



Manage SnapMirror relationship transfers

REST API reference

NetApp
February 11, 2026

Table of Contents

Manage SnapMirror relationship transfers	1
Manage SnapMirror relationship transfers	1
Overview	1
Retrieve ongoing SnapMirror transfers for a relationship	1
Related ONTAP commands	1
Example	1
Learn more	1
Parameters	1
Response	5
Error	7
Definitions	8
Start a SnapMirror transfer operation	14
Default property values	14
Related ONTAP commands	14
Examples	15
Learn more	15
Parameters	15
Request Body	16
Response	20
Error	20
Definitions	21
Retrieve attributes of an ongoing SnapMirror transfer	27
Related ONTAP commands	27
Example	28
Learn more	28
Parameters	28
Response	28
Error	31
Definitions	32
Cancel an ongoing SnapMirror transfer	37
Related ONTAP commands	37
Example	37
Learn more	37
Parameters	37
Request Body	37
Response	39
Error	40
Definitions	40

Manage SnapMirror relationship transfers

Manage SnapMirror relationship transfers

Overview

This API is used to manage transfers on an existing SnapMirror relationship.

You can initiate SnapMirror operations such as "initialize", "update", "restore-transfer", and "abort" using this API on asynchronous SnapMirror relationship. On a synchronous SnapMirror relationship, you can initiate SnapMirror "initialize" operation. The GET for this API reports the status of both active transfers and transfers that have terminated within the past 24 hours. For the restore relationships, the POST on transfers API triggers "restore-transfer". Successful completion of "restore" also deletes the restore relationship. If the "restore" fails, DELETE on relationships must be called to delete the restore relationship.

A transfer on an asynchronous SnapMirror relationship with Application Consistency Group endpoints expands the destination Application Consistency Group endpoint if the source Application Consistency Group endpoint is already expanded.

Retrieve ongoing SnapMirror transfers for a relationship

GET /snapmirror/relationships/{relationship.uuid}/transfers

Introduced In: 9.6

Retrieves the list of ongoing SnapMirror transfers for the specified relationship.

Related ONTAP commands

- snapmirror show

Example

```
GET "/api/snapmirror/relationships/293baa53-e63d-11e8-bff1-005056a793dd/transfers"
```

Learn more

- [DOC /snapmirror/relationships/{relationship.uuid}/transfers](#)

Parameters

Name	Type	In	Required	Description
relationship.uuid	string	path	True	SnapMirror relationship UUID
snapshot	string	query	False	Filter by snapshot

Name	Type	In	Required	Description
error_info.message	string	query	False	Filter by error_info.message <ul style="list-style-type: none"> • Introduced in: 9.10
error_info.code	integer	query	False	Filter by error_info.code <ul style="list-style-type: none"> • Introduced in: 9.10
bytes_transferred	integer	query	False	Filter by bytes_transferred
uuid	string	query	False	Filter by uuid
relationship.restore	boolean	query	False	Filter by relationship.restore
relationship.destination.luns.uuid	string	query	False	Filter by relationship.destination.luns.uuid <ul style="list-style-type: none"> • Introduced in: 9.16
relationship.destination.luns.name	string	query	False	Filter by relationship.destination.luns.name <ul style="list-style-type: none"> • Introduced in: 9.16
relationship.destination.svm.name	string	query	False	Filter by relationship.destination.svm.name
relationship.destination.svm.uuid	string	query	False	Filter by relationship.destination.svm.uuid

Name	Type	In	Required	Description
relationship.destination.consistency_group_volumes.name	string	query	False	Filter by relationship.destination.consistency_group_volumes.name <ul style="list-style-type: none"> • Introduced in: 9.8
relationship.destination.cluster.name	string	query	False	Filter by relationship.destination.cluster.name <ul style="list-style-type: none"> • Introduced in: 9.7
relationship.destination.cluster.uuid	string	query	False	Filter by relationship.destination.cluster.uuid <ul style="list-style-type: none"> • Introduced in: 9.7
relationship.destination.path	string	query	False	Filter by relationship.destination.path
state	string	query	False	Filter by state
last_updated_time	string	query	False	Filter by last_updated_time <ul style="list-style-type: none"> • Introduced in: 9.14
on_demand_attrs	string	query	False	Filter by on_demand_attrs <ul style="list-style-type: none"> • Introduced in: 9.13
total_duration	string	query	False	Filter by total_duration <ul style="list-style-type: none"> • Introduced in: 9.10
checkpoint_size	integer	query	False	Filter by checkpoint_size

Name	Type	In	Required	Description
end_time	string	query	False	Filter by end_time <ul style="list-style-type: none"> Introduced in: 9.10
network_compression_ratio	string	query	False	Filter by network_compression_ratio <ul style="list-style-type: none"> Introduced in: 9.13
throttle	integer	query	False	Filter by throttle <ul style="list-style-type: none"> Introduced in: 9.9
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	The default is true for GET calls. When set to false, only the number of records is returned. <ul style="list-style-type: none"> Default value: 1
return_timeout	integer	query	False	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. <ul style="list-style-type: none"> Default value: 15 Max value: 120 Min value: 0

Name	Type	In	Required	Description
order_by	array[string]	query	False	Order results by specified fields and optional [asc]

Response

Status: 200, Ok

Name	Type	Description
_links	_links	
num_records	integer	Number of records
records	array[snapmirror_transfer]	

Example response

```
{
  "_links": {
    "next": {
      "href": "/api/resourcelink"
    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "num_records": 1,
  "records": [
    {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "bytes_transferred": 0,
      "checkpoint_size": 0,
      "end_time": "2020-12-02 18:36:19 -0800",
      "error_info": {
        "code": 6620046,
        "message": "Transfer aborted"
      },
      "last_updated_time": "2023-09-15 16:58:39 -0700",
      "network_compression_ratio": 61,
      "on_demand_attrs": "read_write_with_user_data_pull",
      "relationship": {
        "destination": {
          "cluster": {
            "_links": {
              "self": {
                "href": "/api/resourcelink"
              }
            },
            "name": "cluster1",
            "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
          },
          "consistency_group_volumes": [
            {
              "name": "volume1"
            }
          ],
          "luns": {
            "lun": [
              {
                "name": "lun1"
              }
            ]
          }
        }
      }
    }
  ]
}
```

```

        "_links": {
            "self": {
                "href": "/api/resourcelink"
            }
        },
        "name": "/vol/volume1/lun1",
        "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
    },
    "path": "svm1:volume1",
    "svm": {
        "_links": {
            "self": {
                "href": "/api/resourcelink"
            }
        },
        "name": "svm1",
        "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
    }
},
"uuid": "d2d7ceea-ab52-11e8-855e-00505682a4c7"
},
"snapshot": "string",
"state": "string",
"storage_efficiency_enabled": true,
"throttle": 0,
"total_duration": "PT28M41S",
"uuid": "4ea7a442-86d1-11e0-ae1c-123478563412"
}
]
}

```

Error

Status: Default, Error

Name	Type	Description
error	returned_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	href	
self	href	

_links

Name	Type	Description
self	href	

error_info

Error information for the transfer.

Name	Type	Description
code	integer	Error code
message	string	Error message

files

Specifies a file or LUN consisting of a source_path and an optional destination_path. If not specified, the destination_path is the same as the source_path. File restore is not supported if the source_path or destination_path contains commas in its directory or file name.

Name	Type	Description
destination_path	string	
source_path	string	

options

cluster

Name	Type	Description
_links	_links	
name	string	
uuid	string	

consistency_group_volumes

Name	Type	Description
name	string	The name of the volume.

luns

Optional property for a SnapMirror endpoint. Specifies the list of source LUNs and optionally list of destination LUNs during SnapMirror Consistency Group LUN restore operation.

Name	Type	Description
_links	_links	
name	string	<p>The name of a LUN. A LUN is located within a volume. Optionally, it can be located within a qtree in a volume.</p> <p>LUN names are paths of the form "/vol/<volume>[/<qtree>]/<namespace>" where the qtree name is optional.</p>
uuid	string	The unique identifier of the LUN.

svm

SVM, applies only to SVM-scoped objects.

Name	Type	Description
_links	_links	
name	string	The name of the SVM. This field cannot be specified in a PATCH method.
uuid	string	The unique identifier of the SVM. This field cannot be specified in a PATCH method.

snapmirror_endpoint

Endpoint of a SnapMirror relationship. For a GET request, the property "cluster" is populated when the endpoint is on a remote cluster. A POST request to create the destination SVM endpoint or to establish an SVM DR relationship must have the property "cluster" populated with the remote cluster details. A POST request to create the destination FlexVol volume, FlexGroup volume, Consistency Group, ONTAP S3 bucket and NON-ONTAP object-store endpoints can optionally specify the "cluster" property when the source SVM and the destination SVM are peered. A POST request to establish a SnapMirror relationship between the source endpoint and destination endpoint and when the source SVM and the destination

SVM are not peered, must specify the "cluster" property for the remote endpoint.

Name	Type	Description
cluster	cluster	
consistency_group_volumes	array[consistency_group_volumes]	This property specifies the list of FlexVol volumes or LUNs of a Consistency Group. Optional on the ASA r2 platform. Mandatory for all other platforms.
luns	luns	Optional property for a SnapMirror endpoint. Specifies the list of source LUNs and optionally list of destination LUNs during SnapMirror Consistency Group LUN restore operation.
path	string	ONTAP FlexVol/FlexGroup - svm1:volume1 ONTAP SVM - svm1: ONTAP Consistency Group - svm1:/cg/cg_name ONTAP S3 - svm1:/bucket/bucket1 NON-ONTAP - objstore1:/objstore <ul style="list-style-type: none"> example: svm1:volume1 Introduced in: 9.6 x-nullable: true
svm	svm	SVM, applies only to SVM-scoped objects.

relationship

Name	Type	Description
destination	snapmirror_endpoint	<p>Endpoint of a SnapMirror relationship. For a GET request, the property "cluster" is populated when the endpoint is on a remote cluster. A POST request to create the destination SVM endpoint or to establish an SVM DR relationship must have the property "cluster" populated with the remote cluster details. A POST request to create the destination FlexVol volume, FlexGroup volume, Consistency Group, ONTAP S3 bucket and NON-ONTAP object-store endpoints can optionally specify the "cluster" property when the source SVM and the destination SVM are peered. A POST request to establish a SnapMirror relationship between the source endpoint and destination endpoint and when the source SVM and the destination SVM are not peered, must specify the "cluster" property for the remote endpoint.</p> <ul style="list-style-type: none"> • Introduced in: 9.6
restore	boolean	Is the relationship for restore?
uuid	string	Unique identifier of the SnapMirror relationship.

`snapmirror_transfer`

SnapMirror transfer information

Name	Type	Description
<code>_links</code>	_links	
<code>bytes_transferred</code>	integer	Bytes transferred
<code>checkpoint_size</code>	integer	Amount of data transferred in bytes as recorded in the restart checkpoint.
<code>end_time</code>	string	End time of the transfer.

Name	Type	Description
error_info	error_info	Error information for the transfer.
last_updated_time	string	Last updated time of the bytes transferred in an active transfer.
network_compression_ratio	string	Specifies the compression ratio achieved for the data sent over the wire with network compression enabled. This property is only valid for active transfers.
on_demand_attrs	string	Specifies whether or not an on-demand restore is being carried out. This is only supported for the transfer of restore relationships for entire volumes from the object store. A value for <code>read_write_with_user_data_pull</code> should be provided to start an on-demand restore. A file restore from the object store does not support this option.
relationship	relationship	
snapshot	string	Name of snapshot being transferred.
state	string	Status of the transfer. Set PATCH state to "aborted" to abort the transfer. Set PATCH state to "hard_aborted" to abort the transfer and discard the restart checkpoint. To find "queued" transfers refer to relationships GET API.
throttle	integer	Throttle, in KBs per second. This "throttle" overrides the "throttle" set on the SnapMirror relationship or SnapMirror relationship's policy. If neither of these are set, defaults to 0, which is interpreted as unlimited.
total_duration	string	Elapsed transfer time.

Name	Type	Description
uuid	string	Unique identifier of the SnapMirror transfer.

error_arguments

Name	Type	Description
code	string	Argument code
message	string	Message argument

returned_error

Name	Type	Description
arguments	array[error_arguments]	Message arguments
code	string	Error code
message	string	Error message
target	string	The target parameter that caused the error.

Start a SnapMirror transfer operation

POST /snapmirror/relationships/{relationship.uuid}/transfers

Introduced In: 9.6

Starts a SnapMirror transfer operation. This API initiates a restore operation if the SnapMirror relationship is of type "restore". Otherwise, it initiates a SnapMirror "initialize" operation or "update" operation based on the current SnapMirror state.

Default property values

- storage_efficiency_enabled - *true*

Related ONTAP commands

- snapmirror update
- snapmirror initialize
- snapmirror restore

Examples

The following examples show how to perform SnapMirror "initialize", "update", and "restore" operations.

Perform SnapMirror initialize or update

```
POST "/api/snapmirror/relationships/e4e7e130-0279-11e9-b566-0050568e9909/transfers" '{}'
```

Perform SnapMirror initialize, update or restore with throttle value set

```
POST "/api/snapmirror/relationships/e4e7e130-0279-11e9-b566-0050568e9909/transfers" '{"throttle":"100"}'
```

Perform SnapMirror restore transfer of a file

```
POST "/api/snapmirror/relationships/c8c62a90-0fef-11e9-b09e-0050568e7067/transfers" '{"source_snapshot": "src", "files": [{"source_path": "/a1.txt.0", "destination_path": "/a1-renamed.txt.0"}]}'
```

Performing a SnapMirror initialize or update using a particular snapshot.

```
POST "/api/snapmirror/relationships/e4e7e130-0279-11e9-b566-0050568e9909/transfers" {"source_snapshot": "snap1"}
```

Learn more

- [DOC /snapmirror/relationships/{relationship.uuid}/transfers](#)

Parameters

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

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"> • Default value: 0 • Max value: 120 • Min value: 0

Request Body

Name	Type	Description
bytes_transferred	integer	Bytes transferred
checkpoint_size	integer	Amount of data transferred in bytes as recorded in the restart checkpoint.
end_time	string	End time of the transfer.
error_info	error_info	Error information for the transfer.

Name	Type	Description
files	array[files]	This is supported for transfer of restore relationship only. This specifies the list of files or LUNs to be restored. Can contain up to eight files or LUNs.
last_updated_time	string	Last updated time of the bytes transferred in an active transfer.
network_compression_ratio	string	Specifies the compression ratio achieved for the data sent over the wire with network compression enabled. This property is only valid for active transfers.
on_demand_attrs	string	Specifies whether or not an on-demand restore is being carried out. This is only supported for the transfer of restore relationships for entire volumes from the object store. A value for <code>read_write_with_user_data_pull</code> should be provided to start an on-demand restore. A file restore from the object store does not support this option.
options	array[options]	Options for snapmirror transfer.
relationship	relationship	
snapshot	string	Name of snapshot being transferred.
source_snapshot	string	Specifies the snapshot on the source to be transferred to the destination.
storage_efficiency_enabled	boolean	This is supported for transfer of restore relationship only. Set this property to "false" to turn off storage efficiency for data transferred over the wire and written to the destination.

Name	Type	Description
throttle	integer	Throttle, in KBs per second. This "throttle" overrides the "throttle" set on the SnapMirror relationship or SnapMirror relationship's policy. If neither of these are set, defaults to 0, which is interpreted as unlimited.
total_duration	string	Elapsed transfer time.
uuid	string	Unique identifier of the SnapMirror transfer.

Example request

```
{  
    "bytes_transferred": 0,  
    "checkpoint_size": 0,  
    "end_time": "2020-12-02 18:36:19 -0800",  
    "error_info": {  
        "code": 6620046,  
        "message": "Transfer aborted"  
    },  
    "files": [  
        {  
            "destination_path": "/dirb/file2",  
            "source_path": "/dira/file1"  
        }  
    ],  
    "last_updated_time": "2023-09-15 16:58:39 -0700",  
    "network_compression_ratio": 61,  
    "on_demand_attrs": "read_write_with_user_data_pull",  
    "options": [  
        {}  
    ],  
    "relationship": {  
        "destination": {  
            "cluster": {  
                "name": "cluster1",  
                "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"  
            },  
            "consistency_group_volumes": [  
                {  
                    "name": "volume1",  
                    "uuid": "028baa66-41bd-11e9-81d5-00a0986138f7"  
                }  
            ],  
            "ipspace": "Default",  
            "luns": {  
                "name": "/vol/volume1/lun1",  
                "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"  
            },  
            "path": "svm1:volume1",  
            "svm": {  
                "name": "svm1",  
                "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"  
            }  
        },  
        "uuid": "d2d7ceea-ab52-11e8-855e-00505682a4c7"  
    }  
}
```

```

} ,
"snapshot": "string",
"source_snapshot": "string",
"throttle": 0,
"total_duration": "PT28M41S",
"uuid": "4ea7a442-86d1-11e0-ae1c-123478563412"
}

```

Response

Status: 201, Created

Headers

Name	Description	Type
Location	Useful for tracking the resource location	string

Error

Status: Default

ONTAP Error Response codes

Error code	Description
13303845	Restore operation failed
13303812	Initialize operation failed
13303844	Update operation failed
13303846	Empty source path file list
13303847	Invalid property
13304040	Throttle not supported for update of Synchronous SnapMirror relationships
6620237	SnapMirror relationship database write failed
6620238	SnapMirror relationship database read failed

| 13304134 | The overwrite property specified does not match the value specified in the previous request. || | 6619720 | Relationship information has been updated and is being propagated. Wait a few minutes and try the operation again. || 13303816 | Could not retrieve the state or status values for the relationship. Wait a few minutes and try the operation again. || 13304159 | Could not retrieve the state or status values for the relationship. Wait a few minutes and try the operation again. If the error persists, address the error condition shown. |

Definitions

See Definitions

href

Name	Type	Description
href	string	

_links

error_info

Error information for the transfer.

Name	Type	Description
code	integer	Error code
message	string	Error message

files

Specifies a file or LUN consisting of a source_path and an optional destination_path. If not specified, the destination_path is the same as the source_path. File restore is not supported if the source_path or destination_path contains commas in its directory or file name.

Name	Type	Description
destination_path	string	
source_path	string	

options

cluster

Name	Type	Description
name	string	
uuid	string	

consistency_group_volumes

Name	Type	Description
name	string	The name of the volume.

Name	Type	Description
uuid	string	<p>Unique identifier of the volume. This corresponds to the instance-uuid that is exposed in the CLI and ONTAPI. It does not change due to a volume move.</p> <ul style="list-style-type: none"> example: 028baa66-41bd-11e9-81d5-00a0986138f7 x-nitap-createOnly: true Introduced in: 9.8 x-nullable: true

luns

Optional property for a SnapMirror endpoint. Specifies the list of source LUNs and optionally list of destination LUNs during SnapMirror Consistency Group LUN restore operation.

Name	Type	Description
name	string	<p>The name of a LUN. A LUN is located within a volume. Optionally, it can be located within a qtree in a volume.</p> <p>LUN names are paths of the form "/vol/<volume>[/<qtree>]/<name>" where the qtree name is optional.</p>
uuid	string	The unique identifier of the LUN.

svm

SVM, applies only to SVM-scoped objects.

Name	Type	Description
name	string	The name of the SVM. This field cannot be specified in a PATCH method.
uuid	string	The unique identifier of the SVM. This field cannot be specified in a PATCH method.

snapmirror_endpoint

Endpoint of a SnapMirror relationship. For a GET request, the property "cluster" is populated when the

endpoint is on a remote cluster. A POST request to create the destination SVM endpoint or to establish an SVM DR relationship must have the property "cluster" populated with the remote cluster details. A POST request to create the destination FlexVol volume, FlexGroup volume, Consistency Group, ONTAP S3 bucket and NON-ONTAP object-store endpoints can optionally specify the "cluster" property when the source SVM and the destination SVM are peered. A POST request to establish a SnapMirror relationship between the source endpoint and destination endpoint and when the source SVM and the destination SVM are not peered, must specify the "cluster" property for the remote endpoint.

Name	Type	Description
cluster	cluster	
consistency_group_volumes	array[consistency_group_volumes]	This property specifies the list of FlexVol volumes or LUNs of a Consistency Group. Optional on the ASA r2 platform. Mandatory for all other platforms.
ipspace	string	Optional property to specify the IPSpace of the SVM.
luns	luns	Optional property for a SnapMirror endpoint. Specifies the list of source LUNs and optionally list of destination LUNs during SnapMirror Consistency Group LUN restore operation.
path	string	ONTAP FlexVol/FlexGroup - svm1:volume1 ONTAP SVM - svm1: ONTAP Consistency Group - svm1:/cg/cg_name ONTAP S3 - svm1:/bucket/bucket1 NON-ONTAP - objstore1:/objstore <ul style="list-style-type: none"> example: svm1:volume1 Introduced in: 9.6 x-nullable: true
svm	svm	SVM, applies only to SVM-scoped objects.

relationship

Name	Type	Description
destination	snapmirror_endpoint	<p>Endpoint of a SnapMirror relationship. For a GET request, the property "cluster" is populated when the endpoint is on a remote cluster. A POST request to create the destination SVM endpoint or to establish an SVM DR relationship must have the property "cluster" populated with the remote cluster details. A POST request to create the destination FlexVol volume, FlexGroup volume, Consistency Group, ONTAP S3 bucket and NON-ONTAP object-store endpoints can optionally specify the "cluster" property when the source SVM and the destination SVM are peered. A POST request to establish a SnapMirror relationship between the source endpoint and destination endpoint and when the source SVM and the destination SVM are not peered, must specify the "cluster" property for the remote endpoint.</p> <ul style="list-style-type: none"> • Introduced in: 9.6
restore	boolean	Is the relationship for restore?
uuid	string	Unique identifier of the SnapMirror relationship.

`snapmirror_transfer`

SnapMirror transfer information

Name	Type	Description
bytes_transferred	integer	Bytes transferred
checkpoint_size	integer	Amount of data transferred in bytes as recorded in the restart checkpoint.
end_time	string	End time of the transfer.
error_info	error_info	Error information for the transfer.

Name	Type	Description
files	array[files]	This is supported for transfer of restore relationship only. This specifies the list of files or LUNs to be restored. Can contain up to eight files or LUNs.
last_updated_time	string	Last updated time of the bytes transferred in an active transfer.
network_compression_ratio	string	Specifies the compression ratio achieved for the data sent over the wire with network compression enabled. This property is only valid for active transfers.
on_demandAttrs	string	Specifies whether or not an on-demand restore is being carried out. This is only supported for the transfer of restore relationships for entire volumes from the object store. A value for <code>read_write_with_user_data_pull</code> should be provided to start an on-demand restore. A file restore from the object store does not support this option.
options	array[options]	Options for snapmirror transfer.
relationship	relationship	
snapshot	string	Name of snapshot being transferred.
source_snapshot	string	Specifies the snapshot on the source to be transferred to the destination.
storage_efficiency_enabled	boolean	This is supported for transfer of restore relationship only. Set this property to "false" to turn off storage efficiency for data transferred over the wire and written to the destination.

Name	Type	Description
throttle	integer	Throttle, in KBs per second. This "throttle" overrides the "throttle" set on the SnapMirror relationship or SnapMirror relationship's policy. If neither of these are set, defaults to 0, which is interpreted as unlimited.
total_duration	string	Elapsed transfer time.
uuid	string	Unique identifier of the SnapMirror transfer.

error_arguments

Name	Type	Description
code	string	Argument code
message	string	Message argument

returned_error

Name	Type	Description
arguments	array[error_arguments]	Message arguments
code	string	Error code
message	string	Error message
target	string	The target parameter that caused the error.

Retrieve attributes of an ongoing SnapMirror transfer

GET /snapmirror/relationships/{relationship.uuid}/transfers/{uuid}

Introduced In: 9.6

Retrieves the attributes of a specific ongoing SnapMirror transfer.

Related ONTAP commands

- snapmirror show

Example

```
GET "/api/snapmirror/relationships/293baa53-e63d-11e8-bff1-005056a793dd/transfers/293baa53-e63d-11e8-bff1-005056a793dd"
```

Learn more

- [DOC /snapmirror/relationships/{relationship.uuid}/transfers](#)

Parameters

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

Response

```
Status: 200, Ok
```

Name	Type	Description
_links	_links	
bytes_transferred	integer	Bytes transferred
checkpoint_size	integer	Amount of data transferred in bytes as recorded in the restart checkpoint.
end_time	string	End time of the transfer.
error_info	error_info	Error information for the transfer.
last_updated_time	string	Last updated time of the bytes transferred in an active transfer.

Name	Type	Description
network_compression_ratio	string	Specifies the compression ratio achieved for the data sent over the wire with network compression enabled. This property is only valid for active transfers.
on_demand_attrs	string	Specifies whether or not an on-demand restore is being carried out. This is only supported for the transfer of restore relationships for entire volumes from the object store. A value for <code>read_write_with_user_data_pull</code> should be provided to start an on-demand restore. A file restore from the object store does not support this option.
relationship	relationship	
snapshot	string	Name of snapshot being transferred.
state	string	Status of the transfer. Set PATCH state to "aborted" to abort the transfer. Set PATCH state to "hard_aborted" to abort the transfer and discard the restart checkpoint. To find "queued" transfers refer to relationships GET API.
throttle	integer	Throttle, in KBs per second. This "throttle" overrides the "throttle" set on the SnapMirror relationship or SnapMirror relationship's policy. If neither of these are set, defaults to 0, which is interpreted as unlimited.
total_duration	string	Elapsed transfer time.
uuid	string	Unique identifier of the SnapMirror transfer.

Example response

```
{  
  "_links": {  
    "self": {  
      "href": "/api/resourcelink"  
    }  
  },  
  "bytes_transferred": 0,  
  "checkpoint_size": 0,  
  "end_time": "2020-12-02 18:36:19 -0800",  
  "error_info": {  
    "code": 6620046,  
    "message": "Transfer aborted"  
  },  
  "last_updated_time": "2023-09-15 16:58:39 -0700",  
  "network_compression_ratio": 61,  
  "on_demand_attrs": "read_write_with_user_data_pull",  
  "relationship": {  
    "destination": {  
      "cluster": {  
        "_links": {  
          "self": {  
            "href": "/api/resourcelink"  
          }  
        },  
        "name": "cluster1",  
        "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"  
      },  
      "consistency_group_volumes": [  
        {  
          "name": "volume1"  
        }  
      ],  
      "luns": {  
        "_links": {  
          "self": {  
            "href": "/api/resourcelink"  
          }  
        },  
        "name": "/vol/volume1/lun1",  
        "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"  
      },  
      "path": "svm1:volume1",  
      "svm": {  
        "_links": {  
          "self": {  
            "href": "/api/resourcelink"  
          }  
        },  
        "name": "svm1",  
        "type": "Storage Virtual Machine"  
      }  
    }  
  }  
}
```

```

        "self": {
            "href": "/api/resourcelink"
        }
    },
    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
}
},
"uuid": "d2d7ceea-ab52-11e8-855e-00505682a4c7"
},
"snapshot": "string",
"state": "string",
"storage_efficiency_enabled": true,
"throttle": 0,
"total_duration": "PT28M41S",
"uuid": "4ea7a442-86d1-11e0-ae1c-123478563412"
}

```

Error

Status: Default, Error

Name	Type	Description
error	returned_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	href	

error_info

Error information for the transfer.

Name	Type	Description
code	integer	Error code
message	string	Error message

files

Specifies a file or LUN consisting of a source_path and an optional destination_path. If not specified, the destination_path is the same as the source_path. File restore is not supported if the source_path or destination_path contains commas in its directory or file name.

Name	Type	Description
destination_path	string	
source_path	string	

options

cluster

Name	Type	Description
_links	_links	
name	string	
uuid	string	

consistency_group_volumes

Name	Type	Description
name	string	The name of the volume.

luns

Optional property for a SnapMirror endpoint. Specifies the list of source LUNs and optionally list of destination LUNs during SnapMirror Consistency Group LUN restore operation.

Name	Type	Description
_links	_links	
name	string	<p>The name of a LUN. A LUN is located within a volume. Optionally, it can be located within a qtree in a volume.</p> <p>LUN names are paths of the form "/vol/<volume>[/<qtree>]<name>" where the qtree name is optional.</p>
uuid	string	The unique identifier of the LUN.

svm

SVM, applies only to SVM-scoped objects.

Name	Type	Description
_links	_links	
name	string	The name of the SVM. This field cannot be specified in a PATCH method.
uuid	string	The unique identifier of the SVM. This field cannot be specified in a PATCH method.

snapmirror_endpoint

Endpoint of a SnapMirror relationship. For a GET request, the property "cluster" is populated when the endpoint is on a remote cluster. A POST request to create the destination SVM endpoint or to establish an SVM DR relationship must have the property "cluster" populated with the remote cluster details. A POST request to create the destination FlexVol volume, FlexGroup volume, Consistency Group, ONTAP S3 bucket and NON-ONTAP object-store endpoints can optionally specify the "cluster" property when the source SVM and the destination SVM are peered. A POST request to establish a SnapMirror relationship between the source endpoint and destination endpoint and when the source SVM and the destination SVM are not peered, must specify the "cluster" property for the remote endpoint.

Name	Type	Description
cluster	cluster	

Name	Type	Description
consistency_group_volumes	array[consistency_group_volume s]	This property specifies the list of FlexVol volumes or LUNs of a Consistency Group. Optional on the ASA r2 platform. Mandatory for all other platforms.
luns	luns	Optional property for a SnapMirror endpoint. Specifies the list of source LUNs and optionally list of destination LUNs during SnapMirror Consistency Group LUN restore operation.
path	string	ONTAP FlexVol/FlexGroup - svm1:volume1 ONTAP SVM - svm1: ONTAP Consistency Group - svm1:/cg/cg_name ONTAP S3 - svm1:/bucket/bucket1 NON-ONTAP - objstore1:/objstore <ul style="list-style-type: none"> example: svm1:volume1 Introduced in: 9.6 x-nullable: true
svm	svm	SVM, applies only to SVM-scoped objects.

relationship

Name	Type	Description
destination	snapmirror_endpoint	<p>Endpoint of a SnapMirror relationship. For a GET request, the property "cluster" is populated when the endpoint is on a remote cluster. A POST request to create the destination SVM endpoint or to establish an SVM DR relationship must have the property "cluster" populated with the remote cluster details. A POST request to create the destination FlexVol volume, FlexGroup volume, Consistency Group, ONTAP S3 bucket and NON-ONTAP object-store endpoints can optionally specify the "cluster" property when the source SVM and the destination SVM are peered. A POST request to establish a SnapMirror relationship between the source endpoint and destination endpoint and when the source SVM and the destination SVM are not peered, must specify the "cluster" property for the remote endpoint.</p> <ul style="list-style-type: none"> • Introduced in: 9.6
restore	boolean	Is the relationship for restore?
uuid	string	Unique identifier of the SnapMirror relationship.

error_arguments

Name	Type	Description
code	string	Argument code
message	string	Message argument

returned_error

Name	Type	Description
arguments	array[error_arguments]	Message arguments

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

Cancel an ongoing SnapMirror transfer

PATCH /snapmirror/relationships/{relationship.uuid}/transfers/{uuid}

Introduced In: 9.6

Aborts an ongoing SnapMirror transfer. This operation is applicable on asynchronous SnapMirror relationships.

Related ONTAP commands

- snapmirror abort

Example

```
PATCH "/api/snapmirror/relationships/293baa53-e63d-11e8-bff1-005056a793dd/transfers/293baa53-e63d-11e8-bff1-005056a793dd"
'{"state":"aborted"}'
```

Learn more

- [DOC /snapmirror/relationships/{relationship.uuid}/transfers](#)

Parameters

Name	Type	In	Required	Description
relationship.uuid	string	path	True	SnapMirror relationship UUID
uuid	string	path	True	SnapMirror transfer UUID

Request Body

Name	Type	Description
bytes_transferred	integer	Bytes transferred
checkpoint_size	integer	Amount of data transferred in bytes as recorded in the restart checkpoint.
end_time	string	End time of the transfer.
error_info	error_info	Error information for the transfer.
last_updated_time	string	Last updated time of the bytes transferred in an active transfer.
network_compression_ratio	string	Specifies the compression ratio achieved for the data sent over the wire with network compression enabled. This property is only valid for active transfers.
on_demand_attrs	string	Specifies whether or not an on-demand restore is being carried out. This is only supported for the transfer of restore relationships for entire volumes from the object store. A value for <code>read_write_with_user_data_pull</code> should be provided to start an on-demand restore. A file restore from the object store does not support this option.
relationship	relationship	
snapshot	string	Name of snapshot being transferred.
state	string	Status of the transfer. Set PATCH state to "aborted" to abort the transfer. Set PATCH state to "hard_aborted" to abort the transfer and discard the restart checkpoint. To find "queued" transfers refer to relationships GET API.
total_duration	string	Elapsed transfer time.
uuid	string	Unique identifier of the SnapMirror transfer.

Example request

```
{  
    "bytes_transferred": 0,  
    "checkpoint_size": 0,  
    "end_time": "2020-12-02 18:36:19 -0800",  
    "error_info": {  
        "code": 6620046,  
        "message": "Transfer aborted"  
    },  
    "last_updated_time": "2023-09-15 16:58:39 -0700",  
    "network_compression_ratio": 61,  
    "on_demand_attrs": "read_write_with_user_data_pull",  
    "relationship": {  
        "destination": {  
            "cluster": {  
                "name": "cluster1",  
                "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"  
            },  
            "luns": {  
                "name": "/vol/volume1/lun1",  
                "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"  
            },  
            "path": "svm1:volume1",  
            "svm": {  
                "name": "svm1",  
                "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"  
            }  
        },  
        "uuid": "d2d7ceea-ab52-11e8-855e-00505682a4c7"  
    },  
    "snapshot": "string",  
    "state": "string",  
    "storage_efficiency_enabled": true,  
    "total_duration": "PT28M41S",  
    "uuid": "4ea7a442-86d1-11e0-ae1c-123478563412"  
}
```

Response

```
Status: 200, Ok
```

Error

Status: Default

ONTAP Error Response codes

Error code	Description
13303848	Abort of sync SnapMirror is not allowed
13303849	SnapMirror transfer state is invalid

Definitions

See Definitions

href

Name	Type	Description
href	string	

_links

error_info

Error information for the transfer.

Name	Type	Description
code	integer	Error code
message	string	Error message

files

Specifies a file or LUN consisting of a source_path and an optional destination_path. If not specified, the destination_path is the same as the source_path. File restore is not supported if the source_path or destination_path contains commas in its directory or file name.

Name	Type	Description
destination_path	string	
source_path	string	

options

cluster

Name	Type	Description
name	string	
uuid	string	

consistency_group_volumes

Name	Type	Description
name	string	The name of the volume.

luns

Optional property for a SnapMirror endpoint. Specifies the list of source LUNs and optionally list of destination LUNs during SnapMirror Consistency Group LUN restore operation.

Name	Type	Description
name	string	<p>The name of a LUN. A LUN is located within a volume. Optionally, it can be located within a qtree in a volume.</p> <p>LUN names are paths of the form "/vol/<volume>[/<qtree>]/<name>" where the qtree name is optional.</p>
uuid	string	The unique identifier of the LUN.

svm

SVM, applies only to SVM-scoped objects.

Name	Type	Description
name	string	The name of the SVM. This field cannot be specified in a PATCH method.
uuid	string	The unique identifier of the SVM. This field cannot be specified in a PATCH method.

snapmirror_endpoint

Endpoint of a SnapMirror relationship. For a GET request, the property "cluster" is populated when the endpoint is on a remote cluster. A POST request to create the destination SVM endpoint or to establish an SVM DR relationship must have the property "cluster" populated with the remote cluster details. A POST request to create the destination FlexVol volume, FlexGroup volume, Consistency Group, ONTAP S3 bucket and NON-ONTAP object-store endpoints can optionally specify the "cluster" property when the source SVM and the destination SVM are peered. A POST request to establish a SnapMirror relationship between the source endpoint and destination endpoint and when the source SVM and the destination SVM are not peered, must specify the "cluster" property for the remote endpoint.

Name	Type	Description
cluster	cluster	
luns	luns	Optional property for a SnapMirror endpoint. Specifies the list of source LUNs and optionally list of destination LUNs during SnapMirror Consistency Group LUN restore operation.

Name	Type	Description
path	string	<p>ONTAP FlexVol/FlexGroup - svm1:volume1 ONTAP SVM - svm1: ONTAP Consistency Group - svm1:/cg/cg_name</p> <p>ONTAP S3 - svm1:/bucket/bucket1 NON-ONTAP - objstore1:/objstore</p> <ul style="list-style-type: none"> • example: svm1:volume1 • Introduced in: 9.6 • x-nullable: true
svm	svm	SVM, applies only to SVM-scoped objects.

relationship

Name	Type	Description
destination	snapmirror_endpoint	<p>Endpoint of a SnapMirror relationship. For a GET request, the property "cluster" is populated when the endpoint is on a remote cluster. A POST request to create the destination SVM endpoint or to establish an SVM DR relationship must have the property "cluster" populated with the remote cluster details. A POST request to create the destination FlexVol volume, FlexGroup volume, Consistency Group, ONTAP S3 bucket and NON-ONTAP object-store endpoints can optionally specify the "cluster" property when the source SVM and the destination SVM are peered. A POST request to establish a SnapMirror relationship between the source endpoint and destination endpoint and when the source SVM and the destination SVM are not peered, must specify the "cluster" property for the remote endpoint.</p> <ul style="list-style-type: none"> • Introduced in: 9.6
restore	boolean	Is the relationship for restore?

Name	Type	Description
uuid	string	Unique identifier of the SnapMirror relationship.

snapmirror_transfer

SnapMirror transfer information

Name	Type	Description
bytes_transferred	integer	Bytes transferred
checkpoint_size	integer	Amount of data transferred in bytes as recorded in the restart checkpoint.
end_time	string	End time of the transfer.
error_info	error_info	Error information for the transfer.
last_updated_time	string	Last updated time of the bytes transferred in an active transfer.
network_compression_ratio	string	Specifies the compression ratio achieved for the data sent over the wire with network compression enabled. This property is only valid for active transfers.
on_demand_attrs	string	Specifies whether or not an on-demand restore is being carried out. This is only supported for the transfer of restore relationships for entire volumes from the object store. A value for <code>read_write_with_user_data_pull</code> should be provided to start an on-demand restore. A file restore from the object store does not support this option.
relationship	relationship	
snapshot	string	Name of snapshot being transferred.

Name	Type	Description
state	string	Status of the transfer. Set PATCH state to "aborted" to abort the transfer. Set PATCH state to "hard_aborted" to abort the transfer and discard the restart checkpoint. To find "queued" transfers refer to relationships GET API.
total_duration	string	Elapsed transfer time.
uuid	string	Unique identifier of the SnapMirror transfer.

error_arguments

Name	Type	Description
code	string	Argument code
message	string	Message argument

returned_error

Name	Type	Description
arguments	array[error_arguments]	Message arguments
code	string	Error code
message	string	Error message
target	string	The target parameter that caused the error.

Copyright information

Copyright © 2026 NetApp, Inc. All Rights Reserved. Printed in the U.S. No part of this document covered by copyright may be reproduced in any form or by any means—graphic, electronic, or mechanical, including photocopying, recording, taping, or storage in an electronic retrieval system—with prior written permission of the copyright owner.

Software derived from copyrighted NetApp material is subject to the following license and disclaimer:

THIS SOFTWARE IS PROVIDED BY NETAPP “AS IS” AND WITHOUT ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE HEREBY DISCLAIMED. IN NO EVENT SHALL NETAPP BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

NetApp reserves the right to change any products described herein at any time, and without notice. NetApp assumes no responsibility or liability arising from the use of products described herein, except as expressly agreed to in writing by NetApp. The use or purchase of this product does not convey a license under any patent rights, trademark rights, or any other intellectual property rights of NetApp.

The product described in this manual may be protected by one or more U.S. patents, foreign patents, or pending applications.

LIMITED RIGHTS LEGEND: Use, duplication, or disclosure by the government is subject to restrictions as set forth in subparagraph (b)(3) of the Rights in Technical Data -Noncommercial Items at DFARS 252.227-7013 (FEB 2014) and FAR 52.227-19 (DEC 2007).

Data contained herein pertains to a commercial product and/or commercial service (as defined in FAR 2.101) and is proprietary to NetApp, Inc. All NetApp technical data and computer software provided under this Agreement is commercial in nature and developed solely at private expense. The U.S. Government has a non-exclusive, non-transferrable, nonsublicensable, worldwide, limited irrevocable license to use the Data only in connection with and in support of the U.S. Government contract under which the Data was delivered. Except as provided herein, the Data may not be used, disclosed, reproduced, modified, performed, or displayed without the prior written approval of NetApp, Inc. United States Government license rights for the Department of Defense are limited to those rights identified in DFARS clause 252.227-7015(b) (FEB 2014).

Trademark information

NETAPP, the NETAPP logo, and the marks listed at <http://www.netapp.com/TM> are trademarks of NetApp, Inc. Other company and product names may be trademarks of their respective owners.