NetApp

AppMirror

Astra Automation

NetApp
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AppMirror

AppMirror overview

The AppMirror API enables management of AppMirror relationships.

Create a new AppMirror resource

POST `/accounts/{account_id}/k8s/v1/appMirrors`

Indicates the desired values for the AppMirror API resource to be created.

Parameters

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

Request Body

Indicates the desired values for the AppMirror API resource to be created.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: • "application/astra-appMirror"
version	string	True	Version of the resource. Defined values are: • "1.0" • "1.1"

Name	Type	Required	Description
sourceAppID	string	True	Identifier of the source application. Only updated when swapping the sourceAppID with the destinationAppID. Defined values are: • Conforms to the Astra Identifier Schema
destinationClusterID	string	True	Identifier of the managed cluster to host the destination application. Must be provided on create because it determines what cluster the destination application will be created on. If provided on update, it must match the cluster ID of the destination application, so it can only change when swapping sourceAppID with destinationAppID. Defined values are: • Conforms to the Astra Identifier Schema

Name	Type	Required	Description
namespaceMapping	array[namespaceMapping]	False	The namespace or namespaces to use when creating the destination application, corresponding to the namespaces of the source application. Each JSON object contains the fields "clusterID" and "namespaces", where the "clusterID" value is the JSON string ID of the source or destination cluster, and the "namespaces" value is a JSON array of JSON strings. There must be exactly one JSON object for each cluster, and the namespaces will be correlated by index. If not provided, the same namespace from the source cluster will be used in the destination cluster. Defined values are: • Minimum length: 0 • Maximum length: 2

Name	Type	Required	Description
storageClasses	array[storageClasses]	False	The storage class to be used on the destination cluster when creating new Persistent Volume Claims (PVCs). Each JSON object contains the fields "clusterID" and "storageClassName", where the "clusterID" value is the JSON string ID of the source or destination cluster, and the "storageClassName" is the storage class to use when creating PVCs on that cluster. If not provided or if the value is missing for a cluster, the default storage class will be used for that cluster. Defined values are: • Minimum length: 0 • Maximum length: 2
stateDesired	string	True	The desired state for the relationship. At creation, the only valid value is "established". Defined values are: • "established" - The relationship is created. • "failedOver" - Failover of the application to the destination cluster has completed. • "deleted" - The relationship was successfully cleaned up and deleted.

Name	Type	Required	Description
metadata	type_astra_metadata_update	False	Client and service-specified metadata associated with the resource. Defined values are: • Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Example request

```
{
    "type": "application/astra-appMirror",
    "version": "1.1",
    "sourceAppID": "efd639b6-fc92-4112-8841-0c0ab7890ae0",
    "destinationClusterID": "c5d023a9-4061-4a8a-bfbf-3be11ff06226",
    "stateDesired": "established"
}
```

Response

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

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: • "application/astra-appMirror"

Name	Type	Required	Description
version	string	True	Version of the resource. Defined values are: • "1.0" • "1.1"
id	string	True	Globally unique identifier of the resource. Defined values are: • Conforms to the UUIDv4 Schema
sourceAppID	string	True	Identifier of the source application. Only updated when swapping the sourceAppID with the destinationAppID. Defined values are: • Conforms to the Astra Identifier Schema
sourceClusterID	string	True	Identifier of the managed cluster hosting the source application. This field is read-only and is determined based on the host cluster of the source application. If provided in an update, it must match the cluster ID of the source application, so it can only change when swapping the sourceAppID with destinationAppID. Defined values are: • Conforms to the Astra Identifier Schema

Name	Type	Required	Description
destinationAppID	string	False	Identifier of the destination application. Cannot be provided on create because a new app ID will be generated as part of relationship initialization. Can only be updated when swapping sourceAppID with the destinationAppID. Defined values are: • Conforms to the Astra Identifier Schema
destinationClusterID	string	True	Identifier of the managed cluster to host the destination application. Must be provided on create because it determines what cluster the destination application will be created on. If provided on update, it must match the cluster ID of the destination application, so it can only change when swapping sourceAppID with destinationAppID. Defined values are: • Conforms to the Astra Identifier Schema

Name	Type	Required	Description
namespaceMapping	array[namespaceMapping]	False	The namespace or namespaces to use when creating the destination application, corresponding to the namespaces of the source application. Each JSON object contains the fields "clusterID" and "namespaces", where the "clusterID" value is the JSON string ID of the source or destination cluster, and the "namespaces" value is a JSON array of JSON strings. There must be exactly one JSON object for each cluster, and the namespaces will be correlated by index. If not provided, the same namespace from the source cluster will be used in the destination cluster. Defined values are: • Minimum length: 0 • Maximum length: 2

Name	Type	Required	Description
storageClasses	array[storageClasses]	False	The storage class to be used on the destination cluster when creating new Persistent Volume Claims (PVCs). Each JSON object contains the fields "clusterID" and "storageClassName", where the "clusterID" value is the JSON string ID of the source or destination cluster, and the "storageClassName" is the storage class to use when creating PVCs on that cluster. If not provided or if the value is missing for a cluster, the default storage class will be used for that cluster. Defined values are: • Minimum length: 0 • Maximum length: 2

Name	Type	Required	Description
state	string	True	The state of the relationship. Defined values are: • "establishing" - The relationship is being created. • "established" - The relationship is created. • "failingOver" - Failover of the application to the destination cluster is in progress. • "failedOver" - Failover of the application to the destination cluster has completed. • "deleting" - Resources created by the relationship are being cleaned up. • "deleted" - The relationship was cleaned up and deleted.
stateTransitions	array[type_astra_stateTransition]	False	Permitted state transitions. The following state transitions are possible for this resource: • "establishing": "established", "deleting" • "established": "failingOver", "deleting" • "failingOver": "failedOver", "deleting" • "failedOver": "establishing", "deleting" • "deleting": "deleted" • "deleted":

Name	Type	Required	Description
stateDesired	string	True	The desired state for the relationship. At creation, the only valid value is "established". Defined values are: • "established" - The relationship is created. • "failedOver" - Failover of the application to the destination cluster has completed. • "deleted" - The relationship was successfully cleaned up and deleted.
stateAllowed	array[string]	False	States that can be requested in a given state. The following states can be requested in each defined state: • "establishing": "established", "deleted" • "established": "failedOver", "deleted" • "failingOver": "failedOver", "deleted" • "failedOver": "established", "deleted" • "deleting": "deleted" • "deleted": "deleted"
stateDetails	array[type_astra_stateDetail]	True	Additional details about the current state, including why the current state was reached. If no details are available, this array will be empty. Defined values are: • Minimum Items: 0

Name	Type	Required	Description
transferState	string	False	State of the current or most recent snapshot transfer. Defined values are: • "transferring" - A new snapshot was created and is now being replicated to the destination cluster. This state also covers the transfers that have failed on previous attempts and are being continually retried. • "idle" - There is currently no transfer in progress.
transferStateTransitions	array[type_astra_stateTransition]	False	Permitted state transitions from a given defined state. The following state transitions are possible for this resource: • "transferring": "idle" • "idle": "transferring"
transferStateDetails	array[type_astra_stateDetail]	False	Additional details about the current state including why the current state was reached. If no details are available, this array will be empty. Defined values are: • Minimum Items: 0

Name	Type	Required	Description
healthState	string	True	Health state of the resource. Defined values are:
			• "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
healthStateTransitions	array[type_astra_stateTransition]	True	Permitted state transitions from a given defined state. The following state transitions are possible for this resource:
			• "indeterminate": "normal", "warning", "critical"
			• "normal": "indeterminate", "warning", "critical"
			• "warning": "indeterminate", "normal", "critical"
			• "critical": "indeterminate", "normal", "warning"

Name	Type	Required	Description
healthStateDetails	array[type_astra_stateDetail]	True	Additional details about the current state including why the current state was reached. If no details are available, this array will be empty. Defined values are: • Minimum Items: 0
metadata	type_astra_metadata_update	True	Client and service-specified metadata associated with the resource. Defined values are: • Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Example response

```
{
  "type": "application/astra-appMirror",
  "version": "1.1",
  "id": "512c8dac-b7d4-5be9-836e-ee672965866a",
  "sourceAppID": "efd639b6-fc92-4112-8841-0c0ab7890ae0",
  "sourceClusterID": "5789e026-c2e2-41e9-ab00-9766bcfa8951",
  "destinationAppID": "cd7b6d91-fc19-4983-a754-9a7bb4d80a7b",
  "destinationClusterID": "c5d023a9-4061-4a8a-bfbf-3be11ff06226",
  "state": "establishing",
  "stateTransitions": [
    {
      "from": "establishing",
      "to": [
        "established",
        "deleting"
      ]
    },
    {
      "from": "established",
      "to": [
        "failingOver",
        "deleting"
      ]
    },
    {
      "from": "failingOver",
      "to": [
        "failedOver",
        "deleting"
      ]
    },
    {
      "from": "failedOver",
      "to": [
        "establishing",
        "deleting"
      ]
    },
    {
      "from": "deleting",
      "to": [
        "deleted"
      ]
    }
```

```json
    ],
    "stateDesired": "established",
    "stateAllowed": [
      "deleted"
    ],
    "stateDetails": [
      {
        "type": "https://astra.netapp.io/stateDetails/3",
        "title": "AppMirror is being established",
        "detail": "The AppMirror relationship is in the process of being
established."
      }
    ],
    "healthState": "warning",
    "healthStateTransitions": [
      {
        "from": "indeterminate",
        "to": [
          "normal",
          "warning",
          "critical"
        ]
      },
      {
        "from": "normal",
        "to": [
          "indeterminate",
          "warning",
          "critical"
        ]
      },
      {
        "from": "warning",
        "to": [
          "indeterminate",
          "normal",
          "critical"
        ]
      },
      {
        "from": "critical",
        "to": [
          "indeterminate",
          "normal",
          "warning"
        ]
```

```
      }
    ],
    "healthStateDetails": [
      {
        "type": "https://astra.netapp.io/stateDetails/4",
        "title": "AppMirror not yet established",
        "detail": "The AppMirror relationship is not protecting the app
  data yet because the relationship is in the process of being
  established."
      }
    ],
    "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	
invalidFields	array[invalidFields]	False	List of invalid request body fields

Example response

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

Response

```
Status: 409, Conflict
```

Name	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/10",
   "title": "JSON resource conflict",
   "detail": "The request body JSON contains a field that conflicts with
 an idempotent value.",
   "status": "409"
}
```

Response

```
Status: 403, Forbidden
```

Name	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	

Name	Type	Required	Description
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

namespaceMapping

Name	Type	Required	Description
clusterID	string	False	Identifier of the cluster for which the namespaces are specified. Defined values are: • Conforms to the Astra Identifier Schema
namespaces	array[string]	False	List of namespaces to use on the cluster. Correlated with the other cluster namespace list by index. Defined values are: • Minimum length: 1 • Maximum length: 63 • Conforms to the DNS 1123 Label Schema
role	string	False	The initial role for this namespace definition. This parameter is optional except for when a same-cluster replication configuration is used. Defined values are: • "source" • "destination"

storageClasses

Name	Type	Required	Description
clusterID	string	False	Identifier of the cluster for which the storage class is specified. Defined values are: • Conforms to the Astra Identifier Schema
storageClassName	string	False	Name of the storage class to use when creating PVCs on the cluster specified in "clusterID". Defined values are: • Minimum length: 1 • Maximum length: 255
role	string	False	The initial role for this storage class definition. This parameter is optional except for when a same-cluster replication configuration is used. Defined values are: • "source" • "destination"

type_astra_label

Name	Type	Required	Description
name	string	True	
value	string	True	

type_astra_metadata_update

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

• Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

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

type_astra_stateTransition

Name	Type	Required	Description
from	string	True	
to	array[string]	True	

additionalDetails

type_astra_stateDetail

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

invalidFields

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

List all AppMirror resources

GET `/accounts/{account_id}/k8s/v1/appMirrors`

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

Name	Type	In	Required	Description
filter	string	query	False	Indicates which fields should be matched in order to return a resource when listing a collection. Supported operators are: • eq - Equality • lt/gt - Less than/Greater than • lte/gte - Less than or equals to/Greater than or equals to URL example: "filter=field%20eq%20%27value%27" OpenAPI examples: "field eq 'value'"

Response

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

Name	Type	Required	Description
items	array[Any of: appMirror_1.1_get_response_body, array[]]	True	
metadata	type_astra_metadata_list	True	

Example response

```
{
  "type": "application/astra-appMirrors",
  "version": "1.1",
  "items": [
    {
      "type": "application/astra-appMirror",
      "version": "1.1",
      "id": "f1c98c2e-6391-42d3-8b21-3e75dac048a3",
      "sourceAppID": "efd639b6-fc92-4112-8841-0c0ab7890ae0",
      "sourceClusterID": "5789e026-c2e2-41e9-ab00-9766bcfa8951",
      "destinationAppID": "cd7b6d91-fc19-4983-a754-9a7bb4d80a7b",
      "destinationClusterID": "c5d023a9-4061-4a8a-bfbf-3be11ff06226",
      "namespaceMapping": [
        {
          "clusterID": "5789e026-c2e2-41e9-ab00-9766bcfa8951",
          "namespaces": [
            "ns1-src",
            "ns2-src"
          ]
        },
        {
          "clusterID": "c5d023a9-4061-4a8a-bfbf-3be11ff06226",
          "namespaces": [
            "ns1-dest",
            "ns2-dest"
          ]
        }
      ],
      "state": "established",
      "stateTransitions": [
        {
          "from": "establishing",
          "to": [
            "established",
            "deleting"
          ]
        },
        {
          "from": "established",
          "to": [
            "failingOver",
            "deleting"
          ]
        },
```

```
      {
        "from": "failingOver",
        "to": [
          "failedOver",
          "deleting"
        ]
      },
      {
        "from": "failedOver",
        "to": [
          "establishing",
          "deleting"
        ]
      },
      {
        "from": "deleting",
        "to": [
          "deleted"
        ]
      }
    ],
    "stateDesired": "established",
    "stateAllowed": [
      "failedOver",
      "deleted"
    ],
    "stateDetails": [
      {
        "type": "https://astra.netapp.io/stateDetails/1",
        "title": "AppMirror relationship established",
        "detail": "The AppMirror relationship has been successfully
established."
      }
    ],
    "healthState": "normal",
    "healthStateTransitions": [
      {
        "from": "indeterminate",
        "to": [
          "normal",
          "warning",
          "critical"
        ]
      },
      {
        "from": "normal",
```

```
          "to": [
            "indeterminate",
            "warning",
            "critical"
          ]
        },
        {
          "from": "warning",
          "to": [
            "indeterminate",
            "normal",
            "critical"
          ]
        },
        {
          "from": "critical",
          "to": [
            "indeterminate",
            "normal",
            "warning"
          ]
        }
      ],
      "healthStateDetails": [
        {
          "type": "https://astra.netapp.io/stateDetails/2",
          "title": "SnapMirror syncing successfully",
          "detail": "All SnapMirror relationships are synchronizing as
expected."
        }
      ],
      "metadata": {
        "labels": [],
        "creationTimestamp": "2020-08-06T12:24:52.256624Z",
        "modificationTimestamp": "2020-08-06T12:24:52.256624Z",
        "createdBy": "11c0cfa1-4f27-4ef7-a21c-cb452fc5c9aa"
      }
    },
    {
      "type": "application/astra-appMirror",
      "version": "1.1",
      "id": "114633f0-5b59-4bd7-adce-a9ba4423a1bd",
      "sourceAppID": "eaf8b854-211d-460a-ac18-d093d8e2ac70",
      "sourceClusterID": "fcb27b51-ebb7-40ca-b8f1-1d23ebd06889",
      "destinationAppID": "e829c5e0-750f-44ad-a684-aee85be2c2bb",
      "destinationClusterID": "fcb27b51-ebb7-40ca-b8f1-1d23ebd06889",
```

```json
      "namespaceMapping": [
        {
          "clusterID": "fcb27b51-ebb7-40ca-b8f1-1d23ebd06889",
          "namespaces": [
            "app-namespace"
          ],
          "role": "source"
        },
        {
          "clusterID": "fcb27b51-ebb7-40ca-b8f1-1d23ebd06889",
          "namespaces": [
            "destination-app-namespace"
          ],
          "role": "destination"
        }
      ],
      "storageClasses": [
        {
          "storageClassName": "destination-sc",
          "clusterID": "fcb27b51-ebb7-40ca-b8f1-1d23ebd06889",
          "role": "destination"
        }
      ],
      "state": "established",
      "stateTransitions": [
        {
          "from": "establishing",
          "to": [
            "established",
            "deleting"
          ]
        },
        {
          "from": "established",
          "to": [
            "failingOver",
            "deleting"
          ]
        },
        {
          "from": "failingOver",
          "to": [
            "failedOver",
            "deleting"
          ]
        },
```

```json
      {
        "from": "failedOver",
        "to": [
          "establishing",
          "deleting"
        ]
      }
    ],
    "stateDesired": "established",
    "stateAllowed": [
      "failedOver",
      "deleted"
    ],
    "stateDetails": [],
    "transferState": "idle",
    "transferStateTransitions": [
      {
        "from": "transferring",
        "to": [
          "idle"
        ]
      },
      {
        "from": "idle",
        "to": [
          "transferring"
        ]
      }
    ],
    "transferStateDetails": [
      {
        "type": "https://astra.netapp.io/stateDetails/24",
        "title": "Snapshot replication completed",
        "detail": "A snapshot was replicated to the destination.",
        "additionalDetails": {
          "completionTime": "2023-07-06T22:46:39Z",
          "snapshotID": "ae60820d-e963-4eab-8bb3-9159e9f012f0",
          "startTime": "2023-07-06T22:46:08Z"
        }
      }
    ],
    "healthState": "normal",
    "healthStateTransitions": [],
    "healthStateDetails": [
      {
        "type": "https://astra.netapp.io/stateDetails/24",
```

```
              "title": "Snapshot replication completed",
              "detail": "A snapshot was replicated to the destination.",
              "additionalDetails": {
                "completionTime": "2023-07-06T22:46:39Z",
                "snapshotID": "ae60820d-e963-4eab-8bb3-9159e9f012f0",
                "startTime": "2023-07-06T22:46:08Z"
              }
            }
          ],
          "metadata": {
            "labels": [],
            "creationTimestamp": "2023-07-06T22:45:24Z",
            "modificationTimestamp": "2023-07-06T22:45:24Z",
            "createdBy": "cc420827-f968-4da7-9e72-df8a0fd52f94"
          }
        }
      ],
      "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

namespaceMapping

Name	Type	Required	Description
clusterID	string	False	Identifier of the cluster for which the namespaces are specified. Defined values are: • Conforms to the Astra Identifier Schema
namespaces	array[string]	False	List of namespaces to use on the cluster. Correlated with the other cluster namespace list by index. Defined values are: • Minimum length: 1 • Maximum length: 63 • Conforms to the DNS 1123 Label Schema
role	string	False	The initial role for this namespace definition. This parameter is optional except for when a same-cluster replication configuration is used. Defined values are: • "source" • "destination"

storageClasses

Name	Type	Required	Description
clusterID	string	False	Identifier of the cluster for which the storage class is specified. Defined values are: • Conforms to the Astra Identifier Schema
storageClassName	string	False	Name of the storage class to use when creating PVCs on the cluster specified in "clusterID". Defined values are: • Minimum length: 1 • Maximum length: 255
role	string	False	The initial role for this storage class definition. This parameter is optional except for when a same-cluster replication configuration is used. Defined values are: • "source" • "destination"

type_astra_stateTransition

Name	Type	Required	Description
from	string	True	
to	array[string]	True	

additionalDetails

type_astra_stateDetail

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

Name	Type	Required	Description
additionalDetails	additionalDetails	False	

type_astra_label

Name	Type	Required	Description
name	string	True	
value	string	True	

type_astra_metadata_update

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

- Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

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

appMirror_1.1_get_response_body

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: • "application/astra-appMirror"
version	string	True	Version of the resource. Defined values are: • "1.0" • "1.1"

Name	Type	Required	Description
id	string	True	Globally unique identifier of the resource. Defined values are: • Conforms to the UUIDv4 Schema
sourceAppID	string	True	Identifier of the source application. Only updated when swapping the sourceAppID with the destinationAppID. Defined values are: • Conforms to the Astra Identifier Schema
sourceClusterID	string	True	Identifier of the managed cluster hosting the source application. This field is read-only and is determined based on the host cluster of the source application. If provided in an update, it must match the cluster ID of the source application, so it can only change when swapping the sourceAppID with destinationAppID. Defined values are: • Conforms to the Astra Identifier Schema

Name	Type	Required	Description
destinationAppID	string	False	Identifier of the destination application. Cannot be provided on create because a new app ID will be generated as part of relationship initialization. Can only be updated when swapping sourceAppID with the destinationAppID. Defined values are: • Conforms to the Astra Identifier Schema
destinationClusterID	string	True	Identifier of the managed cluster to host the destination application. Must be provided on create because it determines what cluster the destination application will be created on. If provided on update, it must match the cluster ID of the destination application, so it can only change when swapping sourceAppID with destinationAppID. Defined values are: • Conforms to the Astra Identifier Schema

Name	Type	Required	Description
namespaceMapping	array[namespaceMapping]	False	The namespace or namespaces to use when creating the destination application, corresponding to the namespaces of the source application. Each JSON object contains the fields "clusterID" and "namespaces", where the "clusterID" value is the JSON string ID of the source or destination cluster, and the "namespaces" value is a JSON array of JSON strings. There must be exactly one JSON object for each cluster, and the namespaces will be correlated by index. If not provided, the same namespace from the source cluster will be used in the destination cluster. Defined values are: • Minimum length: 0 • Maximum length: 2

Name	Type	Required	Description
storageClasses	array[storageClasses]	False	The storage class to be used on the destination cluster when creating new Persistent Volume Claims (PVCs). Each JSON object contains the fields "clusterID" and "storageClassName", where the "clusterID" value is the JSON string ID of the source or destination cluster, and the "storageClassName" is the storage class to use when creating PVCs on that cluster. If not provided or if the value is missing for a cluster, the default storage class will be used for that cluster. Defined values are: • Minimum length: 0 • Maximum length: 2

Name	Type	Required	Description
state	string	True	The state of the relationship. Defined values are:

- "establishing" - The relationship is being created.
- "established" - The relationship is created.
- "failingOver" - Failover of the application to the destination cluster is in progress.
- "failedOver" - Failover of the application to the destination cluster has completed.
- "deleting" - Resources created by the relationship are being cleaned up.
- "deleted" - The relationship was cleaned up and deleted.

Name	Type	Required	Description
stateTransitions	array[type_astra_stateTransition]	False	Permitted state transitions. The following state transitions are possible for this resource: • "establishing": "established", "deleting" • "established": "failingOver", "deleting" • "failingOver": "failedOver", "deleting" • "failedOver": "establishing", "deleting" • "deleting": "deleted" • "deleted":
stateDesired	string	True	The desired state for the relationship. At creation, the only valid value is "established". Defined values are: • "established" - The relationship is created. • "failedOver" - Failover of the application to the destination cluster has completed. • "deleted" - The relationship was successfully cleaned up and deleted.

Name	Type	Required	Description
stateAllowed	array[string]	False	States that can be requested in a given state. The following states can be requested in each defined state: • "establishing": "established", "deleted" • "established": "failedOver", "deleted" • "failingOver": "failedOver", "deleted" • "failedOver": "established", "deleted" • "deleting": "deleted" • "deleted": "deleted"
stateDetails	array[type_astra_stateDetail]	True	Additional details about the current state, including why the current state was reached. If no details are available, this array will be empty. Defined values are: • Minimum Items: 0

Name	Type	Required	Description
transferState	string	False	State of the current or most recent snapshot transfer. Defined values are: • "transferring" - A new snapshot was created and is now being replicated to the destination cluster. This state also covers the transfers that have failed on previous attempts and are being continually retried. • "idle" - There is currently no transfer in progress.
transferStateTransitions	array[type_astra_stateTransition]	False	Permitted state transitions from a given defined state. The following state transitions are possible for this resource: • "transferring": "idle" • "idle": "transferring"
transferStateDetails	array[type_astra_stateDetail]	False	Additional details about the current state including why the current state was reached. If no details are available, this array will be empty. Defined values are: • Minimum Items: 0

Name	Type	Required	Description
healthState	string	True	Health state of the resource. Defined values are:
			• "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
healthStateTransitions	array[type_astra_stateTransition]	True	Permitted state transitions from a given defined state. The following state transitions are possible for this resource: • "indeterminate": "normal", "warning", "critical" • "normal": "indeterminate", "warning", "critical" • "warning": "indeterminate", "normal", "critical" • "critical": "indeterminate", "normal", "warning"
healthStateDetails	array[type_astra_stateDetail]	True	Additional details about the current state including why the current state was reached. If no details are available, this array will be empty. Defined values are: • Minimum Items: 0

Name	Type	Required	Description
metadata	type_astra_metadata_update	True	Client and service-specified metadata associated with the resource. Defined values are: • Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

type_astra_metadata_list

Name	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 an AppMirror resource

GET `/accounts/{account_id}/k8s/v1/appMirrors/{appMirror_id}`

Returns the stored AppMirror API resource in the JSON response body.

Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource • example: {{.Account}}
appMirror_id	string	path	True	ID of the appMirror collection to list

Response

> Status: 200, Returns the stored AppMirror API resource in the JSON response body.

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

Name	Type	Required	Description
sourceAppID	string	True	Identifier of the source application. Only updated when swapping the sourceAppID with the destinationAppID. Defined values are: • Conforms to the Astra Identifier Schema
sourceClusterID	string	True	Identifier of the managed cluster hosting the source application. This field is read-only and is determined based on the host cluster of the source application. If provided in an update, it must match the cluster ID of the source application, so it can only change when swapping the sourceAppID with destinationAppID. Defined values are: • Conforms to the Astra Identifier Schema
destinationAppID	string	False	Identifier of the destination application. Cannot be provided on create because a new app ID will be generated as part of relationship initialization. Can only be updated when swapping sourceAppID with the destinationAppID. Defined values are: • Conforms to the Astra Identifier Schema

Name	Type	Required	Description
destinationClusterID	string	True	Identifier of the managed cluster to host the destination application. Must be provided on create because it determines what cluster the destination application will be created on. If provided on update, it must match the cluster ID of the destination application, so it can only change when swapping sourceAppID with destinationAppID. Defined values are: • Conforms to the Astra Identifier Schema
namespaceMapping	array[namespaceMapping]	False	The namespace or namespaces to use when creating the destination application, corresponding to the namespaces of the source application. Each JSON object contains the fields "clusterID" and "namespaces", where the "clusterID" value is the JSON string ID of the source or destination cluster, and the "namespaces" value is a JSON array of JSON strings. There must be exactly one JSON object for each cluster, and the namespaces will be correlated by index. If not provided, the same namespace from the source cluster will be used in the destination cluster. Defined values are: • Minimum length: 0 • Maximum length: 2

Name	Type	Required	Description
storageClasses	array[storageClasses]	False	The storage class to be used on the destination cluster when creating new Persistent Volume Claims (PVCs). Each JSON object contains the fields "clusterID" and "storageClassName", where the "clusterID" value is the JSON string ID of the source or destination cluster, and the "storageClassName" is the storage class to use when creating PVCs on that cluster. If not provided or if the value is missing for a cluster, the default storage class will be used for that cluster. Defined values are: • Minimum length: 0 • Maximum length: 2

Name	Type	Required	Description
state	string	True	The state of the relationship. Defined values are: • "establishing" - The relationship is being created. • "established" - The relationship is created. • "failingOver" - Failover of the application to the destination cluster is in progress. • "failedOver" - Failover of the application to the destination cluster has completed. • "deleting" - Resources created by the relationship are being cleaned up. • "deleted" - The relationship was cleaned up and deleted.
stateTransitions	array[type_astra_stateTransition]	False	Permitted state transitions. The following state transitions are possible for this resource: • "establishing": "established", "deleting" • "established": "failingOver", "deleting" • "failingOver": "failedOver", "deleting" • "failedOver": "establishing", "deleting" • "deleting": "deleted" • "deleted":

Name	Type	Required	Description
stateDesired	string	True	The desired state for the relationship. At creation, the only valid value is "established". Defined values are: • "established" - The relationship is created. • "failedOver" - Failover of the application to the destination cluster has completed. • "deleted" - The relationship was successfully cleaned up and deleted.
stateAllowed	array[string]	False	States that can be requested in a given state. The following states can be requested in each defined state: • "establishing": "established", "deleted" • "established": "failedOver", "deleted" • "failingOver": "failedOver", "deleted" • "failedOver": "established", "deleted" • "deleting": "deleted" • "deleted": "deleted"
stateDetails	array[type_astra_stateDetail]	True	Additional details about the current state, including why the current state was reached. If no details are available, this array will be empty. Defined values are: • Minimum Items: 0

Name	Type	Required	Description
transferState	string	False	State of the current or most recent snapshot transfer. Defined values are: • "transferring" - A new snapshot was created and is now being replicated to the destination cluster. This state also covers the transfers that have failed on previous attempts and are being continually retried. • "idle" - There is currently no transfer in progress.
transferStateTransitions	array[type_astra_stateTransition]	False	Permitted state transitions from a given defined state. The following state transitions are possible for this resource: • "transferring": "idle" • "idle": "transferring"
transferStateDetails	array[type_astra_stateDetail]	False	Additional details about the current state including why the current state was reached. If no details are available, this array will be empty. Defined values are: • Minimum Items: 0

Name	Type	Required	Description
healthState	string	True	Health state of the resource. Defined values are: • "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
healthStateTransitions	array[type_astra_stateTransition]	True	Permitted state transitions from a given defined state. The following state transitions are possible for this resource: • "indeterminate": "normal", "warning", "critical" • "normal": "indeterminate", "warning", "critical" • "warning": "indeterminate", "normal", "critical" • "critical": "indeterminate", "normal", "warning"

Name	Type	Required	Description
healthStateDetails	array[type_astra_stateDetail]	True	Additional details about the current state including why the current state was reached. If no details are available, this array will be empty. Defined values are: • Minimum Items: 0
metadata	type_astra_metadata_update	True	Client and service-specified metadata associated with the resource. Defined values are: • Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Example response

```json
{
  "type": "application/astra-appMirror",
  "version": "1.1",
  "id": "512c8dac-b7d4-5be9-836e-ee672965866a",
  "sourceAppID": "efd639b6-fc92-4112-8841-0c0ab7890ae0",
  "sourceClusterID": "5789e026-c2e2-41e9-ab00-9766bcfa8951",
  "destinationAppID": "cd7b6d91-fc19-4983-a754-9a7bb4d80a7b",
  "destinationClusterID": "c5d023a9-4061-4a8a-bfbf-3be11ff06226",
  "namespaceMapping": [
    {
      "clusterID": "5789e026-c2e2-41e9-ab00-9766bcfa8951",
      "namespaces": [
        "ns1-src",
        "ns2-src"
      ]
    },
    {
      "clusterID": "c5d023a9-4061-4a8a-bfbf-3be11ff06226",
      "namespaces": [
        "ns1-dest",
        "ns2-dest"
      ]
    }
  ],
  "state": "established",
  "stateTransitions": [
    {
      "from": "establishing",
      "to": [
        "established",
        "deleting"
      ]
    },
    {
      "from": "established",
      "to": [
        "failingOver",
        "deleting"
      ]
    },
    {
      "from": "failingOver",
      "to": [
        "failedOver",
```

```
          "deleting"
        ]
      },
      {
        "from": "failedOver",
        "to": [
          "establishing",
          "deleting"
        ]
      },
      {
        "from": "deleting",
        "to": [
          "deleted"
        ]
      }
    ],
    "stateDesired": "established",
    "stateAllowed": [
      "failedOver",
      "deleted"
    ],
    "stateDetails": [
      {
        "type": "https://astra.netapp.io/stateDetails/1",
        "title": "AppMirror relationship established",
        "detail": "The AppMirror relationship has been successfully
established."
      }
    ],
    "healthState": "normal",
    "healthStateTransitions": [
      {
        "from": "indeterminate",
        "to": [
          "normal",
          "warning",
          "critical"
        ]
      },
      {
        "from": "normal",
        "to": [
          "indeterminate",
          "warning",
          "critical"
```

```
    ]
  },
  {
    "from": "warning",
    "to": [
      "indeterminate",
      "normal",
      "critical"
    ]
  },
  {
    "from": "critical",
    "to": [
      "indeterminate",
      "normal",
      "warning"
    ]
  }
],
"healthStateDetails": [
  {
    "type": "https://astra.netapp.io/stateDetails/2",
    "title": "SnapMirror syncing successfully",
    "detail": "All SnapMirror relationships are synchronizing as
expected."
  }
],
"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	

Name	Type	Required	Description
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

```json
{
    "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

namespaceMapping

Name	Type	Required	Description
clusterID	string	False	Identifier of the cluster for which the namespaces are specified. Defined values are: • Conforms to the Astra Identifier Schema
namespaces	array[string]	False	List of namespaces to use on the cluster. Correlated with the other cluster namespace list by index. Defined values are: • Minimum length: 1 • Maximum length: 63 • Conforms to the DNS 1123 Label Schema
role	string	False	The initial role for this namespace definition. This parameter is optional except for when a same-cluster replication configuration is used. Defined values are: • "source" • "destination"

storageClasses

Name	Type	Required	Description
clusterID	string	False	Identifier of the cluster for which the storage class is specified. Defined values are: • Conforms to the Astra Identifier Schema
storageClassName	string	False	Name of the storage class to use when creating PVCs on the cluster specified in "clusterID". Defined values are: • Minimum length: 1 • Maximum length: 255
role	string	False	The initial role for this storage class definition. This parameter is optional except for when a same-cluster replication configuration is used. Defined values are: • "source" • "destination"

type_astra_stateTransition

Name	Type	Required	Description
from	string	True	
to	array[string]	True	

additionalDetails

type_astra_stateDetail

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

Name	Type	Required	Description
additionalDetails	additionalDetails	False	

type_astra_label

Name	Type	Required	Description
name	string	True	
value	string	True	

type_astra_metadata_update

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

- Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
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

Modify an AppMirror resource

PUT /accounts/{account_id}/k8s/v1/appMirrors/{appMirror_id}

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

Side Effects

- Various side effects based on desiredState.

Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource • example: {{.Account}}
appMirror_id	string	path	True	ID of the appMirror collection to list

Request Body

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

Side Effects

• Various side effects based on desiredState.

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

Name	Type	Required	Description
sourceAppID	string	False	Identifier of the source application. Only updated when swapping the sourceAppID with the destinationAppID. Defined values are: • Conforms to the Astra Identifier Schema
sourceClusterID	string	False	Identifier of the managed cluster hosting the source application. This field is read-only and is determined based on the host cluster of the source application. If provided in an update, it must match the cluster ID of the source application, so it can only change when swapping the sourceAppID with destinationAppID. Defined values are: • Conforms to the Astra Identifier Schema
destinationAppID	string	False	Identifier of the destination application. Cannot be provided on create because a new app ID will be generated as part of relationship initialization. Can only be updated when swapping sourceAppID with the destinationAppID. Defined values are: • Conforms to the Astra Identifier Schema

Name	Type	Required	Description
destinationClusterID	string	False	Identifier of the managed cluster to host the destination application. Must be provided on create because it determines what cluster the destination application will be created on. If provided on update, it must match the cluster ID of the destination application, so it can only change when swapping sourceAppID with destinationAppID. Defined values are: • Conforms to the Astra Identifier Schema
namespaceMapping	array[namespaceMapping]	False	The namespace or namespaces to use when creating the destination application, corresponding to the namespaces of the source application. Each JSON object contains the fields "clusterID" and "namespaces", where the "clusterID" value is the JSON string ID of the source or destination cluster, and the "namespaces" value is a JSON array of JSON strings. There must be exactly one JSON object for each cluster, and the namespaces will be correlated by index. If not provided, the same namespace from the source cluster will be used in the destination cluster. Defined values are: • Minimum length: 0 • Maximum length: 2

Name	Type	Required	Description
storageClasses	array[storageClasses]	False	The storage class to be used on the destination cluster when creating new Persistent Volume Claims (PVCs). Each JSON object contains the fields "clusterID" and "storageClassName", where the "clusterID" value is the JSON string ID of the source or destination cluster, and the "storageClassName" is the storage class to use when creating PVCs on that cluster. If not provided or if the value is missing for a cluster, the default storage class will be used for that cluster. Defined values are: • Minimum length: 0 • Maximum length: 2

Name	Type	Required	Description
state	string	False	The state of the relationship. Defined values are: "establishing" - The relationship is being created. "established" - The relationship is created. "failingOver" - Failover of the application to the destination cluster is in progress. "failedOver" - Failover of the application to the destination cluster has completed. "deleting" - Resources created by the relationship are being cleaned up. "deleted" - The relationship was cleaned up and deleted.
stateTransitions	array[type_astra_stateTransition]	False	Permitted state transitions. The following state transitions are possible for this resource: "establishing": "established", "deleting" "established": "failingOver", "deleting" "failingOver": "failedOver", "deleting" "failedOver": "establishing", "deleting" "deleting": "deleted" "deleted":

Name	Type	Required	Description
stateDesired	string	False	The desired state for the relationship. At creation, the only valid value is "established". Defined values are: • "established" - The relationship is created. • "failedOver" - Failover of the application to the destination cluster has completed. • "deleted" - The relationship was successfully cleaned up and deleted.
stateAllowed	array[string]	False	States that can be requested in a given state. The following states can be requested in each defined state: • "establishing": "established", "deleted" • "established": "failedOver", "deleted" • "failingOver": "failedOver", "deleted" • "failedOver": "established", "deleted" • "deleting": "deleted" • "deleted": "deleted"
stateDetails	array[type_astra_stateDetail]	False	Additional details about the current state, including why the current state was reached. If no details are available, this array will be empty. Defined values are: • Minimum Items: 0

Name	Type	Required	Description
transferState	string	False	State of the current or most recent snapshot transfer. Defined values are: • "transferring" - A new snapshot was created and is now being replicated to the destination cluster. This state also covers the transfers that have failed on previous attempts and are being continually retried. • "idle" - There is currently no transfer in progress.
transferStateTransitions	array[type_astra_stateTransition]	False	Permitted state transitions from a given defined state. The following state transitions are possible for this resource: • "transferring": "idle" • "idle": "transferring"
transferStateDetails	array[type_astra_stateDetail]	False	Additional details about the current state including why the current state was reached. If no details are available, this array will be empty. Defined values are: • Minimum Items: 0

Name	Type	Required	Description
healthState	string	False	Health state of the resource. Defined values are: • "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
healthStateTransitions	array[type_astra_stateTransition]	False	Permitted state transitions from a given defined state. The following state transitions are possible for this resource: • "indeterminate": "normal", "warning", "critical" • "normal": "indeterminate", "warning", "critical" • "warning": "indeterminate", "normal", "critical" • "critical": "indeterminate", "normal", "warning"

Name	Type	Required	Description
healthStateDetails	array[type_astra_stateDetail]	False	Additional details about the current state including why the current state was reached. If no details are available, this array will be empty. Defined values are: • Minimum Items: 0
metadata	type_astra_metadata_update	False	Client and service-specified metadata associated with the resource. Defined values are: • Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Example request

```
{
  "type": "application/astra-appMirror",
  "version": "1.1",
  "stateDesired": "failedOver"
}
```

Response

```
Status: 204, Indicates if the appMirror resource was updated.
```

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	
invalidFields	array[invalidFields]	False	List of invalid request body fields

Example response

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

Response

```
Status: 409, Conflict
```

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

Example response

```
{
  "type": "https://astra.netapp.io/problems/10",
  "title": "JSON resource conflict",
  "detail": "The request body JSON contains a field that conflicts with
an idempotent value.",
  "status": "409"
}
```

Response

```
Status: 403, Forbidden
```

Name	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/1",
    "title": "Resource not found",
    "detail": "The resource specified in the request URI wasn't found.",
    "status": "404"
}
```

Definitions

See Definitions

namespaceMapping

Name	Type	Required	Description
clusterID	string	False	Identifier of the cluster for which the namespaces are specified. Defined values are: • Conforms to the Astra Identifier Schema
namespaces	array[string]	False	List of namespaces to use on the cluster. Correlated with the other cluster namespace list by index. Defined values are: • Minimum length: 1 • Maximum length: 63 • Conforms to the DNS 1123 Label Schema
role	string	False	The initial role for this namespace definition. This parameter is optional except for when a same-cluster replication configuration is used. Defined values are: • "source" • "destination"

storageClasses

Name	Type	Required	Description
clusterID	string	False	Identifier of the cluster for which the storage class is specified. Defined values are: • Conforms to the Astra Identifier Schema
storageClassName	string	False	Name of the storage class to use when creating PVCs on the cluster specified in "clusterID". Defined values are: • Minimum length: 1 • Maximum length: 255
role	string	False	The initial role for this storage class definition. This parameter is optional except for when a same-cluster replication configuration is used. Defined values are: • "source" • "destination"

type_astra_stateTransition

Name	Type	Required	Description
from	string	True	
to	array[string]	True	

additionalDetails

type_astra_stateDetail

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

Name	Type	Required	Description
additionalDetails	additionalDetails	False	

type_astra_label

Name	Type	Required	Description
name	string	True	
value	string	True	

type_astra_metadata_update

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

- Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
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

invalidFields

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

Delete an AppMirror resource

DELETE `/accounts/{account_id}/k8s/v1/appMirrors/{appMirror_id}`

Removes the specified AppMirror API resource. Starts a process to asynchronously remove the AppMirror resource, along with any resources on the source and destination clusters that were created as a result of the AppMirror relationship. The resources removed are dependent on the state of the relationship at the time of deletion.

Side Effects

- The stateDesired field is set to "deleted".
- The state field is set to "deleting".
- If state is "established", the TridentMirrorRelationships and PersistentVolumeClaims created by the AppMirror relationship will be deleted.
- If state is "failedOver", the TridentMirrorRelationships created by the AppMirror relationship will be deleted and the PersistentVolumeClaims in the destination application will be left in place.
- When the asynchronous delete operation is completed, the AppMirror API resource will be removed from both the source and destination applications.

Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource • example: {{.Account}}
appMirror_id	string	path	True	ID of the appMirror collection to list

Response

```
Status: 204, Indicates if the appMirror resource was deleted.
```

Response

```
Status: 401, Unauthorized
```

Name	Type	Required	Description
type	string	True	
title	string	True	

Name	Type	Required	Description
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

```json
{
    "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/1",
    "title": "Resource not found",
    "detail": "The resource specified in the request URI wasn't found.",
    "status": "404"
}
```

Definitions

See Definitions

invalidParams

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

Create a new AppMirror resource for an app

POST /accounts/{account_id}/k8s/v1/apps/{app_id}/appMirrors

Indicates the desired values for the AppMirror API resource to be created.

Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource • example: {{.Account}}
app_id	string	path	True	ID of the containing app resource

Request Body

Indicates the desired values for the AppMirror API resource to be created.

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: • "application/astra-appMirror"
version	string	True	Version of the resource. Defined values are: • "1.0" • "1.1"
sourceAppID	string	True	Identifier of the source application. Only updated when swapping the sourceAppID with the destinationAppID. Defined values are: • Conforms to the Astra Identifier Schema
destinationClusterID	string	True	Identifier of the managed cluster to host the destination application. Must be provided on create because it determines what cluster the destination application will be created on. If provided on update, it must match the cluster ID of the destination application, so it can only change when swapping sourceAppID with destinationAppID. Defined values are: • Conforms to the Astra Identifier Schema

Name	Type	Required	Description
namespaceMapping	array[namespaceMapping]	False	The namespace or namespaces to use when creating the destination application, corresponding to the namespaces of the source application. Each JSON object contains the fields "clusterID" and "namespaces", where the "clusterID" value is the JSON string ID of the source or destination cluster, and the "namespaces" value is a JSON array of JSON strings. There must be exactly one JSON object for each cluster, and the namespaces will be correlated by index. If not provided, the same namespace from the source cluster will be used in the destination cluster. Defined values are: • Minimum length: 0 • Maximum length: 2

Name	Type	Required	Description
storageClasses	array[storageClasses]	False	The storage class to be used on the destination cluster when creating new Persistent Volume Claims (PVCs). Each JSON object contains the fields "clusterID" and "storageClassName", where the "clusterID" value is the JSON string ID of the source or destination cluster, and the "storageClassName" is the storage class to use when creating PVCs on that cluster. If not provided or if the value is missing for a cluster, the default storage class will be used for that cluster. Defined values are: • Minimum length: 0 • Maximum length: 2
stateDesired	string	True	The desired state for the relationship. At creation, the only valid value is "established". Defined values are: • "established" - The relationship is created. • "failedOver" - Failover of the application to the destination cluster has completed. • "deleted" - The relationship was successfully cleaned up and deleted.

Name	Type	Required	Description
metadata	type_astra_metadata_update	False	Client and service-specified metadata associated with the resource. Defined values are: • Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Example request

```
{
    "type": "application/astra-appMirror",
    "version": "1.1",
    "sourceAppID": "efd639b6-fc92-4112-8841-0c0ab7890ae0",
    "destinationClusterID": "c5d023a9-4061-4a8a-bfbf-3be11ff06226",
    "stateDesired": "established"
}
```

Response

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

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: • "application/astra-appMirror"

Name	Type	Required	Description
version	string	True	Version of the resource. Defined values are: • "1.0" • "1.1"
id	string	True	Globally unique identifier of the resource. Defined values are: • Conforms to the UUIDv4 Schema
sourceAppID	string	True	Identifier of the source application. Only updated when swapping the sourceAppID with the destinationAppID. Defined values are: • Conforms to the Astra Identifier Schema
sourceClusterID	string	True	Identifier of the managed cluster hosting the source application. This field is read-only and is determined based on the host cluster of the source application. If provided in an update, it must match the cluster ID of the source application, so it can only change when swapping the sourceAppID with destinationAppID. Defined values are: • Conforms to the Astra Identifier Schema

Name	Type	Required	Description
destinationAppID	string	False	Identifier of the destination application. Cannot be provided on create because a new app ID will be generated as part of relationship initialization. Can only be updated when swapping sourceAppID with the destinationAppID. Defined values are: • Conforms to the Astra Identifier Schema
destinationClusterID	string	True	Identifier of the managed cluster to host the destination application. Must be provided on create because it determines what cluster the destination application will be created on. If provided on update, it must match the cluster ID of the destination application, so it can only change when swapping sourceAppID with destinationAppID. Defined values are: • Conforms to the Astra Identifier Schema

Name	Type	Required	Description
namespaceMapping	array[namespaceMapping]	False	The namespace or namespaces to use when creating the destination application, corresponding to the namespaces of the source application. Each JSON object contains the fields "clusterID" and "namespaces", where the "clusterID" value is the JSON string ID of the source or destination cluster, and the "namespaces" value is a JSON array of JSON strings. There must be exactly one JSON object for each cluster, and the namespaces will be correlated by index. If not provided, the same namespace from the source cluster will be used in the destination cluster. Defined values are: • Minimum length: 0 • Maximum length: 2

Name	Type	Required	Description
storageClasses	array[storageClasses]	False	The storage class to be used on the destination cluster when creating new Persistent Volume Claims (PVCs). Each JSON object contains the fields "clusterID" and "storageClassName", where the "clusterID" value is the JSON string ID of the source or destination cluster, and the "storageClassName" is the storage class to use when creating PVCs on that cluster. If not provided or if the value is missing for a cluster, the default storage class will be used for that cluster. Defined values are: • Minimum length: 0 • Maximum length: 2

Name	Type	Required	Description
state	string	True	The state of the relationship. Defined values are:
			• "establishing" - The relationship is being created.
			• "established" - The relationship is created.
			• "failingOver" - Failover of the application to the destination cluster is in progress.
			• "failedOver" - Failover of the application to the destination cluster has completed.
			• "deleting" - Resources created by the relationship are being cleaned up.
			• "deleted" - The relationship was cleaned up and deleted.
stateTransitions	array[type_astra_stateTransition]	False	Permitted state transitions. The following state transitions are possible for this resource:
			• "establishing": "established", "deleting"
			• "established": "failingOver", "deleting"
			• "failingOver": "failedOver", "deleting"
			• "failedOver": "establishing", "deleting"
			• "deleting": "deleted"
			• "deleted":

Name	Type	Required	Description
stateDesired	string	True	The desired state for the relationship. At creation, the only valid value is "established". Defined values are: • "established" - The relationship is created. • "failedOver" - Failover of the application to the destination cluster has completed. • "deleted" - The relationship was successfully cleaned up and deleted.
stateAllowed	array[string]	False	States that can be requested in a given state. The following states can be requested in each defined state: • "establishing": "established", "deleted" • "established": "failedOver", "deleted" • "failingOver": "failedOver", "deleted" • "failedOver": "established", "deleted" • "deleting": "deleted" • "deleted": "deleted"
stateDetails	array[type_astra_stateDetail]	True	Additional details about the current state, including why the current state was reached. If no details are available, this array will be empty. Defined values are: • Minimum Items: 0

Name	Type	Required	Description
transferState	string	False	State of the current or most recent snapshot transfer. Defined values are: • "transferring" - A new snapshot was created and is now being replicated to the destination cluster. This state also covers the transfers that have failed on previous attempts and are being continually retried. • "idle" - There is currently no transfer in progress.
transferStateTransitions	array[type_astra_stateTransition]	False	Permitted state transitions from a given defined state. The following state transitions are possible for this resource: • "transferring": "idle" • "idle": "transferring"
transferStateDetails	array[type_astra_stateDetail]	False	Additional details about the current state including why the current state was reached. If no details are available, this array will be empty. Defined values are: • Minimum Items: 0

Name	Type	Required	Description
healthState	string	True	Health state of the resource. Defined values are:
			• "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
healthStateTransitions	array[type_astra_stateTransition]	True	Permitted state transitions from a given defined state. The following state transitions are possible for this resource:
			• "indeterminate": "normal", "warning", "critical"
			• "normal": "indeterminate", "warning", "critical"
			• "warning": "indeterminate", "normal", "critical"
			• "critical": "indeterminate", "normal", "warning"

Name	Type	Required	Description
healthStateDetails	array[type_astra_stateDetail]	True	Additional details about the current state including why the current state was reached. If no details are available, this array will be empty. Defined values are: • Minimum Items: 0
metadata	type_astra_metadata_update	True	Client and service-specified metadata associated with the resource. Defined values are: • Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Example response

```json
{
  "type": "application/astra-appMirror",
  "version": "1.1",
  "id": "512c8dac-b7d4-5be9-836e-ee672965866a",
  "sourceAppID": "efd639b6-fc92-4112-8841-0c0ab7890ae0",
  "sourceClusterID": "5789e026-c2e2-41e9-ab00-9766bcfa8951",
  "destinationAppID": "cd7b6d91-fc19-4983-a754-9a7bb4d80a7b",
  "destinationClusterID": "c5d023a9-4061-4a8a-bfbf-3be11ff06226",
  "state": "establishing",
  "stateTransitions": [
    {
      "from": "establishing",
      "to": [
        "established",
        "deleting"
      ]
    },
    {
      "from": "established",
      "to": [
        "failingOver",
        "deleting"
      ]
    },
    {
      "from": "failingOver",
      "to": [
        "failedOver",
        "deleting"
      ]
    },
    {
      "from": "failedOver",
      "to": [
        "establishing",
        "deleting"
      ]
    },
    {
      "from": "deleting",
      "to": [
        "deleted"
      ]
    }
```

```
    ],
    "stateDesired": "established",
    "stateAllowed": [
      "deleted"
    ],
    "stateDetails": [
      {
        "type": "https://astra.netapp.io/stateDetails/3",
        "title": "AppMirror is being established",
        "detail": "The AppMirror relationship is in the process of being
established."
      }
    ],
    "healthState": "warning",
    "healthStateTransitions": [
      {
        "from": "indeterminate",
        "to": [
          "normal",
          "warning",
          "critical"
        ]
      },
      {
        "from": "normal",
        "to": [
          "indeterminate",
          "warning",
          "critical"
        ]
      },
      {
        "from": "warning",
        "to": [
          "indeterminate",
          "normal",
          "critical"
        ]
      },
      {
        "from": "critical",
        "to": [
          "indeterminate",
          "normal",
          "warning"
        ]
```

```
      }
    ],
    "healthStateDetails": [
      {
        "type": "https://astra.netapp.io/stateDetails/4",
        "title": "AppMirror not yet established",
        "detail": "The AppMirror relationship is not protecting the app
  data yet because the relationship is in the process of being
  established."
      }
    ],
    "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	
invalidFields	array[invalidFields]	False	List of invalid request body fields

Example response

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

Response

```
Status: 409, Conflict
```

Name	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/10",
   "title": "JSON resource conflict",
   "detail": "The request body JSON contains a field that conflicts with
an idempotent value.",
   "status": "409"
}
```

Response

```
Status: 403, Forbidden
```

Name	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	

Name	Type	Required	Description
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

namespaceMapping

Name	Type	Required	Description
clusterID	string	False	Identifier of the cluster for which the namespaces are specified. Defined values are: • Conforms to the Astra Identifier Schema
namespaces	array[string]	False	List of namespaces to use on the cluster. Correlated with the other cluster namespace list by index. Defined values are: • Minimum length: 1 • Maximum length: 63 • Conforms to the DNS 1123 Label Schema
role	string	False	The initial role for this namespace definition. This parameter is optional except for when a same-cluster replication configuration is used. Defined values are: • "source" • "destination"

storageClasses

Name	Type	Required	Description
clusterID	string	False	Identifier of the cluster for which the storage class is specified. Defined values are: • Conforms to the Astra Identifier Schema
storageClassName	string	False	Name of the storage class to use when creating PVCs on the cluster specified in "clusterID". Defined values are: • Minimum length: 1 • Maximum length: 255
role	string	False	The initial role for this storage class definition. This parameter is optional except for when a same-cluster replication configuration is used. Defined values are: • "source" • "destination"

type_astra_label

Name	Type	Required	Description
name	string	True	
value	string	True	

type_astra_metadata_update

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

• Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

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

type_astra_stateTransition

Name	Type	Required	Description
from	string	True	
to	array[string]	True	

additionalDetails

type_astra_stateDetail

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

invalidFields

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

List the AppMirror resources for an app

GET `/accounts/{account_id}/k8s/v1/apps/{app_id}/appMirrors`

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

Name	Type	In	Required	Description
filter	string	query	False	Indicates which fields should be matched in order to return a resource when listing a collection. Supported operators are: • eq - Equality • lt/gt - Less than/Greater than • lte/gte - Less than or equals to/Greater than or equals to URL example: "filter=field%20eq%20%0%27value%27" OpenAPI examples: "field eq 'value'"

Response

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

Name	Type	Required	Description
items	array[Any of: appMirror_1.1_get_response_body, array[]]	True	
metadata	type_astra_metadata_list	True	

Example response

```json
{
  "type": "application/astra-appMirrors",
  "version": "1.1",
  "items": [
    {
      "type": "application/astra-appMirror",
      "version": "1.1",
      "id": "f1c98c2e-6391-42d3-8b21-3e75dac048a3",
      "sourceAppID": "efd639b6-fc92-4112-8841-0c0ab7890ae0",
      "sourceClusterID": "5789e026-c2e2-41e9-ab00-9766bcfa8951",
      "destinationAppID": "cd7b6d91-fc19-4983-a754-9a7bb4d80a7b",
      "destinationClusterID": "c5d023a9-4061-4a8a-bfbf-3be11ff06226",
      "namespaceMapping": [
        {
          "clusterID": "5789e026-c2e2-41e9-ab00-9766bcfa8951",
          "namespaces": [
            "ns1-src",
            "ns2-src"
          ]
        },
        {
          "clusterID": "c5d023a9-4061-4a8a-bfbf-3be11ff06226",
          "namespaces": [
            "ns1-dest",
            "ns2-dest"
          ]
        }
      ],
      "state": "established",
      "stateTransitions": [
        {
          "from": "establishing",
          "to": [
            "established",
            "deleting"
          ]
        },
        {
          "from": "established",
          "to": [
            "failingOver",
            "deleting"
          ]
        },
```

```json
        {
          "from": "failingOver",
          "to": [
            "failedOver",
            "deleting"
          ]
        },
        {
          "from": "failedOver",
          "to": [
            "establishing",
            "deleting"
          ]
        },
        {
          "from": "deleting",
          "to": [
            "deleted"
          ]
        }
      ],
      "stateDesired": "established",
      "stateAllowed": [
        "failedOver",
        "deleted"
      ],
      "stateDetails": [
        {
          "type": "https://astra.netapp.io/stateDetails/1",
          "title": "AppMirror relationship established",
          "detail": "The AppMirror relationship has been successfully
established."
        }
      ],
      "healthState": "normal",
      "healthStateTransitions": [
        {
          "from": "indeterminate",
          "to": [
            "normal",
            "warning",
            "critical"
          ]
        },
        {
          "from": "normal",
```

```
          "to": [
            "indeterminate",
            "warning",
            "critical"
          ]
        },
        {
          "from": "warning",
          "to": [
            "indeterminate",
            "normal",
            "critical"
          ]
        },
        {
          "from": "critical",
          "to": [
            "indeterminate",
            "normal",
            "warning"
          ]
        }
      ],
      "healthStateDetails": [
        {
          "type": "https://astra.netapp.io/stateDetails/2",
          "title": "SnapMirror syncing successfully",
          "detail": "All SnapMirror relationships are synchronizing as
expected."
        }
      ],
      "metadata": {
        "labels": [],
        "creationTimestamp": "2020-08-06T12:24:52.256624Z",
        "modificationTimestamp": "2020-08-06T12:24:52.256624Z",
        "createdBy": "11c0cfa1-4f27-4ef7-a21c-cb452fc5c9aa"
      }
    },
    {
      "type": "application/astra-appMirror",
      "version": "1.1",
      "id": "114633f0-5b59-4bd7-adce-a9ba4423a1bd",
      "sourceAppID": "eaf8b854-211d-460a-ac18-d093d8e2ac70",
      "sourceClusterID": "fcb27b51-ebb7-40ca-b8f1-1d23ebd06889",
      "destinationAppID": "e829c5e0-750f-44ad-a684-aee85be2c2bb",
      "destinationClusterID": "fcb27b51-ebb7-40ca-b8f1-1d23ebd06889",
```

```json
    "namespaceMapping": [
      {
        "clusterID": "fcb27b51-ebb7-40ca-b8f1-1d23ebd06889",
        "namespaces": [
          "app-namespace"
        ],
        "role": "source"
      },
      {
        "clusterID": "fcb27b51-ebb7-40ca-b8f1-1d23ebd06889",
        "namespaces": [
          "destination-app-namespace"
        ],
        "role": "destination"
      }
    ],
    "storageClasses": [
      {
        "storageClassName": "destination-sc",
        "clusterID": "fcb27b51-ebb7-40ca-b8f1-1d23ebd06889",
        "role": "destination"
      }
    ],
    "state": "established",
    "stateTransitions": [
      {
        "from": "establishing",
        "to": [
          "established",
          "deleting"
        ]
      },
      {
        "from": "established",
        "to": [
          "failingOver",
          "deleting"
        ]
      },
      {
        "from": "failingOver",
        "to": [
          "failedOver",
          "deleting"
        ]
      },
```

```
      {
        "from": "failedOver",
        "to": [
          "establishing",
          "deleting"
        ]
      }
    ],
    "stateDesired": "established",
    "stateAllowed": [
      "failedOver",
      "deleted"
    ],
    "stateDetails": [],
    "transferState": "idle",
    "transferStateTransitions": [
      {
        "from": "transferring",
        "to": [
          "idle"
        ]
      },
      {
        "from": "idle",
        "to": [
          "transferring"
        ]
      }
    ],
    "transferStateDetails": [
      {
        "type": "https://astra.netapp.io/stateDetails/24",
        "title": "Snapshot replication completed",
        "detail": "A snapshot was replicated to the destination.",
        "additionalDetails": {
          "completionTime": "2023-07-06T22:46:39Z",
          "snapshotID": "ae60820d-e963-4eab-8bb3-9159e9f012f0",
          "startTime": "2023-07-06T22:46:08Z"
        }
      }
    ],
    "healthState": "normal",
    "healthStateTransitions": [],
    "healthStateDetails": [
      {
        "type": "https://astra.netapp.io/stateDetails/24",
```

```
                "title": "Snapshot replication completed",
                "detail": "A snapshot was replicated to the destination.",
                "additionalDetails": {
                    "completionTime": "2023-07-06T22:46:39Z",
                    "snapshotID": "ae60820d-e963-4eab-8bb3-9159e9f012f0",
                    "startTime": "2023-07-06T22:46:08Z"
                }
            }
        ],
        "metadata": {
            "labels": [],
            "creationTimestamp": "2023-07-06T22:45:24Z",
            "modificationTimestamp": "2023-07-06T22:45:24Z",
            "createdBy": "cc420827-f968-4da7-9e72-df8a0fd52f94"
        }
    }
    ],
    "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

namespaceMapping

Name	Type	Required	Description
clusterID	string	False	Identifier of the cluster for which the namespaces are specified. Defined values are: • Conforms to the Astra Identifier Schema
namespaces	array[string]	False	List of namespaces to use on the cluster. Correlated with the other cluster namespace list by index. Defined values are: • Minimum length: 1 • Maximum length: 63 • Conforms to the DNS 1123 Label Schema
role	string	False	The initial role for this namespace definition. This parameter is optional except for when a same-cluster replication configuration is used. Defined values are: • "source" • "destination"

storageClasses

Name	Type	Required	Description
clusterID	string	False	Identifier of the cluster for which the storage class is specified. Defined values are: • Conforms to the Astra Identifier Schema
storageClassName	string	False	Name of the storage class to use when creating PVCs on the cluster specified in "clusterID". Defined values are: • Minimum length: 1 • Maximum length: 255
role	string	False	The initial role for this storage class definition. This parameter is optional except for when a same-cluster replication configuration is used. Defined values are: • "source" • "destination"

type_astra_stateTransition

Name	Type	Required	Description
from	string	True	
to	array[string]	True	

additionalDetails

type_astra_stateDetail

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

Name	Type	Required	Description
additionalDetails	additionalDetails	False	

type_astra_label

Name	Type	Required	Description
name	string	True	
value	string	True	

type_astra_metadata_update

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

- Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

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

appMirror_1.1_get_response_body

Name	Type	Required	Description
type	string	True	Media type of the resource. Defined values are: • "application/astra-appMirror"
version	string	True	Version of the resource. Defined values are: • "1.0" • "1.1"

Name	Type	Required	Description
id	string	True	Globally unique identifier of the resource. Defined values are: • Conforms to the UUIDv4 Schema
sourceAppID	string	True	Identifier of the source application. Only updated when swapping the sourceAppID with the destinationAppID. Defined values are: • Conforms to the Astra Identifier Schema
sourceClusterID	string	True	Identifier of the managed cluster hosting the source application. This field is read-only and is determined based on the host cluster of the source application. If provided in an update, it must match the cluster ID of the source application, so it can only change when swapping the sourceAppID with destinationAppID. Defined values are: • Conforms to the Astra Identifier Schema

Name	Type	Required	Description
destinationAppID	string	False	Identifier of the destination application. Cannot be provided on create because a new app ID will be generated as part of relationship initialization. Can only be updated when swapping sourceAppID with the destinationAppID. Defined values are: • Conforms to the Astra Identifier Schema
destinationClusterID	string	True	Identifier of the managed cluster to host the destination application. Must be provided on create because it determines what cluster the destination application will be created on. If provided on update, it must match the cluster ID of the destination application, so it can only change when swapping sourceAppID with destinationAppID. Defined values are: • Conforms to the Astra Identifier Schema

Name	Type	Required	Description
namespaceMapping	array[namespaceMapping]	False	The namespace or namespaces to use when creating the destination application, corresponding to the namespaces of the source application. Each JSON object contains the fields "clusterID" and "namespaces", where the "clusterID" value is the JSON string ID of the source or destination cluster, and the "namespaces" value is a JSON array of JSON strings. There must be exactly one JSON object for each cluster, and the namespaces will be correlated by index. If not provided, the same namespace from the source cluster will be used in the destination cluster. Defined values are: • Minimum length: 0 • Maximum length: 2

Name	Type	Required	Description
storageClasses	array[storageClasses]	False	The storage class to be used on the destination cluster when creating new Persistent Volume Claims (PVCs). Each JSON object contains the fields "clusterID" and "storageClassName", where the "clusterID" value is the JSON string ID of the source or destination cluster, and the "storageClassName" is the storage class to use when creating PVCs on that cluster. If not provided or if the value is missing for a cluster, the default storage class will be used for that cluster. Defined values are: • Minimum length: 0 • Maximum length: 2

Name	Type	Required	Description
state	string	True	The state of the relationship. Defined values are: • "establishing" - The relationship is being created. • "established" - The relationship is created. • "failingOver" - Failover of the application to the destination cluster is in progress. • "failedOver" - Failover of the application to the destination cluster has completed. • "deleting" - Resources created by the relationship are being cleaned up. • "deleted" - The relationship was cleaned up and deleted.

Name	Type	Required	Description
stateTransitions	array[type_astra_stateTransition]	False	Permitted state transitions. The following state transitions are possible for this resource: • "establishing": "established", "deleting" • "established": "failingOver", "deleting" • "failingOver": "failedOver", "deleting" • "failedOver": "establishing", "deleting" • "deleting": "deleted" • "deleted":
stateDesired	string	True	The desired state for the relationship. At creation, the only valid value is "established". Defined values are: • "established" - The relationship is created. • "failedOver" - Failover of the application to the destination cluster has completed. • "deleted" - The relationship was successfully cleaned up and deleted.

Name	Type	Required	Description
stateAllowed	array[string]	False	States that can be requested in a given state. The following states can be requested in each defined state: • "establishing": "established", "deleted" • "established": "failedOver", "deleted" • "failingOver": "failedOver", "deleted" • "failedOver": "established", "deleted" • "deleting": "deleted" • "deleted": "deleted"
stateDetails	array[type_astra_stateDetail]	True	Additional details about the current state, including why the current state was reached. If no details are available, this array will be empty. Defined values are: • Minimum Items: 0

Name	Type	Required	Description
transferState	string	False	State of the current or most recent snapshot transfer. Defined values are: • "transferring" - A new snapshot was created and is now being replicated to the destination cluster. This state also covers the transfers that have failed on previous attempts and are being continually retried. • "idle" - There is currently no transfer in progress.
transferStateTransitions	array[type_astra_stateTransition]	False	Permitted state transitions from a given defined state. The following state transitions are possible for this resource: • "transferring": "idle" • "idle": "transferring"
transferStateDetails	array[type_astra_stateDetail]	False	Additional details about the current state including why the current state was reached. If no details are available, this array will be empty. Defined values are: • Minimum Items: 0

Name	Type	Required	Description
healthState	string	True	Health state of the resource. Defined values are:
			• "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
healthStateTransitions	array[type_astra_stateTransition]	True	Permitted state transitions from a given defined state. The following state transitions are possible for this resource: • "indeterminate": "normal", "warning", "critical" • "normal": "indeterminate", "warning", "critical" • "warning": "indeterminate", "normal", "critical" • "critical": "indeterminate", "normal", "warning"
healthStateDetails	array[type_astra_stateDetail]	True	Additional details about the current state including why the current state was reached. If no details are available, this array will be empty. Defined values are: • Minimum Items: 0

Name	Type	Required	Description
metadata	type_astra_metadata_update	True	Client and service-specified metadata associated with the resource. Defined values are: • Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

type_astra_metadata_list

Name	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 an AppMirror resource for an app

GET `/accounts/{account_id}/k8s/v1/apps/{app_id}/appMirrors/{appMirror_id}`

Returns the stored AppMirror API resource in the JSON response body.

Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource • example: {{.Account}}
app_id	string	path	True	ID of the containing app resource
appMirror_id	string	path	True	ID of the appMirror collection to list

Response

> Status: 200, Returns the stored AppMirror API resource in the JSON response body.

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

Name	Type	Required	Description
sourceAppID	string	True	Identifier of the source application. Only updated when swapping the sourceAppID with the destinationAppID. Defined values are: • Conforms to the Astra Identifier Schema
sourceClusterID	string	True	Identifier of the managed cluster hosting the source application. This field is read-only and is determined based on the host cluster of the source application. If provided in an update, it must match the cluster ID of the source application, so it can only change when swapping the sourceAppID with destinationAppID. Defined values are: • Conforms to the Astra Identifier Schema
destinationAppID	string	False	Identifier of the destination application. Cannot be provided on create because a new app ID will be generated as part of relationship initialization. Can only be updated when swapping sourceAppID with the destinationAppID. Defined values are: • Conforms to the Astra Identifier Schema

Name	Type	Required	Description
destinationClusterID	string	True	Identifier of the managed cluster to host the destination application. Must be provided on create because it determines what cluster the destination application will be created on. If provided on update, it must match the cluster ID of the destination application, so it can only change when swapping sourceAppID with destinationAppID. Defined values are: • Conforms to the Astra Identifier Schema
namespaceMapping	array[namespaceMapping]	False	The namespace or namespaces to use when creating the destination application, corresponding to the namespaces of the source application. Each JSON object contains the fields "clusterID" and "namespaces", where the "clusterID" value is the JSON string ID of the source or destination cluster, and the "namespaces" value is a JSON array of JSON strings. There must be exactly one JSON object for each cluster, and the namespaces will be correlated by index. If not provided, the same namespace from the source cluster will be used in the destination cluster. Defined values are: • Minimum length: 0 • Maximum length: 2

Name	Type	Required	Description
storageClasses	array[storageClasses]	False	The storage class to be used on the destination cluster when creating new Persistent Volume Claims (PVCs). Each JSON object contains the fields "clusterID" and "storageClassName", where the "clusterID" value is the JSON string ID of the source or destination cluster, and the "storageClassName" is the storage class to use when creating PVCs on that cluster. If not provided or if the value is missing for a cluster, the default storage class will be used for that cluster. Defined values are: • Minimum length: 0 • Maximum length: 2

Name	Type	Required	Description
state	string	True	The state of the relationship. Defined values are: • "establishing" - The relationship is being created. • "established" - The relationship is created. • "failingOver" - Failover of the application to the destination cluster is in progress. • "failedOver" - Failover of the application to the destination cluster has completed. • "deleting" - Resources created by the relationship are being cleaned up. • "deleted" - The relationship was cleaned up and deleted.
stateTransitions	array[type_astra_stateTransition]	False	Permitted state transitions. The following state transitions are possible for this resource: • "establishing": "established", "deleting" • "established": "failingOver", "deleting" • "failingOver": "failedOver", "deleting" • "failedOver": "establishing", "deleting" • "deleting": "deleted" • "deleted":

Name	Type	Required	Description
stateDesired	string	True	The desired state for the relationship. At creation, the only valid value is "established". Defined values are: • "established" - The relationship is created. • "failedOver" - Failover of the application to the destination cluster has completed. • "deleted" - The relationship was successfully cleaned up and deleted.
stateAllowed	array[string]	False	States that can be requested in a given state. The following states can be requested in each defined state: • "establishing": "established", "deleted" • "established": "failedOver", "deleted" • "failingOver": "failedOver", "deleted" • "failedOver": "established", "deleted" • "deleting": "deleted" • "deleted": "deleted"
stateDetails	array[type_astra_stateDetail]	True	Additional details about the current state, including why the current state was reached. If no details are available, this array will be empty. Defined values are: • Minimum Items: 0

Name	Type	Required	Description
transferState	string	False	State of the current or most recent snapshot transfer. Defined values are: • "transferring" - A new snapshot was created and is now being replicated to the destination cluster. This state also covers the transfers that have failed on previous attempts and are being continually retried. • "idle" - There is currently no transfer in progress.
transferStateTransitions	array[type_astra_stateTransition]	False	Permitted state transitions from a given defined state. The following state transitions are possible for this resource: • "transferring": "idle" • "idle": "transferring"
transferStateDetails	array[type_astra_stateDetail]	False	Additional details about the current state including why the current state was reached. If no details are available, this array will be empty. Defined values are: • Minimum Items: 0

Name	Type	Required	Description
healthState	string	True	Health state of the resource. Defined values are: • "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
healthStateTransitions	array[type_astra_stateTransition]	True	Permitted state transitions from a given defined state. The following state transitions are possible for this resource: • "indeterminate": "normal", "warning", "critical" • "normal": "indeterminate", "warning", "critical" • "warning": "indeterminate", "normal", "critical" • "critical": "indeterminate", "normal", "warning"

Name	Type	Required	Description
healthStateDetails	array[type_astra_stateDetail]	True	Additional details about the current state including why the current state was reached. If no details are available, this array will be empty. Defined values are: • Minimum Items: 0
metadata	type_astra_metadata_update	True	Client and service-specified metadata associated with the resource. Defined values are: • Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Example response

```json
{
  "type": "application/astra-appMirror",
  "version": "1.1",
  "id": "512c8dac-b7d4-5be9-836e-ee672965866a",
  "sourceAppID": "efd639b6-fc92-4112-8841-0c0ab7890ae0",
  "sourceClusterID": "5789e026-c2e2-41e9-ab00-9766bcfa8951",
  "destinationAppID": "cd7b6d91-fc19-4983-a754-9a7bb4d80a7b",
  "destinationClusterID": "c5d023a9-4061-4a8a-bfbf-3be11ff06226",
  "namespaceMapping": [
    {
      "clusterID": "5789e026-c2e2-41e9-ab00-9766bcfa8951",
      "namespaces": [
        "ns1-src",
        "ns2-src"
      ]
    },
    {
      "clusterID": "c5d023a9-4061-4a8a-bfbf-3be11ff06226",
      "namespaces": [
        "ns1-dest",
        "ns2-dest"
      ]
    }
  ],
  "state": "established",
  "stateTransitions": [
    {
      "from": "establishing",
      "to": [
        "established",
        "deleting"
      ]
    },
    {
      "from": "established",
      "to": [
        "failingOver",
        "deleting"
      ]
    },
    {
      "from": "failingOver",
      "to": [
        "failedOver",
```

```json
        "deleting"
      ]
    },
    {
      "from": "failedOver",
      "to": [
        "establishing",
        "deleting"
      ]
    },
    {
      "from": "deleting",
      "to": [
        "deleted"
      ]
    }
  ],
  "stateDesired": "established",
  "stateAllowed": [
    "failedOver",
    "deleted"
  ],
  "stateDetails": [
    {
      "type": "https://astra.netapp.io/stateDetails/1",
      "title": "AppMirror relationship established",
      "detail": "The AppMirror relationship has been successfully established."
    }
  ],
  "healthState": "normal",
  "healthStateTransitions": [
    {
      "from": "indeterminate",
      "to": [
        "normal",
        "warning",
        "critical"
      ]
    },
    {
      "from": "normal",
      "to": [
        "indeterminate",
        "warning",
        "critical"
```

```
      ]
    },
    {
      "from": "warning",
      "to": [
        "indeterminate",
        "normal",
        "critical"
      ]
    },
    {
      "from": "critical",
      "to": [
        "indeterminate",
        "normal",
        "warning"
      ]
    }
  ],
  "healthStateDetails": [
    {
      "type": "https://astra.netapp.io/stateDetails/2",
      "title": "SnapMirror syncing successfully",
      "detail": "All SnapMirror relationships are synchronizing as
expected."
    }
  ],
  "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	

Name	Type	Required	Description
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

namespaceMapping

Name	Type	Required	Description
clusterID	string	False	Identifier of the cluster for which the namespaces are specified. Defined values are: • Conforms to the Astra Identifier Schema
namespaces	array[string]	False	List of namespaces to use on the cluster. Correlated with the other cluster namespace list by index. Defined values are: • Minimum length: 1 • Maximum length: 63 • Conforms to the DNS 1123 Label Schema
role	string	False	The initial role for this namespace definition. This parameter is optional except for when a same-cluster replication configuration is used. Defined values are: • "source" • "destination"

storageClasses

Name	Type	Required	Description
clusterID	string	False	Identifier of the cluster for which the storage class is specified. Defined values are: • Conforms to the Astra Identifier Schema
storageClassName	string	False	Name of the storage class to use when creating PVCs on the cluster specified in "clusterID". Defined values are: • Minimum length: 1 • Maximum length: 255
role	string	False	The initial role for this storage class definition. This parameter is optional except for when a same-cluster replication configuration is used. Defined values are: • "source" • "destination"

type_astra_stateTransition

Name	Type	Required	Description
from	string	True	
to	array[string]	True	

additionalDetails

type_astra_stateDetail

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

Name	Type	Required	Description
additionalDetails	additionalDetails	False	

type_astra_label

Name	Type	Required	Description
name	string	True	
value	string	True	

type_astra_metadata_update

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

- Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
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

Modify an AppMirror resource for an app

PUT /accounts/{account_id}/k8s/v1/apps/{app_id}/appMirrors/{appMirror_id}

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

Side Effects

- Various side effects based on desiredState.

Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource • example: {{.Account}}
app_id	string	path	True	ID of the containing app resource
appMirror_id	string	path	True	ID of the appMirror collection to list

Request Body

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

Side Effects

• Various side effects based on desiredState.

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

Name	Type	Required	Description
sourceAppID	string	False	Identifier of the source application. Only updated when swapping the sourceAppID with the destinationAppID. Defined values are: • Conforms to the Astra Identifier Schema
sourceClusterID	string	False	Identifier of the managed cluster hosting the source application. This field is read-only and is determined based on the host cluster of the source application. If provided in an update, it must match the cluster ID of the source application, so it can only change when swapping the sourceAppID with destinationAppID. Defined values are: • Conforms to the Astra Identifier Schema
destinationAppID	string	False	Identifier of the destination application. Cannot be provided on create because a new app ID will be generated as part of relationship initialization. Can only be updated when swapping sourceAppID with the destinationAppID. Defined values are: • Conforms to the Astra Identifier Schema

Name	Type	Required	Description
destinationClusterID	string	False	Identifier of the managed cluster to host the destination application. Must be provided on create because it determines what cluster the destination application will be created on. If provided on update, it must match the cluster ID of the destination application, so it can only change when swapping sourceAppID with destinationAppID. Defined values are: • Conforms to the Astra Identifier Schema
namespaceMapping	array[namespaceMapping]	False	The namespace or namespaces to use when creating the destination application, corresponding to the namespaces of the source application. Each JSON object contains the fields "clusterID" and "namespaces", where the "clusterID" value is the JSON string ID of the source or destination cluster, and the "namespaces" value is a JSON array of JSON strings. There must be exactly one JSON object for each cluster, and the namespaces will be correlated by index. If not provided, the same namespace from the source cluster will be used in the destination cluster. Defined values are: • Minimum length: 0 • Maximum length: 2

Name	Type	Required	Description
storageClasses	array[storageClasses]	False	The storage class to be used on the destination cluster when creating new Persistent Volume Claims (PVCs). Each JSON object contains the fields "clusterID" and "storageClassName", where the "clusterID" value is the JSON string ID of the source or destination cluster, and the "storageClassName" is the storage class to use when creating PVCs on that cluster. If not provided or if the value is missing for a cluster, the default storage class will be used for that cluster. Defined values are: • Minimum length: 0 • Maximum length: 2

Name	Type	Required	Description
state	string	False	The state of the relationship. Defined values are: • "establishing" - The relationship is being created. • "established" - The relationship is created. • "failingOver" - Failover of the application to the destination cluster is in progress. • "failedOver" - Failover of the application to the destination cluster has completed. • "deleting" - Resources created by the relationship are being cleaned up. • "deleted" - The relationship was cleaned up and deleted.
stateTransitions	array[type_astra_stateTransition]	False	Permitted state transitions. The following state transitions are possible for this resource: • "establishing": "established", "deleting" • "established": "failingOver", "deleting" • "failingOver": "failedOver", "deleting" • "failedOver": "establishing", "deleting" • "deleting": "deleted" • "deleted":

Name	Type	Required	Description
stateDesired	string	False	The desired state for the relationship. At creation, the only valid value is "established". Defined values are: • "established" - The relationship is created. • "failedOver" - Failover of the application to the destination cluster has completed. • "deleted" - The relationship was successfully cleaned up and deleted.
stateAllowed	array[string]	False	States that can be requested in a given state. The following states can be requested in each defined state: • "establishing": "established", "deleted" • "established": "failedOver", "deleted" • "failingOver": "failedOver", "deleted" • "failedOver": "established", "deleted" • "deleting": "deleted" • "deleted": "deleted"
stateDetails	array[type_astra_stateDetail]	False	Additional details about the current state, including why the current state was reached. If no details are available, this array will be empty. Defined values are: • Minimum Items: 0

Name	Type	Required	Description
transferState	string	False	State of the current or most recent snapshot transfer. Defined values are: • "transferring" - A new snapshot was created and is now being replicated to the destination cluster. This state also covers the transfers that have failed on previous attempts and are being continually retried. • "idle" - There is currently no transfer in progress.
transferStateTransitions	array[type_astra_stateTransition]	False	Permitted state transitions from a given defined state. The following state transitions are possible for this resource: • "transferring": "idle" • "idle": "transferring"
transferStateDetails	array[type_astra_stateDetail]	False	Additional details about the current state including why the current state was reached. If no details are available, this array will be empty. Defined values are: • Minimum Items: 0

Name	Type	Required	Description
healthState	string	False	Health state of the resource. Defined values are: • "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
healthStateTransitions	array[type_astra_stateTransition]	False	Permitted state transitions from a given defined state. The following state transitions are possible for this resource: • "indeterminate": "normal", "warning", "critical" • "normal": "indeterminate", "warning", "critical" • "warning": "indeterminate", "normal", "critical" • "critical": "indeterminate", "normal", "warning"

Name	Type	Required	Description
healthStateDetails	array[type_astra_stateDetail]	False	Additional details about the current state including why the current state was reached. If no details are available, this array will be empty. Defined values are: • Minimum Items: 0
metadata	type_astra_metadata_update	False	Client and service-specified metadata associated with the resource. Defined values are: • Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Example request

```
{
  "type": "application/astra-appMirror",
  "version": "1.1",
  "stateDesired": "failedOver"
}
```

Response

```
Status: 204, Indicates if the appMirror resource was updated.
```

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	
invalidFields	array[invalidFields]	False	List of invalid request body fields

Example response

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

Response

```
Status: 409, Conflict
```

Name	Type	Required	Description
type	string	True	
title	string	True	
detail	string	True	
status	string	True	
correlationID	string	False	
invalidFields	array[invalidFields]	False	List of invalid request body fields

Example response

```
{
   "type": "https://astra.netapp.io/problems/10",
   "title": "JSON resource conflict",
   "detail": "The request body JSON contains a field that conflicts with
an idempotent value.",
   "status": "409"
}
```

Response

```
Status: 403, Forbidden
```

Name	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/1",
   "title": "Resource not found",
   "detail": "The resource specified in the request URI wasn't found.",
   "status": "404"
}
```

Definitions

See Definitions

namespaceMapping

Name	Type	Required	Description
clusterID	string	False	Identifier of the cluster for which the namespaces are specified. Defined values are: • Conforms to the Astra Identifier Schema
namespaces	array[string]	False	List of namespaces to use on the cluster. Correlated with the other cluster namespace list by index. Defined values are: • Minimum length: 1 • Maximum length: 63 • Conforms to the DNS 1123 Label Schema
role	string	False	The initial role for this namespace definition. This parameter is optional except for when a same-cluster replication configuration is used. Defined values are: • "source" • "destination"

storageClasses

Name	Type	Required	Description
clusterID	string	False	Identifier of the cluster for which the storage class is specified. Defined values are: • Conforms to the Astra Identifier Schema
storageClassName	string	False	Name of the storage class to use when creating PVCs on the cluster specified in "clusterID". Defined values are: • Minimum length: 1 • Maximum length: 255
role	string	False	The initial role for this storage class definition. This parameter is optional except for when a same-cluster replication configuration is used. Defined values are: • "source" • "destination"

type_astra_stateTransition

Name	Type	Required	Description
from	string	True	
to	array[string]	True	

additionalDetails

type_astra_stateDetail

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

Name	Type	Required	Description
additionalDetails	additionalDetails	False	

type_astra_label

Name	Type	Required	Description
name	string	True	
value	string	True	

type_astra_metadata_update

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

- Conforms to the Astra Metadata Schema If not specified on create, a metadata object will be created with no labels. If not specified on update, the metadata object's labels, creationTimestamp and createdBy, will be preserved without modification.

Name	Type	Required	Description
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

invalidFields

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

Delete an AppMirror resource for an app

DELETE `/accounts/{account_id}/k8s/v1/apps/{app_id}/appMirrors/{appMirror_id}`

Removes the specified AppMirror API resource. Starts a process to asynchronously remove the AppMirror resource, along with any resources on the source and destination clusters that were created as a result of the AppMirror relationship. The resources removed are dependent on the state of the relationship at the time of deletion.

Side Effects

- The stateDesired field is set to "deleted".

- The state field is set to "deleting".

- If state is "established", the TridentMirrorRelationships and PersistentVolumeClaims created by the AppMirror relationship will be deleted.

- If state is "failedOver", the TridentMirrorRelationships created by the AppMirror relationship will be deleted and the PersistentVolumeClaims in the destination application will be left in place.

- When the asynchronous delete operation is completed, the AppMirror API resource will be removed from both the source and destination applications.

Parameters

Name	Type	In	Required	Description
account_id	string	path	True	ID of the containing account resource • example: {{.Account}}
app_id	string	path	True	ID of the containing app resource
appMirror_id	string	path	True	ID of the appMirror collection to list

Response

```
Status: 204, Indicates if the appMirror resource was deleted.
```

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/1",
   "title": "Resource not found",
   "detail": "The resource specified in the request URI wasn't found.",
   "status": "404"
}
```

Definitions

See Definitions

invalidParams

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