the resource. Defined values are: <ul style="list-style-type: none"> Conforms to the Astra Metadata Schema |

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 volume

GET /accounts/{account_id}/topology/v1/volumes/{volume_id}

Returns the stored Volume 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"> example: <code>{{.Account}}</code> |
| volume_id | string | path | True | ID of the volume collection to list |

Response

Status: 200, Returns the stored Volume 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"> "application/astra-volume" |
| version | string | True | Version of the resource. Defined values are: <ul style="list-style-type: none"> "1.0" "1.1" "1.2" |
| id | string | True | Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> Conforms to the UUIDv4 Schema |
| name | string | True | JSON string containing the name of the volume. Defined values are: <ul style="list-style-type: none"> Minimum length: 1 Maximum length: 255 |

| Name | Type | Required | Description |
|------------------|--------|----------|--|
| state | string | False | JSON string containing a value indicating the operational state of the volume. |
| size | string | False | JSON string containing the size of the volume. |
| used | number | False | JSON number containing the number of bytes of quota used by the provisioned volume. |
| usedPercentage | number | False | JSON number containing the percentage of volume used. |
| total | number | False | JSON number containing the total bytes of volumes provisioned. |
| creationToken | string | False | JSON string containing the creation token of the volume. Defined values are: <ul style="list-style-type: none"> • Minimum length: 1 • Maximum length: 255 |
| snapshotPossible | string | False | JSON string indicating whether the driver can perform a snapshot of the volume. Defined values are: <ul style="list-style-type: none"> • "true" - Driver can take a snapshot of the volume • "false" - Driver cannot take a snapshot of the volume |

| Name | Type | Required | Description |
|------------------|---------------|----------|--|
| storageClass | string | False | <p>JSON string containing the storage class for the volume.</p> <ul style="list-style-type: none"> • Defined values are: • Minimum length: 1 • Maximum length: 255 |
| pvcName | string | False | <p>JSON string containing the PersistentVolumeClaim (PVC) name of the volume.</p> <ul style="list-style-type: none"> • Defined values are: • Minimum length: 1 • Maximum length: 255 |
| internalName | string | False | <p>JSON string containing the internal name of the volume on the target storage cluster, if available. This name is obtained from the Kubernetes CSI driver.</p> <ul style="list-style-type: none"> • Defined values are: • Minimum length: 1 • Maximum length: 255 |
| appsUsing | array[string] | True | <p>JSON array of JSON strings, each containing the ID of an application that is using the volume. Defined values are:</p> <ul style="list-style-type: none"> • Conforms to the Astra Identifier Schema |
| storageBackendID | string | False | <p>JSON string containing the ID of the storage backend that provides the volume. Defined values are:</p> <ul style="list-style-type: none"> • Conforms to the Astra Identifier Schema |

| Name | Type | Required | Description |
|--------------|--------|----------|--|
| orchestrator | string | False | <p>JSON string containing the orchestrator for this volume. This will be defined for Astra Data Store volumes. Defined values are:</p> <ul style="list-style-type: none"> • "trident" - Trident has provisioned this volume • "vasa" - NetApp VASA Provider has provisioned this volume • "other" - The volume has been provisioned manually or the orchestrator is not known |
| serviceLevel | string | False | <p>JSON string containing the quality of service (QoS) policy defined for this volume at the storage backend level. This will be defined for Astra Data Store volumes.</p> |
| exportPolicy | string | False | <p>JSON string containing the export policy associated with this volume. This will be defined for Astra Data Store volumes.</p> |
| nodeId | string | False | <p>JSON string containing the node ID serving the volume. This will be defined for Astra Data Store volumes. Defined values are:</p> <ul style="list-style-type: none"> • Conforms to the Astra Identifier Schema |

| Name | Type | Required | Description |
|--------------------|--------------------------------|----------|--|
| healthState | string | False | <p>JSON string containing a value indicating the health state of the volume. This will be defined for Astra Data Store volumes. Defined values are:</p> <ul style="list-style-type: none"> • "indeterminate" - The health of the resource cannot be determined (for example, due to lack of connectivity) • "normal" - The resource has no known issues and can provide services in accordance with the interface specification • "warning" - The resource has known issues that do not prevent it providing services in accordance with the interface specification • "critical" - The resource has known issues that prevent it from providing services in accordance with the interface specification |
| healthStateDetails | array[type_astra_stateDetails] | True | <p>JSON array of JSON objects that lists additional details about the current health. If no details are available, this array will be empty.</p> <ul style="list-style-type: none"> • Minimum Items: 0 |

| Name | Type | Required | Description |
|----------|-------------------------------------|----------|--|
| metadata | type_astra_metadata | True | <p>Client and service-specified metadata associated with the resource. Defined values are:</p> <ul style="list-style-type: none"> • Conforms to the Astra Metadata Schema |

Example response

```
{
  "type": "application/astra-volume",
  "version": "1.2",
  "id": "ab5c9fb8-ddba-526f-8bd3-8d5b72cf4f7f",
  "name": "myVolume",
  "state": "ready",
  "size": "512 GiB",
  "used": 1000000000,
  "usedPercentage": 10,
  "total": 1000000000,
  "creationToken": "ba7d4e0c-6ae3-4b6e-859d-9463e7ca4b4e",
  "snapshotPossible": "true",
  "storageClass": "gold",
  "pvcName": "myVolume",
  "internalName": "trident_sd234234_23424_897d_876sd65w",
  "appsUsing": [],
  "orchestrator": "trident",
  "serviceLevel": "gold",
  "exportPolicy": "astra-vp-default",
  "nodeId": "94d16dd2-9beb-4edb-ab58-1a00e9a90052",
  "healthState": "normal",
  "healthStateDetails": [],
  "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 | False | |
| 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 | False | |
| 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 | False | |
| 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 | False | |

| 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_stateDetails

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

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 |

List the volumes for an app

GET /accounts/{account_id}/k8s/v1/apps/{app_id}/volumes

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">example: {{.Account}} |
| app_id | string | path | True | ID of the containing app 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">example: id,name |
| 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: volume_1.2_get_response_body , array[]] | True | |
| metadata | type_astra_metadata_list | True | |

Example response

```
{
  "type": "application/astra-volumes",
  "version": "1.2",
  "items": [
    [
      "24fe6e79-bf8d-45c9-96af-ef1d11fbd4a0",
      "myVolume"
    ],
    [
      "20a370f4-957f-446a-9126-08853d01933a",
      "secondVol"
    ],
    [
      "48e349a2-5bcd-4c59-896c-12b8240e634b",
      "smallVol"
    ]
  ],
  "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 | False | |

| Name | Type | Required | Description |
|---------------|--------|----------|-------------|
| 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 | False | |
| 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 | False | |
| 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 | False | |
| 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_stateDetails

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

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 | |

volume_1.2_get_response_body

| Name | Type | Required | Description |
|---------|--------|----------|--|
| type | string | True | Media type of the resource. Defined values are: <ul style="list-style-type: none">• "application/astra-volume" |
| version | string | True | Version of the resource. Defined values are: <ul style="list-style-type: none">• "1.0"• "1.1"• "1.2" |

| Name | Type | Required | Description |
|----------------|--------|----------|---|
| id | string | True | Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> • Conforms to the UUIDv4 Schema |
| name | string | True | JSON string containing the name of the volume. Defined values are: <ul style="list-style-type: none"> • Minimum length: 1 • Maximum length: 255 |
| state | string | False | JSON string containing a value indicating the operational state of the volume. |
| size | string | False | JSON string containing the size of the volume. |
| used | number | False | JSON number containing the number of bytes of quota used by the provisioned volume. |
| usedPercentage | number | False | JSON number containing the percentage of volume used. |
| total | number | False | JSON number containing the total bytes of volumes provisioned. |
| creationToken | string | False | JSON string containing the creation token of the volume. Defined values are: <ul style="list-style-type: none"> • Minimum length: 1 • Maximum length: 255 |

| Name | Type | Required | Description |
|------------------|--------|----------|--|
| snapshotPossible | string | False | <p>JSON string indicating whether the driver can perform a snapshot of the volume. Defined values are:</p> <ul style="list-style-type: none"> • "true" - Driver can take a snapshot of the volume • "false" - Driver cannot take a snapshot of the volume |
| storageClass | string | False | <p>JSON string containing the storage class for the volume.</p> <ul style="list-style-type: none"> • Defined values are: • Minimum length: 1 • Maximum length: 255 |
| pvcName | string | False | <p>JSON string containing the PersistentVolumeClaim (PVC) name of the volume.</p> <ul style="list-style-type: none"> • Defined values are: • Minimum length: 1 • Maximum length: 255 |
| internalName | string | False | <p>JSON string containing the internal name of the volume on the target storage cluster, if available. This name is obtained from the Kubernetes CSI driver.</p> <ul style="list-style-type: none"> • Defined values are: • Minimum length: 1 • Maximum length: 255 |

| Name | Type | Required | Description |
|------------------|---------------|----------|--|
| appsUsing | array[string] | True | <p>JSON array of JSON strings, each containing the ID of an application that is using the volume. Defined values are:</p> <ul style="list-style-type: none"> • Conforms to the Astra Identifier Schema |
| storageBackendID | string | False | <p>JSON string containing the ID of the storage backend that provides the volume. Defined values are:</p> <ul style="list-style-type: none"> • Conforms to the Astra Identifier Schema |
| orchestrator | string | False | <p>JSON string containing the orchestrator for this volume. This will be defined for Astra Data Store volumes. Defined values are:</p> <ul style="list-style-type: none"> • "trident" - Trident has provisioned this volume • "vasa" - NetApp VASA Provider has provisioned this volume • "other" - The volume has been provisioned manually or the orchestrator is not known |
| serviceLevel | string | False | <p>JSON string containing the quality of service (QoS) policy defined for this volume at the storage backend level. This will be defined for Astra Data Store volumes.</p> |

| Name | Type | Required | Description |
|--------------|--------|----------|---|
| exportPolicy | string | False | JSON string containing the export policy associated with this volume. This will be defined for Astra Data Store volumes. |
| nodeId | string | False | JSON string containing the node ID serving the volume. This will be defined for Astra Data Store volumes. Defined values are: <ul data-bbox="1166 646 1393 751" style="list-style-type: none">• Conforms to the Astra Identifier Schema |

| Name | Type | Required | Description |
|--------------------|--|----------|--|
| healthState | string | False | <p>JSON string containing a value indicating the health state of the volume. This will be defined for Astra Data Store volumes. Defined values are:</p> <ul style="list-style-type: none"> • "indeterminate" - The health of the resource cannot be determined (for example, due to lack of connectivity) • "normal" - The resource has no known issues and can provide services in accordance with the interface specification • "warning" - The resource has known issues that do not prevent it providing services in accordance with the interface specification • "critical" - The resource has known issues that prevent it from providing services in accordance with the interface specification |
| healthStateDetails | array[type_astra_stateDetails] | True | <p>JSON array of JSON objects that lists additional details about the current health. If no details are available, this array will be empty.</p> <ul style="list-style-type: none"> • Minimum Items: 0 |

| Name | Type | Required | Description |
|----------|-------------------------------------|----------|---|
| metadata | type_astra_metadata | True | Client and service-specified metadata associated with the resource. Defined values are: <ul style="list-style-type: none"> Conforms to the Astra Metadata Schema |

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 volume for an app

GET /accounts/{account_id}/k8s/v1/apps/{app_id}/volumes/{volume_id}

Returns the stored Volume 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"> example: <code>{{.Account}}</code> |
| app_id | string | path | True | ID of the containing app resource |
| volume_id | string | path | True | ID of the volume collection to list |

Response

Status: 200, Returns the stored Volume 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"> "application/astra-volume" |
| version | string | True | Version of the resource. Defined values are: <ul style="list-style-type: none"> "1.0" "1.1" "1.2" |
| id | string | True | Globally unique identifier of the resource. Defined values are: <ul style="list-style-type: none"> Conforms to the UUIDv4 Schema |

| Name | Type | Required | Description |
|----------------|--------|----------|---|
| name | string | True | JSON string containing the name of the volume. Defined values are: <ul style="list-style-type: none"> • Minimum length: 1 • Maximum length: 255 |
| state | string | False | JSON string containing a value indicating the operational state of the volume. |
| size | string | False | JSON string containing the size of the volume. |
| used | number | False | JSON number containing the number of bytes of quota used by the provisioned volume. |
| usedPercentage | number | False | JSON number containing the percentage of volume used. |
| total | number | False | JSON number containing the total bytes of volumes provisioned. |
| creationToken | string | False | JSON string containing the creation token of the volume. Defined values are: <ul style="list-style-type: none"> • Minimum length: 1 • Maximum length: 255 |

| Name | Type | Required | Description |
|------------------|--------|----------|--|
| snapshotPossible | string | False | <p>JSON string indicating whether the driver can perform a snapshot of the volume. Defined values are:</p> <ul style="list-style-type: none"> • "true" - Driver can take a snapshot of the volume • "false" - Driver cannot take a snapshot of the volume |
| storageClass | string | False | <p>JSON string containing the storage class for the volume.</p> <ul style="list-style-type: none"> • Defined values are: • Minimum length: 1 • Maximum length: 255 |
| pvcName | string | False | <p>JSON string containing the PersistentVolumeClaim (PVC) name of the volume.</p> <ul style="list-style-type: none"> • Defined values are: • Minimum length: 1 • Maximum length: 255 |
| internalName | string | False | <p>JSON string containing the internal name of the volume on the target storage cluster, if available. This name is obtained from the Kubernetes CSI driver.</p> <ul style="list-style-type: none"> • Defined values are: • Minimum length: 1 • Maximum length: 255 |

| Name | Type | Required | Description |
|------------------|---------------|----------|--|
| appsUsing | array[string] | True | <p>JSON array of JSON strings, each containing the ID of an application that is using the volume. Defined values are:</p> <ul style="list-style-type: none"> • Conforms to the Astra Identifier Schema |
| storageBackendID | string | False | <p>JSON string containing the ID of the storage backend that provides the volume. Defined values are:</p> <ul style="list-style-type: none"> • Conforms to the Astra Identifier Schema |
| orchestrator | string | False | <p>JSON string containing the orchestrator for this volume. This will be defined for Astra Data Store volumes. Defined values are:</p> <ul style="list-style-type: none"> • "trident" - Trident has provisioned this volume • "vasa" - NetApp VASA Provider has provisioned this volume • "other" - The volume has been provisioned manually or the orchestrator is not known |
| serviceLevel | string | False | <p>JSON string containing the quality of service (QoS) policy defined for this volume at the storage backend level. This will be defined for Astra Data Store volumes.</p> |

| Name | Type | Required | Description |
|--------------|--------|----------|--|
| exportPolicy | string | False | JSON string containing the export policy associated with this volume. This will be defined for Astra Data Store volumes. |
| nodeId | string | False | <p>JSON string containing the node ID serving the volume. This will be defined for Astra Data Store volumes. Defined values are:</p> <ul style="list-style-type: none"> • Conforms to the Astra Identifier Schema |
| healthState | string | False | <p>JSON string containing a value indicating the health state of the volume. This will be defined for Astra Data Store volumes. Defined values are:</p> <ul style="list-style-type: none"> • "indeterminate" - The health of the resource cannot be determined (for example, due to lack of connectivity) • "normal" - The resource has no known issues and can provide services in accordance with the interface specification • "warning" - The resource has known issues that do not prevent it providing services in accordance with the interface specification • "critical" - The resource has known issues that prevent it from providing services in accordance with the interface specification |

| Name | Type | Required | Description |
|--------------------|--------------------------------|----------|---|
| healthStateDetails | array[type_astra_stateDetails] | True | <p>JSON array of JSON objects that lists additional details about the current health. If no details are available, this array will be empty.</p> <ul style="list-style-type: none"> • Minimum Items: 0 |
| metadata | type_astra_metadata | True | <p>Client and service-specified metadata associated with the resource. Defined values are:</p> <ul style="list-style-type: none"> • Conforms to the Astra Metadata Schema |

Example response

```
{
  "type": "application/astra-volume",
  "version": "1.2",
  "id": "ab5c9fb8-ddba-526f-8bd3-8d5b72cf4f7f",
  "name": "myVolume",
  "state": "ready",
  "size": "512 GiB",
  "used": 10000000000,
  "usedPercentage": 10,
  "total": 10000000000,
  "creationToken": "ba7d4e0c-6ae3-4b6e-859d-9463e7ca4b4e",
  "snapshotPossible": "true",
  "storageClass": "gold",
  "pvcName": "myVolume",
  "internalName": "trident_sd234234_23424_897d_876sd65w",
  "appsUsing": [],
  "orchestrator": "trident",
  "serviceLevel": "gold",
  "exportPolicy": "astra-vp-default",
  "nodeId": "94d16dd2-9beb-4edb-ab58-1a00e9a90052",
  "healthState": "normal",
  "healthStateDetails": [],
  "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 | False | |
| status | string | True | |

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

Example response

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

Response

Status: 400, Bad request

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

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

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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