



# Manage SnapMirror policies

## ONTAP 9.8 REST API reference

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# Manage SnapMirror policies

## SnapMirror policies endpoint overview

### Managing SnapMirror policies

This API is used to manage SnapMirror policies of type "async" and "sync". When applied to a SnapMirror relationship, the SnapMirror policy controls the behavior of the relationship and specifies the configuration attributes for that relationship. The policy type "async" can be associated with a SnapMirror relationship that has either the FlexVol volume or FlexGroup volume or SVM as the endpoint. The policy type "sync" can be associated with a SnapMirror relationship that has FlexVol volume or a Consistency Group as the endpoint. The policy type "sync" can have a "sync\_type" of either "sync", "strict\_sync" or "automated\_failover". If the "sync\_type" is "sync" then a write success is returned to the client after writing the data to the primary endpoint and before writing the data to the secondary endpoint. If the "sync\_type" is "strict\_sync" then a write success is returned to the client after writing the data to the both primary and secondary endpoints. The "sync\_type" of "automated\_failover" can be associated with a SnapMirror relationship that has Consistency Group as the endpoint.

Mapping of SnapMirror policies from CLI to REST

CLI	REST
mirror-vault	async

CLI	REST	sync_type
sync-mirror	sync	sync
strict-sync-mirror	sync	strict_sync
automated-failover	sync	automated_failover

## Retrieve SnapMirror async and sync policy types

GET /snapmirror/policies

**Introduced In:** 9.6

Retrieves SnapMirror policies of type "async" and "sync".

### Related ONTAP commands

- `snapmirror policy show`

### Example

The following example shows how to retrieve a collection of SnapMirror policies.

```
GET "/api/snapmirror/policies"
```

## Learn more

- [DOC /snapmirror/policies](#)

## Parameters

Name	Type	In	Required	Description
sync_common_snap shot_schedule.name	string	query	False	Filter by sync_common_snap shot_schedule.name
sync_common_snap shot_schedule.uuid	string	query	False	Filter by sync_common_snap shot_schedule.uuid
type	string	query	False	Filter by type
retention.creation_sc hedule.name	string	query	False	Filter by retention.creation_s chedule.name
retention.creation_sc hedule.uuid	string	query	False	Filter by retention.creation_s chedule.uuid
retention.prefix	string	query	False	Filter by retention.prefix
retention.count	integer	query	False	Filter by retention.count
retention.label	string	query	False	Filter by retention.label
transfer_schedule.na me	string	query	False	Filter by transfer_schedule.n ame
transfer_schedule.uu id	string	query	False	Filter by transfer_schedule.u uid
comment	string	query	False	Filter by comment
name	string	query	False	Filter by name

Name	Type	In	Required	Description
identity_preservation	string	query	False	Filter by identity_preservation
scope	string	query	False	Filter by scope
uuid	string	query	False	Filter by uuid
sync_type	string	query	False	Filter by sync_type
throttle	integer	query	False	Filter by throttle
network_compression_enabled	boolean	query	False	Filter by network_compression_enabled
svm.uuid	string	query	False	Filter by svm.uuid
svm.name	string	query	False	Filter by svm.name
fields	array[string]	query	False	Specify the fields to return.
max_records	integer	query	False	Limit the number of records returned.
return_records	boolean	query	False	<p>The default is true for GET calls. When set to false, only the number of records is returned.</p> <ul style="list-style-type: none"> <li>• Default value: 1</li> </ul>

Name	Type	In	Required	Description
return_timeout	integer	query	False	<p>The number of seconds to allow the call to execute before returning. When iterating over a collection, the default is 15 seconds. ONTAP returns earlier if either max records or the end of the collection is reached.</p> <ul style="list-style-type: none"> <li>• Default value: 1</li> <li>• Max value: 120</li> <li>• Min value: 0</li> </ul>
order_by	array[string]	query	False	Order results by specified fields and optional [asc

## Response

Status: 200, Ok

Name	Type	Description
_links	<a href="#">_links</a>	
num_records	integer	Number of records
records	array[ <a href="#">snapmirror_policy</a> ]	

## Example response

```
{
  "_links": {
    "next": {
      "href": "/api/resourcelink"
    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "records": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "comment": "string",
    "identity_preservation": "full",
    "name": "Asynchronous",
    "retention": {
      "count": "7",
      "creation_schedule": {
        "_links": {
          "self": {
            "href": "/api/resourcelink"
          }
        },
        "name": "weekly",
        "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
      },
      "label": "hourly",
      "prefix": "string"
    },
    "scope": "svm",
    "svm": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "svm1",
      "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
    },
    "sync_common_snapshot_schedule": {
      "_links": {
```

```

    "self": {
      "href": "/api/resourcelink"
    }
  },
  "name": "weekly",
  "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
},
"sync_type": "sync",
"throttle": 0,
"transfer_schedule": {
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "name": "weekly",
  "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
},
"type": "async",
"uuid": "4ea7a442-86d1-11e0-ae1c-123478563412"
}
}

```

## Error

Status: Default

### ONTAP Error Response codes

Error code	Description
13303842	SnapMirror policy is not supported.

Name	Type	Description
error	error	



## Example error

```
{
  "error": {
    "arguments": {
      "code": "string",
      "message": "string"
    },
    "code": "4",
    "message": "entry doesn't exist",
    "target": "uuid"
  }
}
```

## Definitions

## See Definitions

href

Name	Type	Description
href	string	

\_links

Name	Type	Description
next	<a href="#">href</a>	
self	<a href="#">href</a>	

\_links

Name	Type	Description
self	<a href="#">href</a>	

creation\_schedule

Schedule used to create Snapshot copies on the destination for long term retention.

Name	Type	Description
_links	<a href="#">_links</a>	
name	string	Job schedule name
uuid	string	Job schedule UUID

snapmirror\_policy\_rule

SnapMirror policy rule for retention.

Name	Type	Description
count	integer	Number of Snapshot copies to be kept for retention.
creation_schedule	<a href="#">creation_schedule</a>	Schedule used to create Snapshot copies on the destination for long term retention.
label	string	Snapshot copy label

Name	Type	Description
prefix	string	Specifies the prefix for the Snapshot copy name to be created as per the schedule. If no value is specified, then the label is used as the prefix.

svm

Name	Type	Description
<a href="#">_links</a>	<a href="#">_links</a>	
name	string	The name of the SVM.
uuid	string	The unique identifier of the SVM.

sync\_common\_snapshot\_schedule

Schedule used to create common Snapshot copies for synchronous relationships.

Name	Type	Description
<a href="#">_links</a>	<a href="#">_links</a>	
name	string	Job schedule name
uuid	string	Job schedule UUID

transfer\_schedule

The schedule used to update asynchronous relationships.

Name	Type	Description
<a href="#">_links</a>	<a href="#">_links</a>	
name	string	Job schedule name
uuid	string	Job schedule UUID

snapmirror\_policy

SnapMirror policy information. SnapMirror policy can either be of type "async" or "sync". The policy type "async" can be associated with a SnapMirror relationship that has either the FlexVol volume or FlexGroup volume or SVM as the endpoint. The policy type "sync" along with "sync\_type" as "sync" or "strict\_sync" can be associated with a SnapMirror relationship that has FlexVol volume as the endpoint. The policy type "sync" can have a "sync\_type" of either "sync", "strict\_sync" or "automated\_failover". If the "sync\_type" is "sync" then a write success is returned to the client after writing the data to the source endpoint and before writing the data to the destination endpoint. If the "sync\_type" is "strict\_sync" then a

write success is returned to the client after writing the data to the both source and destination endpoints. If the "sync\_type" is "automated\_failover" then the policy can be associated with a SnapMirror relationship that has Consistency Group as the endpoint. Use the "sync" policy with "sync\_type" as "automated\_failover" to establish SnapMirror relationships for business continuity usecases. SnapMirror relationships with policy type as "sync" and "sync\_type" as "automated\_failover" can be monitored by the Mediator, if configured. In case the source Consistency Group endpoint is not reachable, the Mediator may trigger a failover to the destination Consistency Group endpoint.

Name	Type	Description
_links	<a href="#">_links</a>	
comment	string	Comment associated with the policy.
identity_preservation	string	Specifies which configuration of the source SVM is replicated to the destination SVM. This property is applicable only for SVM data protection with "async" policy type.
name	string	
network_compression_enabled	boolean	Specifies whether network compression is enabled for transfers. This is applicable only to the policies of type "async".
retention	array[ <a href="#">snapmirror_policy_rule</a> ]	Policy on Snapshot copy retention.
scope	string	Set to "svm" for policies owned by an SVM, otherwise set to "cluster".
svm	<a href="#">svm</a>	
sync_common_snapshot_schedule	<a href="#">sync_common_snapshot_schedule</a>	Schedule used to create common Snapshot copies for synchronous relationships.
sync_type	string	
throttle	integer	Throttle in KB/s. Default to unlimited.
transfer_schedule	<a href="#">transfer_schedule</a>	The schedule used to update asynchronous relationships.
type	string	
uuid	string	

## error\_arguments

Name	Type	Description
code	string	Argument code
message	string	Message argument

## error

Name	Type	Description
arguments	array[ <a href="#">error_arguments</a> ]	Message arguments
code	string	Error code
message	string	Error message
target	string	The target parameter that caused the error.

## Create a SnapMirror policy

POST /snapmirror/policies

**Introduced In:** 9.6

Creates a SnapMirror policy. The property "identity\_preservation" is applicable to only SnapMirror relationships with SVM endpoints and it indicates which configuration of the source SVM is replicated to the destination SVM.

It takes the following values:

- `full` - indicates that the source SVM configuration is replicated to the destination SVM endpoint.
- `exclude_network_config` - indicates that the source SVM configuration other than network configuration is replicated to the destination SVM endpoint.
- `exclude_network_and_protocol_config` - indicates that the source SVM configuration is not replicated to the destination SVM endpoint.

### Important note

- The property "identity\_preservation" is applicable to only SnapMirror relationships with SVM endpoints and it indicates which configuration of the source SVM is replicated to the destination SVM.
- The properties "identity\_preservation" and "transfer\_schedule" are not applicable for "sync" type policies.
- The properties "retention.creation\_schedule" and "retention.prefix" are not applicable for "sync" type policies.

- The property "sync\_common\_snapshot\_schedule" is not applicable for an "async" type policy.
- The property "retention.count" specifies the maximum number of Snapshot copies that are retained on the SnapMirror destination volume.
- When the property "retention.label" is specified, the Snapshot copies that have a SnapMirror label matching this property is transferred to the SnapMirror destination.
- When the property "retention.creation\_schedule" is specified, Snapshot copies are directly created on the SnapMirror destination. The Snapshot copies created have the same content as the latest Snapshot copy already present on the SnapMirror destination.

## Required properties

- name - Name of the new SnapMirror policy.

## Recommended optional properties

- svm.name or svm.uuid - Name or UUID of the SVM that owns the SnapMirror policy.

## Default property values

If not specified in POST, the following default property values are assigned:

- type - *async*
- sync\_type - *sync* (when type is *sync*)
- network\_compression\_enabled - *false*
- throttle - *0*
- identity\_preservation - *exclude\_network\_and\_protocol\_config*

## Related ONTAP commands

- `snapmirror policy create`

## Examples

Creating a SnapMirror policy of type "sync"

```
POST "/api/snapmirror/policies/" '{"name": "policy1", "svm.name": "VS0",
"type": "sync", "sync_type": "sync"}'
```

Creating a SnapMirror policy of type "async" with retention values

```
POST "/api/snapmirror/policies" '{"name": "policy_ret", "svm": {"name":
"vs1"}, "retention": {"label": ["smcreate"], "count": ["2"],
"creation_schedule": ["weekly"]}]'
```

Creating a SnapMirror policy of type "async"

```
POST "/api/snapmirror/policies" '{"name": "newPolicy", "svm":{"name" : "vs1"}, "type": "async"}'
```

Creating a SnapMirror policy of type "sync" with sync\_type as "automated\_failover"

```
POST "/api/snapmirror/policies/" '{"name": "policy1", "svm.name": "VS0", "type": "sync", "sync_type": "automated_failover" }'
```

## Learn more

- [DOC /snapmirror/policies](#)

## Parameters

Name	Type	In	Required	Description
return_records	boolean	query	False	The default is false. If set to true, the records are returned. <ul style="list-style-type: none"><li>• Default value:</li></ul>

Name	Type	In	Required	Description
return_timeout	integer	query	False	<p>The number of seconds to allow the call to execute before returning. When doing a POST, PATCH, or DELETE operation on a single record, the default is 0 seconds. This means that if an asynchronous operation is started, the server immediately returns HTTP code 202 (Accepted) along with a link to the job. If a non-zero value is specified for POST, PATCH, or DELETE operations, ONTAP waits that length of time to see if the job completes so it can return something other than 202.</p> <ul style="list-style-type: none"> <li>• Default value: 1</li> <li>• Max value: 120</li> <li>• Min value: 0</li> </ul>

## Request Body

Name	Type	Description
_links	<a href="#">_links</a>	
comment	string	Comment associated with the policy.
identity_preservation	string	Specifies which configuration of the source SVM is replicated to the destination SVM. This property is applicable only for SVM data protection with "async" policy type.
name	string	



Name	Type	Description
network_compression_enabled	boolean	Specifies whether network compression is enabled for transfers. This is applicable only to the policies of type "async".
retention	array[ <a href="#">snapmirror_policy_rule</a> ]	Policy on Snapshot copy retention.
scope	string	Set to "svm" for policies owned by an SVM, otherwise set to "cluster".
svm	<a href="#">svm</a>	
sync_common_snapshot_schedule	<a href="#">sync_common_snapshot_schedule</a>	Schedule used to create common Snapshot copies for synchronous relationships.
sync_type	string	
throttle	integer	Throttle in KB/s. Default to unlimited.
transfer_schedule	<a href="#">transfer_schedule</a>	The schedule used to update asynchronous relationships.
type	string	
uuid	string	

## Example request

```
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "comment": "string",
  "identity_preservation": "full",
  "name": "Asynchronous",
  "retention": {
    "count": "7",
    "creation_schedule": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "weekly",
      "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
    },
    "label": "hourly",
    "prefix": "string"
  },
  "scope": "svm",
  "svm": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
  },
  "sync_common_snapshot_schedule": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "weekly",
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
  },
  "sync_type": "sync",
  "throttle": 0,
}
```

```
"transfer_schedule": {
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "name": "weekly",
  "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
},
"type": "async",
"uuid": "4ea7a442-86d1-11e0-ae1c-123478563412"
}
```

## Response

Status: 202, Accepted

Name	Type	Description
job	<a href="#">job_link</a>	

## Example response

```
{
  "job": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "uuid": "string"
  }
}
```

## Error

Status: Default

ONTAP Error Response codes

Error code	Description
13303850	Invalid input parameter
13303887	Failed to create SnapMirror policy. Reason: Maximum number of allowed retention rules reached

Name	Type	Description
error	error	

### Example error

```
{
  "error": {
    "arguments": {
      "code": "string",
      "message": "string"
    },
    "code": "4",
    "message": "entry doesn't exist",
    "target": "uuid"
  }
}
```

### Definitions

## See Definitions

href

Name	Type	Description
href	string	

\_links

Name	Type	Description
self	<a href="#">href</a>	

creation\_schedule

Schedule used to create Snapshot copies on the destination for long term retention.

Name	Type	Description
_links	<a href="#">_links</a>	
name	string	Job schedule name
uuid	string	Job schedule UUID

snapmirror\_policy\_rule

SnapMirror policy rule for retention.

Name	Type	Description
count	integer	Number of Snapshot copies to be kept for retention.
creation_schedule	<a href="#">creation_schedule</a>	Schedule used to create Snapshot copies on the destination for long term retention.
label	string	Snapshot copy label
prefix	string	Specifies the prefix for the Snapshot copy name to be created as per the schedule. If no value is specified, then the label is used as the prefix.

svm

Name	Type	Description
_links	<a href="#">_links</a>	
name	string	The name of the SVM.
uuid	string	The unique identifier of the SVM.

#### sync\_common\_snapshot\_schedule

Schedule used to create common Snapshot copies for synchronous relationships.

Name	Type	Description
_links	<a href="#">_links</a>	
name	string	Job schedule name
uuid	string	Job schedule UUID

#### transfer\_schedule

The schedule used to update asynchronous relationships.

Name	Type	Description
_links	<a href="#">_links</a>	
name	string	Job schedule name
uuid	string	Job schedule UUID

#### snapmirror\_policy

SnapMirror policy information. SnapMirror policy can either be of type "async" or "sync". The policy type "async" can be associated with a SnapMirror relationship that has either the FlexVol volume or FlexGroup volume or SVM as the endpoint. The policy type "sync" along with "sync\_type" as "sync" or "strict\_sync" can be associated with a SnapMirror relationship that has FlexVol volume as the endpoint. The policy type "sync" can have a "sync\_type" of either "sync", "strict\_sync" or "automated\_failover". If the "sync\_type" is "sync" then a write success is returned to the client after writing the data to the source endpoint and before writing the data to the destination endpoint. If the "sync\_type" is "strict\_sync" then a write success is returned to the client after writing the data to the both source and destination endpoints. If the "sync\_type" is "automated\_failover" then the policy can be associated with a SnapMirror relationship that has Consistency Group as the endpoint. Use the "sync" policy with "sync\_type" as "automated\_failover" to establish SnapMirror relationships for business continuity usecases. SnapMirror relationships with policy type as "sync" and "sync\_type" as "automated\_failover" can be monitored by the Mediator, if configured. In case the source Consistency Group endpoint is not reachable, the Mediator may trigger a failover to the destination Consistency Group endpoint.

Name	Type	Description
_links	<a href="#">_links</a>	

Name	Type	Description
comment	string	Comment associated with the policy.
identity_preservation	string	Specifies which configuration of the source SVM is replicated to the destination SVM. This property is applicable only for SVM data protection with "async" policy type.
name	string	
network_compression_enabled	boolean	Specifies whether network compression is enabled for transfers. This is applicable only to the policies of type "async".
retention	array[ <a href="#">snapmirror_policy_rule</a> ]	Policy on Snapshot copy retention.
scope	string	Set to "svm" for policies owned by an SVM, otherwise set to "cluster".
svm	<a href="#">svm</a>	
sync_common_snapshot_schedule	<a href="#">sync_common_snapshot_schedule</a>	Schedule used to create common Snapshot copies for synchronous relationships.
sync_type	string	
throttle	integer	Throttle in KB/s. Default to unlimited.
transfer_schedule	<a href="#">transfer_schedule</a>	The schedule used to update asynchronous relationships.
type	string	
uuid	string	

job\_link

Name	Type	Description
_links	<a href="#">_links</a>	

Name	Type	Description
uuid	string	The UUID of the asynchronous job that is triggered by a POST, PATCH, or DELETE operation.

#### error\_arguments

Name	Type	Description
code	string	Argument code
message	string	Message argument

#### error

Name	Type	Description
arguments	array[ <a href="#">error_arguments</a> ]	Message arguments
code	string	Error code
message	string	Error message
target	string	The target parameter that caused the error.

## Delete a SnapMirror policy

DELETE /snapmirror/policies/{uuid}

**Introduced In:** 9.6

Deletes a SnapMirror policy.

### Related ONTAP commands

- `snapmirror policy delete`

### Example

```
DELETE "/api/snapmirror/policies/510c15d4-f9e6-11e8-bdb5-0050568e12c2"
```



## Learn more

- [DOC /snapmirror/policies](#)

## Parameters

Name	Type	In	Required	Description
uuid	string	path	True	Policy UUID
return_timeout	integer	query	False	<p>The number of seconds to allow the call to execute before returning. When doing a POST, PATCH, or DELETE operation on a single record, the default is 0 seconds. This means that if an asynchronous operation is started, the server immediately returns HTTP code 202 (Accepted) along with a link to the job. If a non-zero value is specified for POST, PATCH, or DELETE operations, ONTAP waits that length of time to see if the job completes so it can return something other than 202.</p> <ul style="list-style-type: none"><li>• Default value: 1</li><li>• Max value: 120</li><li>• Min value: 0</li></ul>

## Response

Status: 202, Accepted

Name	Type	Description
job	<a href="#">job_link</a>	

## Example response

```
{
  "job": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "uuid": "string"
  }
}
```

## Error

Status: Default, Error

Name	Type	Description
error	error	

## Example error

```
{
  "error": {
    "arguments": {
      "code": "string",
      "message": "string"
    },
    "code": "4",
    "message": "entry doesn't exist",
    "target": "uuid"
  }
}
```

## Definitions

## See Definitions

href

Name	Type	Description
href	string	

\_links

Name	Type	Description
self	<a href="#">href</a>	

job\_link

Name	Type	Description
_links	<a href="#">_links</a>	
uuid	string	The UUID of the asynchronous job that is triggered by a POST, PATCH, or DELETE operation.

error\_arguments

Name	Type	Description
code	string	Argument code
message	string	Message argument

error

Name	Type	Description
arguments	array[ <a href="#">error_arguments</a> ]	Message arguments
code	string	Error code
message	string	Error message
target	string	The target parameter that caused the error.

## Retrieve a specific SnapMirror policy

GET /snapmirror/policies/{uuid}

**Introduced In:** 9.6

Retrieves a specific SnapMirror policy.

## Example

```
GET "/api/snapmirror/policies/567aaac0-f863-11e8-a666-0050568e12c2"
```

## Learn more

- [DOC /snapmirror/policies](#)

## Parameters

Name	Type	In	Required	Description
uuid	string	path	True	Policy UUID
fields	array[string]	query	False	Specify the fields to return.

## Response

```
Status: 200, Ok
```

Name	Type	Description
<a href="#">_links</a>	<a href="#">_links</a>	
comment	string	Comment associated with the policy.
identity_preservation	string	Specifies which configuration of the source SVM is replicated to the destination SVM. This property is applicable only for SVM data protection with "async" policy type.
name	string	
network_compression_enabled	boolean	Specifies whether network compression is enabled for transfers. This is applicable only to the policies of type "async".
retention	array[ <a href="#">snapmirror_policy_rule</a> ]	Policy on Snapshot copy retention.

Name	Type	Description
scope	string	Set to "svm" for policies owned by an SVM, otherwise set to "cluster".
svm	svm	
sync_common_snapshot_schedule	<a href="#">sync_common_snapshot_schedule</a>	Schedule used to create common Snapshot copies for synchronous relationships.
sync_type	string	
throttle	integer	Throttle in KB/s. Default to unlimited.
transfer_schedule	<a href="#">transfer_schedule</a>	The schedule used to update asynchronous relationships.
type	string	
uuid	string	

## Example response

```
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "comment": "string",
  "identity_preservation": "full",
  "name": "Asynchronous",
  "retention": {
    "count": "7",
    "creation_schedule": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "weekly",
      "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
    },
    "label": "hourly",
    "prefix": "string"
  },
  "scope": "svm",
  "svm": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
  },
  "sync_common_snapshot_schedule": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "weekly",
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
  },
  "sync_type": "sync",
  "throttle": 0,
}
```

```

"transfer_schedule": {
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "name": "weekly",
  "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
},
"type": "async",
"uuid": "4ea7a442-86d1-11e0-ae1c-123478563412"
}

```

## Error

Status: Default

### ONTAP Error Response codes

Error code	Description
13303842	SnapMirror policy is not supported.

Name	Type	Description
error	error	

### Example error

```

{
  "error": {
    "arguments": {
      "code": "string",
      "message": "string"
    },
    "code": "4",
    "message": "entry doesn't exist",
    "target": "uuid"
  }
}

```

# Definitions



## See Definitions

href

Name	Type	Description
href	string	

\_links

Name	Type	Description
self	<a href="#">href</a>	

creation\_schedule

Schedule used to create Snapshot copies on the destination for long term retention.

Name	Type	Description
_links	<a href="#">_links</a>	
name	string	Job schedule name
uuid	string	Job schedule UUID

snapmirror\_policy\_rule

SnapMirror policy rule for retention.

Name	Type	Description
count	integer	Number of Snapshot copies to be kept for retention.
creation_schedule	<a href="#">creation_schedule</a>	Schedule used to create Snapshot copies on the destination for long term retention.
label	string	Snapshot copy label
prefix	string	Specifies the prefix for the Snapshot copy name to be created as per the schedule. If no value is specified, then the label is used as the prefix.

svm

Name	Type	Description
<a href="#">_links</a>	<a href="#">_links</a>	
name	string	The name of the SVM.
uuid	string	The unique identifier of the SVM.

#### sync\_common\_snapshot\_schedule

Schedule used to create common Snapshot copies for synchronous relationships.

Name	Type	Description
<a href="#">_links</a>	<a href="#">_links</a>	
name	string	Job schedule name
uuid	string	Job schedule UUID

#### transfer\_schedule

The schedule used to update asynchronous relationships.

Name	Type	Description
<a href="#">_links</a>	<a href="#">_links</a>	
name	string	Job schedule name
uuid	string	Job schedule UUID

#### error\_arguments

Name	Type	Description
code	string	Argument code
message	string	Message argument

#### error

Name	Type	Description
arguments	array[ <a href="#">error_arguments</a> ]	Message arguments
code	string	Error code
message	string	Error message

Name	Type	Description
target	string	The target parameter that caused the error.

## Update the SnapMirror policy

PATCH /snapmirror/policies/{uuid}

**Introduced In:** 9.6

Updates the SnapMirror policy.

### Important notes

- The properties "transfer\_schedule" and "throttle" can be modified only if all the SnapMirror relationships associated with the specified SnapMirror policy have the same values.
- The properties "retention.label" and "retention.count" are mandatory if "retention" is provided in the input. The provided "retention.label" is the final list and is replaced with the existing values.
- The value of the "identity\_preservation" property cannot be changed if the SnapMirror relationships associated with the policy have different identity\_preservation configurations.
- If the SnapMirror policy "identity\_preservation" value matches the "identity\_preservation" value of the associated SnapMirror relationships, then the "identity\_preservation" value can be changed from a higher "identity\_preservation" threshold value to a lower "identity\_preservation" threshold value but not vice-versa. For example, the threshold value of the "identity\_preservation" property can be changed from "full" to "exclude\_network\_config" to "exclude\_network\_and\_protocol\_config", but could not be increased from "exclude\_network\_and\_protocol\_config" to "exclude\_network\_config" to "full".

### Related ONTAP commands

- `snapmirror policy modify`

### Example

Updating the "retention" property

```
PATCH "/api/snapmirror/policies/fe65686d-00dc-11e9-b5fb-0050568e3f83"
'{"retention" : {"label" : ["sm_created", "lab2"], "count": ["1","2"],
"creation_schedule": {"name": ["weekly"]}}}'
```

Updating "transfer\_schedule", "throttle", and "identity\_preservation" properties

```
PATCH "/api/snapmirror/policies/8aef950b-3bef-11e9-80ac-0050568ea591"
'{"transfer_schedule.name" : "weekly", "throttle" : "100",
"identity_preservation":"exclude_network_and_protocol_config"}'
```

## Learn more

- [DOC /snapmirror/policies](#)

## Parameters

Name	Type	In	Required	Description
uuid	string	path	True	Policy UUID
return_timeout	integer	query	False	<p>The number of seconds to allow the call to execute before returning. When doing a POST, PATCH, or DELETE operation on a single record, the default is 0 seconds. This means that if an asynchronous operation is started, the server immediately returns HTTP code 202 (Accepted) along with a link to the job. If a non-zero value is specified for POST, PATCH, or DELETE operations, ONTAP waits that length of time to see if the job completes so it can return something other than 202.</p> <ul style="list-style-type: none"><li>• Default value: 1</li><li>• Max value: 120</li><li>• Min value: 0</li></ul>

## Request Body

Name	Type	Description
_links	<a href="#">_links</a>	
comment	string	Comment associated with the policy.

Name	Type	Description
identity_preservation	string	Specifies which configuration of the source SVM is replicated to the destination SVM. This property is applicable only for SVM data protection with "async" policy type.
name	string	
network_compression_enabled	boolean	Specifies whether network compression is enabled for transfers. This is applicable only to the policies of type "async".
retention	array[ <a href="#">snapmirror_policy_rule</a> ]	Policy on Snapshot copy retention.
scope	string	Set to "svm" for policies owned by an SVM, otherwise set to "cluster".
svm	<a href="#">svm</a>	
sync_common_snapshot_schedule	<a href="#">sync_common_snapshot_schedule</a>	Schedule used to create common Snapshot copies for synchronous relationships.
sync_type	string	
throttle	integer	Throttle in KB/s. Default to unlimited.
transfer_schedule	<a href="#">transfer_schedule</a>	The schedule used to update asynchronous relationships.
type	string	
uuid	string	

## Example request

```
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "comment": "string",
  "identity_preservation": "full",
  "name": "Asynchronous",
  "retention": {
    "count": "7",
    "creation_schedule": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "weekly",
      "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
    },
    "label": "hourly",
    "prefix": "string"
  },
  "scope": "svm",
  "svm": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
  },
  "sync_common_snapshot_schedule": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "weekly",
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
  },
  "sync_type": "sync",
  "throttle": 0,
}
```

```
"transfer_schedule": {
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "name": "weekly",
  "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
},
"type": "async",
"uuid": "4ea7a442-86d1-11e0-ae1c-123478563412"
}
```

## Response

Status: 202, Accepted

Name	Type	Description
job	<a href="#">job_link</a>	

## Example response

```
{
  "job": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "uuid": "string"
  }
}
```

## Error

Status: Default

ONTAP Error Response codes

Error code	Description
13303842	SnapMirror policy is not supported.
13303843	Conflicting values between SnapMirror policy and SnapMirror relationships for either 'transfer_schedule, throttle or identity_preservation' properties
13303850	Invalid input parameter
13303887	Failed to create SnapMirror policy. Reason: Maximum number of allowed retention rules reached

Name	Type	Description
error	error	

### Example error

```
{
  "error": {
    "arguments": {
      "code": "string",
      "message": "string"
    },
    "code": "4",
    "message": "entry doesn't exist",
    "target": "uuid"
  }
}
```

### Definitions



## See Definitions

href

Name	Type	Description
href	string	

\_links

Name	Type	Description
self	<a href="#">href</a>	

creation\_schedule

Schedule used to create Snapshot copies on the destination for long term retention.

Name	Type	Description
_links	<a href="#">_links</a>	
name	string	Job schedule name
uuid	string	Job schedule UUID

snapmirror\_policy\_rule

SnapMirror policy rule for retention.

Name	Type	Description
count	integer	Number of Snapshot copies to be kept for retention.
creation_schedule	<a href="#">creation_schedule</a>	Schedule used to create Snapshot copies on the destination for long term retention.
label	string	Snapshot copy label
prefix	string	Specifies the prefix for the Snapshot copy name to be created as per the schedule. If no value is specified, then the label is used as the prefix.

svm

Name	Type	Description
_links	<a href="#">_links</a>	
name	string	The name of the SVM.
uuid	string	The unique identifier of the SVM.

#### sync\_common\_snapshot\_schedule

Schedule used to create common Snapshot copies for synchronous relationships.

Name	Type	Description
_links	<a href="#">_links</a>	
name	string	Job schedule name
uuid	string	Job schedule UUID

#### transfer\_schedule

The schedule used to update asynchronous relationships.

Name	Type	Description
_links	<a href="#">_links</a>	
name	string	Job schedule name
uuid	string	Job schedule UUID

#### snapmirror\_policy

SnapMirror policy information. SnapMirror policy can either be of type "async" or "sync". The policy type "async" can be associated with a SnapMirror relationship that has either the FlexVol volume or FlexGroup volume or SVM as the endpoint. The policy type "sync" along with "sync\_type" as "sync" or "strict\_sync" can be associated with a SnapMirror relationship that has FlexVol volume as the endpoint. The policy type "sync" can have a "sync\_type" of either "sync", "strict\_sync" or "automated\_failover". If the "sync\_type" is "sync" then a write success is returned to the client after writing the data to the source endpoint and before writing the data to the destination endpoint. If the "sync\_type" is "strict\_sync" then a write success is returned to the client after writing the data to the both source and destination endpoints. If the "sync\_type" is "automated\_failover" then the policy can be associated with a SnapMirror relationship that has Consistency Group as the endpoint. Use the "sync" policy with "sync\_type" as "automated\_failover" to establish SnapMirror relationships for business continuity usecases. SnapMirror relationships with policy type as "sync" and "sync\_type" as "automated\_failover" can be monitored by the Mediator, if configured. In case the source Consistency Group endpoint is not reachable, the Mediator may trigger a failover to the destination Consistency Group endpoint.

Name	Type	Description
_links	<a href="#">_links</a>	

Name	Type	Description
comment	string	Comment associated with the policy.
identity_preservation	string	Specifies which configuration of the source SVM is replicated to the destination SVM. This property is applicable only for SVM data protection with "async" policy type.
name	string	
network_compression_enabled	boolean	Specifies whether network compression is enabled for transfers. This is applicable only to the policies of type "async".
retention	array[ <a href="#">snapmirror_policy_rule</a> ]	Policy on Snapshot copy retention.
scope	string	Set to "svm" for policies owned by an SVM, otherwise set to "cluster".
svm	<a href="#">svm</a>	
sync_common_snapshot_schedule	<a href="#">sync_common_snapshot_schedule</a>	Schedule used to create common Snapshot copies for synchronous relationships.
sync_type	string	
throttle	integer	Throttle in KB/s. Default to unlimited.
transfer_schedule	<a href="#">transfer_schedule</a>	The schedule used to update asynchronous relationships.
type	string	
uuid	string	

job\_link

Name	Type	Description
<a href="#">_links</a>	<a href="#">_links</a>	

Name	Type	Description
uuid	string	The UUID of the asynchronous job that is triggered by a POST, PATCH, or DELETE operation.

#### error\_arguments

Name	Type	Description
code	string	Argument code
message	string	Message argument

#### error

Name	Type	Description
arguments	array[ <a href="#">error_arguments</a> ]	Message arguments
code	string	Error code
message	string	Error message
target	string	The target parameter that caused the error.

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