∩ NetApp

Manage SVM migration

ONTAP 9.12.1 REST API reference

NetApp
February 13, 2024

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Manage SVM migration

SVM migrations endpoint overview

Overview

You can use this API to migrate an SVM from a source cluster to a destination cluster. During the migration, you can pause, resume, or abort the operation, and retrieve the migration status and transfer status of volumes in the SVM. The migrations APIs are only accessible from the destination cluster.

Precondition

The cluster peering relationship should be created between the source and destination clusters prior to using this API.

SVM migration APIs

The following APIs are used to manage SVM migration:

- POST /api/svm/migrations
- PATCH /api/svm/migrations/{uuid}
- GET /api/svm/migrations/
- GET /api/svm/migrations/{uuid}
- GET /api/svm/migrations/{svm_migration.uuid}/volumes
- GET /api/svm/migrations/{svm_migration.uuid}/volumes/{volume.uuid}
- DELETE /api/svm/migrations/{uuid}

Starting a migration

To start a migration operation, issue a POST request to /svm/migrations. Parameters are provided in the body of the POST request to specify the source cluster and the source SVM.

Monitoring the status of the SVM migration

You can use GET /svm/migrations to retrieve the status of the SVM migration and GET /svm/migrations/{svm_migration.uuid}/volumes to retrieve the transfer status of the volumes in the SVM migration.

Possible errors before starting the migration

Configurations in the POST /svm/migrations request are validated before the SVM migration starts. If an invalid configuration is found or the migration pre-checks fail, an HTTP error code in the 4xx range is returned. No SVM migration operation is started.

Polling the migration operation

After a succesful POST /svm/migrations request is issued, an HTTP error code of 202 is returned along with a migration UUID and link in the body of the response. The SVM migration continues asynchronously and is monitored using the migration UUID and the GET /svm/migrations/{uuid} API.

Errors duing the migration operation

If a failure occurs during the SVM migration, the GET /svm/migrations response provides details of the error along with any error code fields.

Pausing the migration operation

You can use PATCH /svm/migrations/{uuid} with the action "pause" to pause the SVM migration to update the SVM configuration on the source SVM.

Resuming the migration operation

You can use PATCH /svm/migrations{uuid} with the action "resume" to resume the SVM migration from a paused state. You can modify the throttle value when you resume the SVM migration. To set the throttle value to unlimited, specify the throttle value as 0.

Aborting the migration operation

You can use DELETE /svm/migrations/{uuid} to delete the SVM on the destination cluster if the SVM migration has failed or is paused. Use the DELETE /svm/migrations/{uuid} request to remove the SVM on the source cluster; this might be used when communication between the source and destination cluster is reduced.

Retrieving the migration status

You can use GET /svm/migrations/{uuid} to retrieve the current status of your migration.

Retrieving the volume transfer status

You can use GET /svm/migrations/{svm_migration.uuid}/volumes to retrieve the current transfer status of all volumes in the migrating SVM.

Retrieving the volume transfer status of a specific volume

You can use GET /svm/migrations/{svm_migrations.uuid}/volumes/{volume.uuid} to retrieve the transfer status of a specific volume in the migrating SVM.

Examples

Starting a Migration

```
# API
/api/svm/migrations
```

POST body included from file

```
svm_migration_post_body.txt:
{
"source": {
  "svm": {
    "name": "vs1"
  },
  "cluster": {
    "name": "siteB"
  }
}
}
curl -X POST https://<mgmt-ip>/api/svm/migrations -H "Content-Type:
application+hal/json" -d "@svm_migration_post_body.txt"
```

Inline POST body

```
curl -X POST https://<mgmt-ip>/api/svm/migrations -H "Content-Type:
application+hal/json" -d '{"source": {"svm": {"name": "vs1"}, "cluster":
{"name": "siteB"}}}'
```

POST Response

```
Date: Wed, 25 Aug 2021 19:04:47 GMT
Server: libzapid-httpd
X-Content-Type-Options: nosniff
Cache-Control: no-cache,no-store,must-revalidate
Location: /api/svm/migrations/517c5e74-05d7-11ec-a40f-005056bba9a5
Content-Length: 189
Content-Type: application/hal+json
Keep-Alive: timeout=5, max=100
Connection: Keep-Alive
{
"job": {
  "uuid": "5184a3e1-05d7-11ec-a40f-005056bba9a5",
  "_links": {
    "self": {
      "href": "/api/cluster/jobs/5184a3e1-05d7-11ec-a40f-005056bba9a5"
    }
  }
}
}
```

Retrieving POST Job status

Use the link provided in the response to the POST request to fetch the status of the start operation

Request

```
curl -X GET https://<mgmt-ip>/api/cluster/jobs/5184a3e1-05d7-11ec-a40f-
005056bba9a5
```

Response

```
Date: Wed, 25 Aug 2021 19:05:04 GMT
Server: libzapid-httpd
X-Content-Type-Options: nosniff
Cache-Control: no-cache,no-store,must-revalidate
Content-Type: application/hal+json
Vary: Accept-Encoding
Content-Encoding: gzip
Content-Length: 224
Keep-Alive: timeout=5, max=100
Connection: Keep-Alive
{
"uuid": "5184a3e1-05d7-11ec-a40f-005056bba9a5",
"description": "POST /api/svm/migrations/517c5e74-05d7-11ec-a40f-
005056bba9a5",
"state": "success",
"message": "success",
"code": 0,
"start_time": "2021-08-25T15:04:48-04:00",
"end_time": "2021-08-25T15:04:57-04:00",
"_links": {
  "self": {
    "href": "/api/cluster/jobs/5184a3e1-05d7-11ec-a40f-005056bba9a5"
  }
}
}
```

Retrieving all migrations

The location header in the POST operation provides the uuid of the migrate operation that was started using POST. Also, you can list all the migrate operations using the collection GET.

Request

```
curl -X GET https://<mgmt-ip>/api/svm/migrations
```

Response

```
Date: Wed, 25 Aug 2021 19:05:11 GMT
Server: libzapid-httpd
X-Content-Type-Options: nosniff
Cache-Control: no-cache,no-store,must-revalidate
Content-Type: application/hal+json
Vary: Accept-Encoding
Content-Encoding: gzip
Content-Length: 170
Keep-Alive: timeout=5, max=100
Connection: Keep-Alive
{
"records": [
  {
    "uuid": "517c5e74-05d7-11ec-a40f-005056bba9a5",
    "_links": {
      "self": {
        "href": "/api/svm/migrations/517c5e74-05d7-11ec-a40f-005056bba9a5"
      }
    }
  }
],
"num_records": 1,
"_links": {
  "self": {
    "href": "/api/svm/migrations/"
  }
}
}
```

Retrieving a specific migration

Request

```
curl -X GET https://<mgmt-ip>/api/svm/migrations/517c5e74-05d7-11ec-a40f-
005056bba9a5
```

Response

```
Date: Wed, 25 Aug 2021 19:05:33 GMT
Server: libzapid-httpd
X-Content-Type-Options: nosniff
Cache-Control: no-cache,no-store,must-revalidate
```

```
Content-Type: application/hal+json
Vary: Accept-Encoding
Content-Encoding: gzip
Content-Length: 379
Keep-Alive: timeout=5, max=100
Connection: Keep-Alive
{
"uuid": "517c5e74-05d7-11ec-a40f-005056bba9a5",
"state": "setup_configuration",
"start_time": "2021-08-25T15:04:49-04:00",
"current_operation": "start",
"source": {
  "svm": {
    "uuid": "424b6002-fb1a-11eb-9383-005056bbcf32",
    "name": "vs1",
    "_links": {
      "self": {
        "href": "/api/svm/svms/424b6002-fb1a-11eb-9383-005056bbcf32"
      }
    }
  },
  "cluster": {
    "uuid": "b54babec-fb14-11eb-9383-005056bbcf32",
    "name": "siteB",
    "_links": {
      "self": {
        "href": "/api/cluster/peers/b54babec-fb14-11eb-9383-005056bbcf32"
      }
    }
  }
},
"destination": {
  "ipspace": {
    "uuid": "f305cf0b-fb14-11eb-829d-005056bba9a5",
    "name": "Default"
  }
},
"auto_cutover": false,
"auto_source_cleanup": false,
"throttle": 0,
"_links": {
  "self": {
    "href": "/api/svm/migrations/517c5e74-05d7-11ec-a40f-005056bba9a5"
  }
}
}
```

Pausing a migration

To pause the migration use the PATCH request on the migration UUID.

Request

```
curl -X PATCH https://<mgmt-ip>/api/svm/migrations/517c5e74-05d7-11ec-
a40f-005056bba9a5?action=pause
```

Response

```
Date: Wed, 25 Aug 2021 19:06:11 GMT
Server: libzapid-httpd
X-Content-Type-Options: nosniff
Cache-Control: no-cache,no-store,must-revalidate
Content-Length: 189
Content-Type: application/hal+json
Keep-Alive: timeout=5, max=100
Connection: Keep-Alive
{
"job": {
  "uuid": "82dea7c7-05d7-11ec-a40f-005056bba9a5",
  "_links": {
    "self": {
      "href": "/api/cluster/jobs/82dea7c7-05d7-11ec-a40f-005056bba9a5"
    }
  }
}
}
```

Monitoring PATCH job status

Use the link provided in the response of the PATCH request to fetch the information of the patch job.

Request

```
curl -X GET https://<mgmt-ip>/api/cluster/jobs/82dea7c7-05d7-11ec-a40f-
005056bba9a5
```

Response

```
Date: Wed, 25 Aug 2021 21:40:06 GMT
Server: libzapid-httpd
X-Content-Type-Options: nosniff
Cache-Control: no-cache,no-store,must-revalidate
Content-Type: application/hal+json
Vary: Accept-Encoding
Content-Encoding: gzip
Content-Length: 222
Keep-Alive: timeout=5, max=100
Connection: Keep-Alive
{
"uuid": "82dea7c7-05d7-11ec-a40f-005056bba9a5",
"description": "PATCH /api/svm/migrations/517c5e74-05d7-11ec-
005056bba9a5",
"state": "success",
"message": "success",
"code": 0,
"start_time": "2021-08-25T15:06:11-04:00",
"end_time": "2021-08-25T15:06:11-04:00",
"_links": {
  "self": {
    "href": "/api/cluster/jobs/82dea7c7-05d7-11ec-a40f-005056bba9a5"
  }
}
}
```

Aborting a migration

To abort the migration use the DELETE request on the migration UUID.

Request

```
curl -X DELETE https://<mgmt-ip>/api/svm/migrations/517c5e74-05d7-11ec-
a40f-005056bba9a5
```

Response

```
Date: Wed, 25 Aug 2021 22:57:23 GMT
Server: libzapid-httpd
X-Content-Type-Options: nosniff
Cache-Control: no-cache,no-store,must-revalidate
Content-Length: 189
Content-Type: application/hal+json
Keep-Alive: timeout=5, max=100
Connection: Keep-Alive
{
"job": {
  "uuid": "cf870f19-05f7-11ec-a40f-005056bba9a5",
  "_links": {
    "self": {
      "href": "/api/cluster/jobs/cf870f19-05f7-11ec-a40f-005056bba9a5"
    }
  }
}
}
```

Monitoring DELETE job status

Use the link provided in the response of the PATCH request to fetch the information of the patch job.

Request

```
curl -X GET https://<mgmt-ip>/api/cluster/jobs/cf870f19-05f7-11ec-a40f-
005056bba9a5
```

Response

```
Date: Wed, 25 Aug 2021 23:05:47 GMT
Server: libzapid-httpd
X-Content-Type-Options: nosniff
Cache-Control: no-cache,no-store,must-revalidate
Content-Type: application/hal+json
Vary: Accept-Encoding
Content-Encoding: gzip
Content-Length: 228
Keep-Alive: timeout=5, max=100
Connection: Keep-Alive
{
"uuid": "cf870f19-05f7-11ec-a40f-005056bba9a5",
"description": "DELETE /api/svm/migrations/517c5e74-05d7-11ec-a40f-
005056bba9a5",
"state": "success",
"message": "success",
"code": 0,
"start_time": "2021-08-25T18:57:23-04:00",
"end_time": "2021-08-25T18:57:24-04:00",
"_links": {
  "self": {
    "href": "/api/cluster/jobs/cf870f19-05f7-11ec-a40f-005056bba9a5"
  }
}
}
```

Retrieve the SVM migration status

GET /svm/migrations

Introduced In: 9.10

Retrieves the SVM migration status.

Related ONTAP commands

- vserver migrate show

Parameters

Name	Type	In	Required	Description
destination.ipspace.uuid	string	query	False	Filter by destination.ipspace.uuid

Name	Type	In	Required	Description
destination.ipspace. name	string	query	False	Filter by destination.ipspace. name
uuid	string	query	False	Filter by uuid
time_metrics.last_pa use_time	string	query	False	Filter by time_metrics.last_pa use_time
time_metrics.cutover _complete_time	string	query	False	Filter by time_metrics.cutover _complete_time
time_metrics.last_re sume_time	string	query	False	Filter by time_metrics.last_re sume_time
time_metrics.end_ti me	string	query	False	Filter by time_metrics.end_ti me
time_metrics.cutover _start_time	string	query	False	Filter by time_metrics.cutover _start_time
time_metrics.cutover _trigger_time	string	query	False	Filter by time_metrics.cutover _trigger_time
time_metrics.start_ti me	string	query	False	Filter by time_metrics.start_ti me
messages.message	string	query	False	Filter by messages.message
messages.code	string	query	False	Filter by messages.code
last_failed_state	string	query	False	Filter by last_failed_state
auto_source_cleanu p	boolean	query	False	Filter by auto_source_cleanu p

Name	Type	In	Required	Description
restart_count	integer	query	False	Filter by restart_count
point_of_no_return	boolean	query	False	Filter by point_of_no_return
current_operation	string	query	False	Filter by current_operation
throttle	integer	query	False	Filter by throttle • Introduced in: 9.12
last_operation	string	query	False	Filter by last_operation
state	string	query	False	Filter by state
source.svm.uuid	string	query	False	Filter by source.svm.uuid
source.svm.name	string	query	False	Filter by source.svm.name
source.cluster.name	string	query	False	Filter by source.cluster.name
source.cluster.uuid	string	query	False	Filter by source.cluster.uuid
auto_cutover	boolean	query	False	Filter by auto_cutover
fields	array[string]	query	False	Specify the fields to return.
max_records	integer	query	False	Limit the number of records returned.

Name	Type	In	Required	Description
return_records	boolean	query	False	The default is true for GET calls. When set to false, only the number of records is returned. • 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. • Default value: 1 • Max value: 120 • Min value: 0
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[svm_migration]	

Example response

```
{
  "_links": {
    "next": {
      "href": "/api/resourcelink"
    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "num_records": 1,
  "records": {
    "current_operation": "none",
    "destination": {
      "ipspace": {
        "_links": {
          "self": {
            "href": "/api/resourcelink"
          }
        },
        "name": "exchange",
        "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
      },
      "volume_placement": {
        "aggregates": {
          "_links": {
            "self": {
              "href": "/api/resourcelink"
            }
          },
          "name": "aggr1",
          "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
        },
        "volume_aggregate_pairs": {
          "aggregate": {
            "_links": {
              "self": {
                "href": "/api/resourcelink"
              }
            },
            "name": "aggr1",
            "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
          },
          "volume": {
            "_links": {
```

```
                    "self": {
                        "href": "/api/resourcelink"
                    }
                },
                "name": "volume1",
                "uuid": "028baa66-41bd-11e9-81d5-00a0986138f7"
            }
        }
    }
},
"ip_interface_placement": {
    "ip_interfaces": {
        "interface": {
            "_links": {
                "self": {
                    "href": "/api/resourcelink"
                }
            },
            "ip": {
                "address": "10.10.10.7"
            },
            "name": "lif1",
            "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
        },
        "port": {
            "_links": {
                "self": {
                    "href": "/api/resourcelink"
                }
            },
            "name": "e1b",
            "node": {
                "name": "node1"
            },
            "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
        }
    }
},
"last_failed_state": "precheck_started",
"last_operation": "none",
"messages": {
    "code": "string",
    "message": "string"
},
"restart_count": 0,
"source": {
```

```
      "cluster": {
        "_links": {
          "self": {
            "href": "/api/resourcelink"
          }
        },
        "name": "cluster1",
        "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
      },
      "svm": {
        "_links": {
          "self": {
            "href": "/api/resourcelink"
          }
        },
        "name": "svm1",
        "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
      }
    },
    "state": "precheck_started",
    "throttle": 0,
    "time_metrics": {
      "cutover_complete_time": "2020-12-02T19:30:19-08:00",
      "cutover_start_time": "2020-12-02T18:20:19-08:00",
      "cutover_trigger_time": "2020-12-02T19:15:19-08:00",
      "end_time": "2020-12-02T19:36:19-08:00",
      "last_pause_time": "2020-12-02T18:50:19-08:00",
      "last_resume_time": "2020-12-02T18:54:19-08:00",
      "start_time": "2020-12-02T18:36:19-08:00"
    },
    "uuid": "4ea7a442-86d1-11e0-ae1c-123478563412"
  }
}
```

Error

```
Status: Default
```

ONTAP Error Response Codes

Error Code	Description
13172783	Migrate RDB lookup failed

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	href	
self	href	

_links

Name	Type	Description
self	href	

ipspace

Optional property used to specify which IPspace to use for the SVM. By default, the "default" ipspace is used.

Name	Type	Description
_links	_links	
name	string	IPspace name
uuid	string	IPspace UUID

aggregates

Name	Type	Description
_links	_links	
name	string	
uuid	string	

aggregate

Aggregate to use for volume creation.

Name	Type	Description
_links	_links	
name	string	

Name	Type	Description
uuid	string	

volume

Property indicating the source volume.

Name	Type	Description
_links	_links	
name	string	The name of the volume.
uuid	string	Unique identifier for 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. • example: 028baa66-41bd-11e9-81d5-00a0986138f7 • Introduced in: 9.6

volume_aggregate_pairs

Volume-aggregate pair information.

Name	Type	Description
aggregate	aggregate	Aggregate to use for volume creation.
volume	volume	Property indicating the source volume.

volume_placement

Optional property to specify the source volume placement in the destination. It is input only and won't be returned by a subsequent GET.

Name	Type	Description
aggregates	array[aggregates]	Optional property used to specify the list of desired aggregates to use for volume creation in the destination.

Name	Type	Description
volume_aggregate_pairs	array[volume_aggregate_pairs]	Optional property used to specify the list of desired volume-aggregate pairs in the destination.

destination

Destination cluster details for the SVM migration.

Name	Type	Description
ipspace	ipspace	Optional property used to specify which IPspace to use for the SVM. By default, the "default" ipspace is used.
volume_placement	volume_placement	Optional property to specify the source volume placement in the destination. It is input only and won't be returned by a subsequent GET.

ip

IP information

Name	Type	Description
address	string	IPv4 or IPv6 address

interface

Network interface on the source SVM.

Name	Type	Description
_links	_links	
ip	ip	IP information
name	string	The name of the interface. If only the name is provided, the SVM scope must be provided by the object this object is embedded in.
uuid	string	The UUID that uniquely identifies the interface.

node

Name	Type	Description
name	string	Name of node on which the port is located.

port

Port to use for IP interface placement on the destination SVM.

Name	Type	Description
_links	_links	
name	string	
node	node	
uuid	string	

ip_interfaces

IP interface and network port pair information.

Name	Type	Description
interface	interface	Network interface on the source SVM.
port	port	Port to use for IP interface placement on the destination SVM.

svm_migration_ip_interface_placement

Optional property used to specify the list of source SVM's IP interface and network port pairs in the destination for migrating the source SVM IP interfaces. Note that the SVM migration does not perform any reachability checks on the IP interfaces provided.

Name	Type	Description
ip_interfaces	array[ip_interfaces]	List of source SVM's IP interface and port pairs on the destination for migrating the source SVM's IP interfaces.

messages

Name	Type	Description
code	string	Argument code

Name	Type	Description
message	string	Message argument

cluster

Source cluster for the SVM migration.

Name	Type	Description
_links	_links	
name	string	
uuid	string	

svm

Source SVM

Name	Type	Description
_links	_links	
name	string	The name of the SVM.
uuid	string	The unique identifier of the SVM.

source

Source cluster details for the SVM migration.

Name	Type	Description
cluster	cluster	Source cluster for the SVM migration.
svm	svm	Source SVM

time_metrics

Various time metrics details

Name	Type	Description
cutover_complete_time	string	Cutover end time
cutover_start_time	string	Cutover start time
cutover_trigger_time	string	Cutover trigger time

Name	Type	Description
end_time	string	Migration end time
last_pause_time	string	Last migration pause time
last_resume_time	string	Last migration resume time
start_time	string	Migration start time

svm_migration

Provides information on SVM migration, default and user specified configurations, the state of the migration, and volume transfer metrics.

Name	Type	Description
auto_cutover	boolean	Optional property that when set to true automatically performs cutover when the migration state reaches "ready for cutover".
auto_source_cleanup	boolean	Optional property that when set to true automatically cleans up the SVM on the source cluster after the migration cutover.
check_only	boolean	Optional property that when set to true performs only migration pre-checks not the actual migration.
current_operation	string	
destination	destination	Destination cluster details for the SVM migration.
ip_interface_placement	svm_migration_ip_interface_placement	Optional property used to specify the list of source SVM's IP interface and network port pairs in the destination for migrating the source SVM IP interfaces. Note that the SVM migration does not perform any reachability checks on the IP interfaces provided.
last_failed_state	string	Indicates the state of the migration.
last_operation	string	

Name	Type	Description
messages	array[messages]	Errors and warnings returned/displayed during migration.
point_of_no_return	boolean	Indicates if the migration has progressed beyond the point of no return. When true, the migration cannot be aborted or paused. When false, the migration can be paused or aborted.
restart_count	integer	Number of times migrate restarted the transfer, for example, rollback to transfer after starting the cutover.
source	source	Source cluster details for the SVM migration.
state	string	Indicates the state of the migration.
throttle	integer	Optional property to specify a throttle value in KB/s for each individual volume transfer. Defaults to 0 if not set, which is interpreted as unlimited. The minimum throttle value is 4 KB/s, so if you specify a throttle value between 1 and 4, it will be treated as if you specified 4.
time_metrics	time_metrics	Various time metrics details
uuid	string	SVM migration UUID

error_arguments

Name	Type	Description
code	string	Argument code
message	string	Message argument

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.

Create an SVM migration operation

POST /svm/migrations

Introduced In: 9.10

Creates an SVM migration operation. This API must be executed on the destination cluster. This API creates an SVM on the destination cluster and preserves the SVM's identity specified in the source cluster. Optionally, you can specify the aggregate list for creating the volumes, and IPspace. You can perform pre-checks to verify if SVM migration is possible, by setting the "check-only" option to "true". By default the values for auto-source-cleanup and auto-cutover is true.

Required properties

- `source.svm.name` or `source.svm.uuid` - Source SVM name or source SVM UUID.

- `source.cluster.name` or `source.cluster.uuid` - Source cluster name or source cluster UUID

Optional properties

- `destination.ipspace.name` or `destination.ipspace.uuid` - Destination IP Space name or UUID where the vserver will be migrated to.

- `destination.volume_placement.aggregates` - List of aggregates where the migrating volumes should go on the destination.

- `destination.volume_placement.volume_aggregate_pairs` - List of volume aggregate pairs indicating where the migrating volumes should go on the destination.

- `ip_interface_placement` - List of source SVM's IP interface and port pairs on the destination for migrating the SVM's IP interfaces.

- `auto_cutover` - Option to specify whether to perform cutover automatically. Default is true.

- `auto_source_cleanup` - Option to specify whether to perform souce cleanup automatically. Default is true.

- `check_only` - Option to perform all the prechecks for migrate without actually starting the migrate. Default is false.

- `throttle` - Option to specify a throttle value in KB/s. Defaults to unlimited.

Related ONTAP commands

- `vserver migrate start`

Parameters

Name	Type	In	Required	Description
return_timeout	integer	query	False	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. • Default value: 1 • Max value: 120 • Min value: 0
return_records	boolean	query	False	The default is false. If set to true, the records are returned. • Default value:

Request Body

Name	Type	Description
auto_cutover	boolean	Optional property that when set to true automatically performs cutover when the migration state reaches "ready for cutover".
auto_source_cleanup	boolean	Optional property that when set to true automatically cleans up the SVM on the source cluster after the migration cutover.
check_only	boolean	Optional property that when set to true performs only migration pre-checks not the actual migration.
current_operation	string	
destination	destination	Destination cluster details for the SVM migration.
ip_interface_placement	svm_migration_ip_interface_placement	Optional property used to specify the list of source SVM's IP interface and network port pairs in the destination for migrating the source SVM IP interfaces. Note that the SVM migration does not perform any reachability checks on the IP interfaces provided.
last_failed_state	string	Indicates the state of the migration.
last_operation	string	
messages	array[messages]	Errors and warnings returned/displayed during migration.
point_of_no_return	boolean	Indicates if the migration has progressed beyond the point of no return. When true, the migration cannot be aborted or paused. When false, the migration can be paused or aborted.
restart_count	integer	Number of times migrate restarted the transfer, for example, rollback to transfer after starting the cutover.
source	source	Source cluster details for the SVM migration.

Name	Type	Description
state	string	Indicates the state of the migration.
throttle	integer	Optional property to specify a throttle value in KB/s for each individual volume transfer. Defaults to 0 if not set, which is interpreted as unlimited. The minimum throttle value is 4 KB/s, so if you specify a throttle value between 1 and 4, it will be treated as if you specified 4.
time_metrics	time_metrics	Various time metrics details
uuid	string	SVM migration UUID

Example request

```json
{
  "current_operation": "none",
  "destination": {
    "ipspace": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "exchange",
      "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
    },
    "volume_placement": {
      "aggregates": {
        "_links": {
          "self": {
            "href": "/api/resourcelink"
          }
        },
        "name": "aggr1",
        "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
      },
      "volume_aggregate_pairs": {
        "aggregate": {
          "_links": {
            "self": {
              "href": "/api/resourcelink"
            }
          },
          "name": "aggr1",
          "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
        },
        "volume": {
          "_links": {
            "self": {
              "href": "/api/resourcelink"
            }
          },
          "name": "volume1",
          "uuid": "028baa66-41bd-11e9-81d5-00a0986138f7"
        }
      }
    }
  },
```

```json
    "ip_interface_placement": {
      "ip_interfaces": {
        "interface": {
          "_links": {
            "self": {
              "href": "/api/resourcelink"
            }
          },
          "ip": {
            "address": "10.10.10.7"
          },
          "name": "lif1",
          "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
        },
        "port": {
          "_links": {
            "self": {
              "href": "/api/resourcelink"
            }
          },
          "name": "e1b",
          "node": {
            "name": "node1"
          },
          "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
        }
      }
    },
    "last_failed_state": "precheck_started",
    "last_operation": "none",
    "messages": {
      "code": "string",
      "message": "string"
    },
    "restart_count": 0,
    "source": {
      "cluster": {
        "_links": {
          "self": {
            "href": "/api/resourcelink"
          }
        },
        "name": "cluster1",
        "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
      },
      "svm": {
```

```
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "svm1",
      "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
    }
  },
  "state": "precheck_started",
  "throttle": 0,
  "time_metrics": {
    "cutover_complete_time": "2020-12-02T19:30:19-08:00",
    "cutover_start_time": "2020-12-02T18:20:19-08:00",
    "cutover_trigger_time": "2020-12-02T19:15:19-08:00",
    "end_time": "2020-12-02T19:36:19-08:00",
    "last_pause_time": "2020-12-02T18:50:19-08:00",
    "last_resume_time": "2020-12-02T18:54:19-08:00",
    "start_time": "2020-12-02T18:36:19-08:00"
  },
  "uuid": "4ea7a442-86d1-11e0-ae1c-123478563412"
}
```

Response

```
Status: 202, Accepted
```

Name	Type	Description
job	job_link	
num_records	integer	Number of records
records	array[svm_migration]	

Example response

```json
{
  "job": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "uuid": "string"
  },
  "num_records": 1,
  "records": {
    "current_operation": "none",
    "destination": {
      "ipspace": {
        "_links": {
          "self": {
            "href": "/api/resourcelink"
          }
        },
        "name": "exchange",
        "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
      },
      "volume_placement": {
        "aggregates": {
          "_links": {
            "self": {
              "href": "/api/resourcelink"
            }
          },
          "name": "aggr1",
          "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
        },
        "volume_aggregate_pairs": {
          "aggregate": {
            "_links": {
              "self": {
                "href": "/api/resourcelink"
              }
            },
            "name": "aggr1",
            "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
          },
          "volume": {
            "_links": {
```

```
          "self": {
            "href": "/api/resourcelink"
          }
        },
        "name": "volume1",
        "uuid": "028baa66-41bd-11e9-81d5-00a0986138f7"
      }
    }
  }
},
"ip_interface_placement": {
  "ip_interfaces": {
    "interface": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "ip": {
        "address": "10.10.10.7"
      },
      "name": "lif1",
      "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
    },
    "port": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "e1b",
      "node": {
        "name": "node1"
      },
      "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
    }
  }
},
"last_failed_state": "precheck_started",
"last_operation": "none",
"messages": {
  "code": "string",
  "message": "string"
},
"restart_count": 0,
"source": {
```

```
        "cluster": {
          "_links": {
            "self": {
              "href": "/api/resourcelink"
            }
          },
          "name": "cluster1",
          "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
        },
        "svm": {
          "_links": {
            "self": {
              "href": "/api/resourcelink"
            }
          },
          "name": "svm1",
          "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
        }
      },
      "state": "precheck_started",
      "throttle": 0,
      "time_metrics": {
        "cutover_complete_time": "2020-12-02T19:30:19-08:00",
        "cutover_start_time": "2020-12-02T18:20:19-08:00",
        "cutover_trigger_time": "2020-12-02T19:15:19-08:00",
        "end_time": "2020-12-02T19:36:19-08:00",
        "last_pause_time": "2020-12-02T18:50:19-08:00",
        "last_resume_time": "2020-12-02T18:54:19-08:00",
        "start_time": "2020-12-02T18:36:19-08:00"
      },
      "uuid": "4ea7a442-86d1-11e0-ae1c-123478563412"
    }
  }
```

Headers

Name	Description	Type
Location	Useful for tracking the resource location	string

Error

```
Status: Default
```

ONTAP Error Response Codes

Error Code	Description
262245	The value provided is invalid.
13172746	SVM migration cannot be started. This is a generic code, see the response message for details.

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	href	

ipspace

Optional property used to specify which IPspace to use for the SVM. By default, the "default" ipspace is used.

Name	Type	Description
_links	_links	
name	string	IPspace name
uuid	string	IPspace UUID

aggregates

Name	Type	Description
_links	_links	
name	string	
uuid	string	

aggregate

Aggregate to use for volume creation.

Name	Type	Description
_links	_links	
name	string	
uuid	string	

volume

Property indicating the source volume.

Name	Type	Description
_links	_links	
name	string	The name of the volume.
uuid	string	Unique identifier for 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. • example: 028baa66-41bd-11e9-81d5-00a0986138f7 • Introduced in: 9.6

volume_aggregate_pairs

Volume-aggregate pair information.

Name	Type	Description
aggregate	aggregate	Aggregate to use for volume creation.
volume	volume	Property indicating the source volume.

volume_placement

Optional property to specify the source volume placement in the destination. It is input only and won't be returned by a subsequent GET.

Name	Type	Description
aggregates	array[aggregates]	Optional property used to specify the list of desired aggregates to use for volume creation in the destination.
volume_aggregate_pairs	array[volume_aggregate_pairs]	Optional property used to specify the list of desired volume-aggregate pairs in the destination.

destination

Destination cluster details for the SVM migration.

Name	Type	Description
ipspace	ipspace	Optional property used to specify which IPspace to use for the SVM. By default, the "default" ipspace is used.
volume_placement	volume_placement	Optional property to specify the source volume placement in the destination. It is input only and won't be returned by a subsequent GET.

ip

IP information

Name	Type	Description
address	string	IPv4 or IPv6 address

interface

Network interface on the source SVM.

Name	Type	Description
_links	_links	
ip	ip	IP information
name	string	The name of the interface. If only the name is provided, the SVM scope must be provided by the object this object is embedded in.
uuid	string	The UUID that uniquely identifies the interface.

node

Name	Type	Description
name	string	Name of node on which the port is located.

port

Port to use for IP interface placement on the destination SVM.

Name	Type	Description
_links	_links	
name	string	
node	node	
uuid	string	

ip_interfaces

IP interface and network port pair information.

Name	Type	Description
interface	interface	Network interface on the source SVM.
port	port	Port to use for IP interface placement on the destination SVM.

svm_migration_ip_interface_placement

Optional property used to specify the list of source SVM's IP interface and network port pairs in the destination for migrating the source SVM IP interfaces. Note that the SVM migration does not perform any reachability checks on the IP interfaces provided.

Name	Type	Description
ip_interfaces	array[ip_interfaces]	List of source SVM's IP interface and port pairs on the destination for migrating the source SVM's IP interfaces.

messages

Name	Type	Description
code	string	Argument code
message	string	Message argument

cluster

Source cluster for the SVM migration.

Name	Type	Description
_links	_links	
name	string	

Name	Type	Description
uuid	string	

svm

Source SVM

Name	Type	Description
_links	_links	
name	string	The name of the SVM.
uuid	string	The unique identifier of the SVM.

source

Source cluster details for the SVM migration.

Name	Type	Description
cluster	cluster	Source cluster for the SVM migration.
svm	svm	Source SVM

time_metrics

Various time metrics details

Name	Type	Description
cutover_complete_time	string	Cutover end time
cutover_start_time	string	Cutover start time
cutover_trigger_time	string	Cutover trigger time
end_time	string	Migration end time
last_pause_time	string	Last migration pause time
last_resume_time	string	Last migration resume time
start_time	string	Migration start time

svm_migration

Provides information on SVM migration, default and user specified configurations, the state of the migration, and volume transfer metrics.

Name	Type	Description
auto_cutover	boolean	Optional property that when set to true automatically performs cutover when the migration state reaches "ready for cutover".
auto_source_cleanup	boolean	Optional property that when set to true automatically cleans up the SVM on the source cluster after the migration cutover.
check_only	boolean	Optional property that when set to true performs only migration pre-checks not the actual migration.
current_operation	string	
destination	destination	Destination cluster details for the SVM migration.
ip_interface_placement	svm_migration_ip_interface_placement	Optional property used to specify the list of source SVM's IP interface and network port pairs in the destination for migrating the source SVM IP interfaces. Note that the SVM migration does not perform any reachability checks on the IP interfaces provided.
last_failed_state	string	Indicates the state of the migration.
last_operation	string	
messages	array[messages]	Errors and warnings returned/displayed during migration.
point_of_no_return	boolean	Indicates if the migration has progressed beyond the point of no return. When true, the migration cannot be aborted or paused. When false, the migration can be paused or aborted.

Name	Type	Description
restart_count	integer	Number of times migrate restarted the transfer, for example, rollback to transfer after starting the cutover.
source	source	Source cluster details for the SVM migration.
state	string	Indicates the state of the migration.
throttle	integer	Optional property to specify a throttle value in KB/s for each individual volume transfer. Defaults to 0 if not set, which is interpreted as unlimited. The minimum throttle value is 4 KB/s, so if you specify a throttle value between 1 and 4, it will be treated as if you specified 4.
time_metrics	time_metrics	Various time metrics details
uuid	string	SVM migration UUID

job_link

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

Retrieve the transfer status of volumes in an SVM

GET /svm/migrations/{svm_migration.uuid}/volumes

Introduced In: 9.10

Retrieves the transfer status of the volumes in the SVM.

Related ONTAP commands

- `vserver migrate show-volume`

Parameters

Name	Type	In	Required	Description
svm_migration.uuid	string	path	True	Migration UUID
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. • Default value: 1

Name	Type	In	Required	Description
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. • Default value: 1 • Max value: 120 • Min value: 0
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[svm_migration_volume]	

Example response

```json
{
  "_links": {
    "next": {
      "href": "/api/resourcelink"
    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "num_records": 1,
  "records": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "errors": {
      "code": "string",
      "message": "string"
    },
    "node": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "node1",
      "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
    },
    "svm": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "svm1",
      "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
    },
    "transfer_state": "Idle",
    "volume": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
```

```
        },
        "name": "volume1",
        "uuid": "028baa66-41bd-11e9-81d5-00a0986138f7"
      }
    }
  }
```

Error

```
Status: Default
```

ONTAP Error Response Codes

Error Code	Description
13172783	Migrate RDB lookup failed

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	href	
self	href	

self_link

Name	Type	Description
self	href	

errors

Name	Type	Description
code	string	Argument code
message	string	Message argument

_links

Name	Type	Description
self	href	

node

Node in the destination cluster where the volume is hosted

Name	Type	Description
_links	_links	
name	string	
uuid	string	

svm

SVM information

Name	Type	Description
_links	_links	
name	string	The name of the SVM.
uuid	string	The unique identifier of the SVM.

volume

Volume information in the destination cluster

Name	Type	Description
_links	_links	
name	string	The name of the volume.
uuid	string	Unique identifier for 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. • example: 028baa66-41bd-11e9-81d5-00a0986138f7 • Introduced in: 9.6

svm_migration_volume

Volume transfer information

Name	Type	Description
_links	self_link	
errors	array[errors]	List of transfer errors
healthy	boolean	Indicates whether the volume transfer relationship is healthy.
node	node	Node in the destination cluster where the volume is hosted
svm	svm	SVM information
transfer_state	string	Status of the transfer.
volume	volume	Volume information in the destination cluster

error_arguments

Name	Type	Description
code	string	Argument code
message	string	Message argument

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 the volume transfer status for a volume

GET `/svm/migrations/{svm_migration.uuid}/volumes/{volume.uuid}`

Introduced In: 9.10

Retrieves the volume transfer status of the specified volume.uuid.

Related ONTAP commands

- `vserver migrate show-volume`

Parameters

Name	Type	In	Required	Description
svm_migration.uuid	string	path	True	Migration UUID
volume.uuid	string	path	True	Volume UUID
svm.uuid	string	query	False	Filter by svm.uuid
svm.name	string	query	False	Filter by svm.name

Name	Type	In	Required	Description
transfer_state	string	query	False	Filter by transfer_state
volume.name	string	query	False	Filter by volume.name
node.uuid	string	query	False	Filter by node.uuid
node.name	string	query	False	Filter by node.name
healthy	boolean	query	False	Filter by healthy
errors.message	string	query	False	Filter by errors.message
errors.code	string	query	False	Filter by errors.code
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. • Default value: 1

Name	Type	In	Required	Description
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. • Default value: 1 • Max value: 120 • Min value: 0
order_by	array[string]	query	False	Order results by specified fields and optional [asc

Response

```
Status: 200, Ok
```

Name	Type	Description
_links	self_link	
errors	array[errors]	List of transfer errors
healthy	boolean	Indicates whether the volume transfer relationship is healthy.
node	node	Node in the destination cluster where the volume is hosted
svm	svm	SVM information
transfer_state	string	Status of the transfer.
volume	volume	Volume information in the destination cluster

Example response

```json
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "errors": {
    "code": "string",
    "message": "string"
  },
  "node": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "node1",
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
  },
  "svm": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
  },
  "transfer_state": "Idle",
  "volume": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "volume1",
    "uuid": "028baa66-41bd-11e9-81d5-00a0986138f7"
  }
}
```

Error

```
Status: Default
```

ONTAP Error Response Codes

Error Code	Description
13172783	Migrate RDB lookup failed

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	

self_link

Name	Type	Description
self	href	

errors

Name	Type	Description
code	string	Argument code
message	string	Message argument

_links

Name	Type	Description
self	href	

node

Node in the destination cluster where the volume is hosted

Name	Type	Description
_links	_links	
name	string	
uuid	string	

svm

SVM information

Name	Type	Description
_links	_links	
name	string	The name of the SVM.
uuid	string	The unique identifier of the SVM.

volume

Volume information in the destination cluster

Name	Type	Description
_links	_links	
name	string	The name of the volume.
uuid	string	Unique identifier for 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. • example: 028baa66-41bd-11e9-81d5-00a0986138f7 • Introduced in: 9.6

error_arguments

Name	Type	Description
code	string	Argument code
message	string	Message argument

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.

Delete SVM migrations

DELETE /svm/migrations/{uuid}

Introduced In: 9.10

Deletes the SVM migration.

Related ONTAP commands

- `vserver migrate abort`

Parameters

Name	Type	In	Required	Description
uuid	string	path	True	SVM migration UUID.
return_timeout	integer	query	False	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. • Default value: 1 • Max value: 120 • Min value: 0

Response

```
Status: 202, Accepted
```

Name	Type	Description
job	job_link	

Example response

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

Error

```
Status: Default
```

ONTAP Error Response Codes

Error Code	Description
13172783	Migrate RDB lookup failed

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	href	

job_link

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

Retrieve the migration status for an SVM

GET `/svm/migrations/{uuid}`

Introduced In: 9.10

Retrieves the migration status of an individual SVM.

Important notes

- The "migrations" object includes a large set of fields and can be expensive to retrieve.
- REST APIs only expose a data SVM as an SVM.

Example

Retrieving an individual SVM migration status.

```
GET "/api/svm/migrations/a14ae39f-8d85-11e9-b4a7-
00505682dc8b/svms/f16f0935-5281-11e8-b94d-005056b46485"
```

Parameters

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

Response

```
Status: 200, Ok
```

Name	Type	Description
auto_cutover	boolean	Optional property that when set to true automatically performs cutover when the migration state reaches "ready for cutover".
auto_source_cleanup	boolean	Optional property that when set to true automatically cleans up the SVM on the source cluster after the migration cutover.
check_only	boolean	Optional property that when set to true performs only migration pre-checks not the actual migration.
current_operation	string	

Name	Type	Description
destination	destination	Destination cluster details for the SVM migration.
ip_interface_placement	svm_migration_ip_interface_placement	Optional property used to specify the list of source SVM's IP interface and network port pairs in the destination for migrating the source SVM IP interfaces. Note that the SVM migration does not perform any reachability checks on the IP interfaces provided.
last_failed_state	string	Indicates the state of the migration.
last_operation	string	
messages	array[messages]	Errors and warnings returned/displayed during migration.
point_of_no_return	boolean	Indicates if the migration has progressed beyond the point of no return. When true, the migration cannot be aborted or paused. When false, the migration can be paused or aborted.
restart_count	integer	Number of times migrate restarted the transfer, for example, rollback to transfer after starting the cutover.
source	source	Source cluster details for the SVM migration.
state	string	Indicates the state of the migration.
throttle	integer	Optional property to specify a throttle value in KB/s for each individual volume transfer. Defaults to 0 if not set, which is interpreted as unlimited. The minimum throttle value is 4 KB/s, so if you specify a throttle value between 1 and 4, it will be treated as if you specified 4.
time_metrics	time_metrics	Various time metrics details
uuid	string	SVM migration UUID

```json
{
  "current_operation": "none",
  "destination": {
    "ipspace": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "exchange",
      "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
    },
    "volume_placement": {
      "aggregates": {
        "_links": {
          "self": {
            "href": "/api/resourcelink"
          }
        },
        "name": "aggr1",
        "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
      },
      "volume_aggregate_pairs": {
        "aggregate": {
          "_links": {
            "self": {
              "href": "/api/resourcelink"
            }
          },
          "name": "aggr1",
          "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
        },
        "volume": {
          "_links": {
            "self": {
              "href": "/api/resourcelink"
            }
          },
          "name": "volume1",
          "uuid": "028baa66-41bd-11e9-81d5-00a0986138f7"
        }
      }
    }
  },
```

```json
    "ip_interface_placement": {
      "ip_interfaces": {
        "interface": {
          "_links": {
            "self": {
              "href": "/api/resourcelink"
            }
          },
          "ip": {
            "address": "10.10.10.7"
          },
          "name": "lif1",
          "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
        },
        "port": {
          "_links": {
            "self": {
              "href": "/api/resourcelink"
            }
          },
          "name": "e1b",
          "node": {
            "name": "node1"
          },
          "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
        }
      }
    },
    "last_failed_state": "precheck_started",
    "last_operation": "none",
    "messages": {
      "code": "string",
      "message": "string"
    },
    "restart_count": 0,
    "source": {
      "cluster": {
        "_links": {
          "self": {
            "href": "/api/resourcelink"
          }
        },
        "name": "cluster1",
        "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
      },
      "svm": {
```

```
        "_links": {
          "self": {
            "href": "/api/resourcelink"
          }
        },
        "name": "svm1",
        "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
      }
    },
    "state": "precheck_started",
    "throttle": 0,
    "time_metrics": {
      "cutover_complete_time": "2020-12-02T19:30:19-08:00",
      "cutover_start_time": "2020-12-02T18:20:19-08:00",
      "cutover_trigger_time": "2020-12-02T19:15:19-08:00",
      "end_time": "2020-12-02T19:36:19-08:00",
      "last_pause_time": "2020-12-02T18:50:19-08:00",
      "last_resume_time": "2020-12-02T18:54:19-08:00",
      "start_time": "2020-12-02T18:36:19-08:00"
    },
    "uuid": "4ea7a442-86d1-11e0-ae1c-123478563412"
  }
```

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	href	

ipspace

Optional property used to specify which IPspace to use for the SVM. By default, the "default" ipspace is used.

Name	Type	Description
_links	_links	
name	string	IPspace name
uuid	string	IPspace UUID

aggregates

Name	Type	Description
_links	_links	
name	string	
uuid	string	

aggregate

Aggregate to use for volume creation.

Name	Type	Description
_links	_links	
name	string	
uuid	string	

volume

Property indicating the source volume.

Name	Type	Description
_links	_links	
name	string	The name of the volume.
uuid	string	Unique identifier for 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. • example: 028baa66-41bd-11e9-81d5-00a0986138f7 • Introduced in: 9.6

volume_aggregate_pairs

Volume-aggregate pair information.

Name	Type	Description
aggregate	aggregate	Aggregate to use for volume creation.
volume	volume	Property indicating the source volume.

volume_placement

Optional property to specify the source volume placement in the destination. It is input only and won't be returned by a subsequent GET.

Name	Type	Description
aggregates	array[aggregates]	Optional property used to specify the list of desired aggregates to use for volume creation in the destination.
volume_aggregate_pairs	array[volume_aggregate_pairs]	Optional property used to specify the list of desired volume-aggregate pairs in the destination.

destination

Destination cluster details for the SVM migration.

Name	Type	Description
ipspace	ipspace	Optional property used to specify which IPspace to use for the SVM. By default, the "default" ipspace is used.
volume_placement	volume_placement	Optional property to specify the source volume placement in the destination. It is input only and won't be returned by a subsequent GET.

ip

IP information

Name	Type	Description
address	string	IPv4 or IPv6 address

interface

Network interface on the source SVM.

Name	Type	Description
_links	_links	
ip	ip	IP information
name	string	The name of the interface. If only the name is provided, the SVM scope must be provided by the object this object is embedded in.
uuid	string	The UUID that uniquely identifies the interface.

node

Name	Type	Description
name	string	Name of node on which the port is located.

port

Port to use for IP interface placement on the destination SVM.

Name	Type	Description
_links	_links	
name	string	
node	node	
uuid	string	

ip_interfaces

IP interface and network port pair information.

Name	Type	Description
interface	interface	Network interface on the source SVM.
port	port	Port to use for IP interface placement on the destination SVM.

svm_migration_ip_interface_placement

Optional property used to specify the list of source SVM's IP interface and network port pairs in the destination for migrating the source SVM IP interfaces. Note that the SVM migration does not perform any reachability checks on the IP interfaces provided.

Name	Type	Description
ip_interfaces	array[ip_interfaces]	List of source SVM's IP interface and port pairs on the destination for migrating the source SVM's IP interfaces.

messages

Name	Type	Description
code	string	Argument code
message	string	Message argument

cluster

Source cluster for the SVM migration.

Name	Type	Description
_links	_links	
name	string	

Name	Type	Description
uuid	string	

svm

Source SVM

Name	Type	Description
_links	_links	
name	string	The name of the SVM.
uuid	string	The unique identifier of the SVM.

source

Source cluster details for the SVM migration.

Name	Type	Description
cluster	cluster	Source cluster for the SVM migration.
svm	svm	Source SVM

time_metrics

Various time metrics details

Name	Type	Description
cutover_complete_time	string	Cutover end time
cutover_start_time	string	Cutover start time
cutover_trigger_time	string	Cutover trigger time
end_time	string	Migration end time
last_pause_time	string	Last migration pause time
last_resume_time	string	Last migration resume time
start_time	string	Migration start time

error_arguments

Name	Type	Description
code	string	Argument code
message	string	Message argument

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.

Update actions performed during an SVM migration

PATCH /svm/migrations/{uuid}

Introduced In: 9.10

Actions that can be performed during an SVM migration.

Related ONTAP commands

- `vserver migrate pause`
- `vserver migrate resume`
- `vserver migrate cutover`
- `vserver migrate source-cleanup`

Parameters

Name	Type	In	Required	Description
uuid	string	path	True	SVM migration UUID

Name	Type	In	Required	Description
action	string	query	False	The pause action pauses the SVM migration. This action stops data transfer and configuration replication. This operation must be performed on the destination cluster. The resume action resumes an SVM migration from a paused or failed state. This operation must be performed on the destination cluster. The cutover action triggers the cutover of an SVM from the source cluster to the destination cluster. The source_clean up action performs a clean up of the SVM on the source cluster. • enum: ["pause", "resume", "cutover", "source_cleanup"]
auto_cutover	boolean	query	False	Optional property that when set to true automatically performs cutover when the migration state reaches "ready for cutover". • Default value: 1

Name	Type	In	Required	Description
auto_source_cleanup	boolean	query	False	Optional property that when set to true automatically cleans up the SVM on the source cluster after the migration cutover. • Default value: 1
return_timeout	integer	query	False	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. • Default value: 1 • Max value: 120 • Min value: 0

Request Body

Name	Type	Description
auto_cutover	boolean	Optional property that when set to true automatically performs cutover when the migration state reaches "ready for cutover".
auto_source_cleanup	boolean	Optional property that when set to true automatically cleans up the SVM on the source cluster after the migration cutover.
check_only	boolean	Optional property that when set to true performs only migration pre-checks not the actual migration.
current_operation	string	
destination	destination	Destination cluster details for the SVM migration.
ip_interface_placement	svm_migration_ip_interface_placement	Optional property used to specify the list of source SVM's IP interface and network port pairs in the destination for migrating the source SVM IP interfaces. Note that the SVM migration does not perform any reachability checks on the IP interfaces provided.
last_failed_state	string	Indicates the state of the migration.
last_operation	string	
messages	array[messages]	Errors and warnings returned/displayed during migration.
point_of_no_return	boolean	Indicates if the migration has progressed beyond the point of no return. When true, the migration cannot be aborted or paused. When false, the migration can be paused or aborted.
restart_count	integer	Number of times migrate restarted the transfer, for example, rollback to transfer after starting the cutover.
source	source	Source cluster details for the SVM migration.

Name	Type	Description
state	string	Indicates the state of the migration.
throttle	integer	Optional property to specify a throttle value in KB/s for each individual volume transfer. Defaults to 0 if not set, which is interpreted as unlimited. The minimum throttle value is 4 KB/s, so if you specify a throttle value between 1 and 4, it will be treated as if you specified 4.
time_metrics	time_metrics	Various time metrics details
uuid	string	SVM migration UUID

Example request

```json
{
  "current_operation": "none",
  "destination": {
    "ipspace": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "exchange",
      "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
    },
    "volume_placement": {
      "aggregates": {
        "_links": {
          "self": {
            "href": "/api/resourcelink"
          }
        },
        "name": "aggr1",
        "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
      },
      "volume_aggregate_pairs": {
        "aggregate": {
          "_links": {
            "self": {
              "href": "/api/resourcelink"
            }
          },
          "name": "aggr1",
          "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
        },
        "volume": {
          "_links": {
            "self": {
              "href": "/api/resourcelink"
            }
          },
          "name": "volume1",
          "uuid": "028baa66-41bd-11e9-81d5-00a0986138f7"
        }
      }
    }
  },
```

```json
      "ip_interface_placement": {
        "ip_interfaces": {
          "interface": {
            "_links": {
              "self": {
                "href": "/api/resourcelink"
              }
            },
            "ip": {
              "address": "10.10.10.7"
            },
            "name": "lif1",
            "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
          },
          "port": {
            "_links": {
              "self": {
                "href": "/api/resourcelink"
              }
            },
            "name": "e1b",
            "node": {
              "name": "node1"
            },
            "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
          }
        }
      },
      "last_failed_state": "precheck_started",
      "last_operation": "none",
      "messages": {
        "code": "string",
        "message": "string"
      },
      "restart_count": 0,
      "source": {
        "cluster": {
          "_links": {
            "self": {
              "href": "/api/resourcelink"
            }
          },
          "name": "cluster1",
          "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
        },
        "svm": {
```

```
        "_links": {
          "self": {
            "href": "/api/resourcelink"
          }
        },
        "name": "svm1",
        "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
      }
    },
    "state": "precheck_started",
    "throttle": 0,
    "time_metrics": {
      "cutover_complete_time": "2020-12-02T19:30:19-08:00",
      "cutover_start_time": "2020-12-02T18:20:19-08:00",
      "cutover_trigger_time": "2020-12-02T19:15:19-08:00",
      "end_time": "2020-12-02T19:36:19-08:00",
      "last_pause_time": "2020-12-02T18:50:19-08:00",
      "last_resume_time": "2020-12-02T18:54:19-08:00",
      "start_time": "2020-12-02T18:36:19-08:00"
    },
    "uuid": "4ea7a442-86d1-11e0-ae1c-123478563412"
  }
```

Response

```
Status: 202, Accepted
```

Name	Type	Description
job	job_link	

Example response

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

Error

```
Status: Default
```

ONTAP Error Response Codes

Error Code	Description
13172783	Migrate RDB lookup failed

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	href	

ipspace

Optional property used to specify which IPspace to use for the SVM. By default, the "default" ipspace is used.

Name	Type	Description
_links	_links	
name	string	IPspace name
uuid	string	IPspace UUID

aggregates

Name	Type	Description
_links	_links	
name	string	
uuid	string	

aggregate

Aggregate to use for volume creation.

Name	Type	Description
_links	_links	
name	string	
uuid	string	

volume

Property indicating the source volume.

Name	Type	Description
_links	_links	
name	string	The name of the volume.
uuid	string	Unique identifier for 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. • example: 028baa66-41bd-11e9-81d5-00a0986138f7 • Introduced in: 9.6

volume_aggregate_pairs

Volume-aggregate pair information.

Name	Type	Description
aggregate	aggregate	Aggregate to use for volume creation.
volume	volume	Property indicating the source volume.

volume_placement

Optional property to specify the source volume placement in the destination. It is input only and won't be returned by a subsequent GET.

Name	Type	Description
aggregates	array[aggregates]	Optional property used to specify the list of desired aggregates to use for volume creation in the destination.
volume_aggregate_pairs	array[volume_aggregate_pairs]	Optional property used to specify the list of desired volume-aggregate pairs in the destination.

destination

Destination cluster details for the SVM migration.

Name	Type	Description
ipspace	ipspace	Optional property used to specify which IPspace to use for the SVM. By default, the "default" ipspace is used.
volume_placement	volume_placement	Optional property to specify the source volume placement in the destination. It is input only and won't be returned by a subsequent GET.

ip

IP information

Name	Type	Description
address	string	IPv4 or IPv6 address

interface

Network interface on the source SVM.

Name	Type	Description
_links	_links	
ip	ip	IP information
name	string	The name of the interface. If only the name is provided, the SVM scope must be provided by the object this object is embedded in.
uuid	string	The UUID that uniquely identifies the interface.

node

Name	Type	Description
name	string	Name of node on which the port is located.

port

Port to use for IP interface placement on the destination SVM.

Name	Type	Description
_links	_links	
name	string	
node	node	
uuid	string	

ip_interfaces

IP interface and network port pair information.

Name	Type	Description
interface	interface	Network interface on the source SVM.
port	port	Port to use for IP interface placement on the destination SVM.

svm_migration_ip_interface_placement

Optional property used to specify the list of source SVM's IP interface and network port pairs in the destination for migrating the source SVM IP interfaces. Note that the SVM migration does not perform any reachability checks on the IP interfaces provided.

Name	Type	Description
ip_interfaces	array[ip_interfaces]	List of source SVM's IP interface and port pairs on the destination for migrating the source SVM's IP interfaces.

messages

Name	Type	Description
code	string	Argument code
message	string	Message argument

cluster

Source cluster for the SVM migration.

Name	Type	Description
_links	_links	
name	string	

Name	Type	Description
uuid	string	

svm

Source SVM

Name	Type	Description
_links	_links	
name	string	The name of the SVM.
uuid	string	The unique identifier of the SVM.

source

Source cluster details for the SVM migration.

Name	Type	Description
cluster	cluster	Source cluster for the SVM migration.
svm	svm	Source SVM

time_metrics

Various time metrics details

Name	Type	Description
cutover_complete_time	string	Cutover end time
cutover_start_time	string	Cutover start time
cutover_trigger_time	string	Cutover trigger time
end_time	string	Migration end time
last_pause_time	string	Last migration pause time
last_resume_time	string	Last migration resume time
start_time	string	Migration start time

svm_migration

Provides information on SVM migration, default and user specified configurations, the state of the migration, and volume transfer metrics.

Name	Type	Description
auto_cutover	boolean	Optional property that when set to true automatically performs cutover when the migration state reaches "ready for cutover".
auto_source_cleanup	boolean	Optional property that when set to true automatically cleans up the SVM on the source cluster after the migration cutover.
check_only	boolean	Optional property that when set to true performs only migration pre-checks not the actual migration.
current_operation	string	
destination	destination	Destination cluster details for the SVM migration.
ip_interface_placement	svm_migration_ip_interface_placement	Optional property used to specify the list of source SVM's IP interface and network port pairs in the destination for migrating the source SVM IP interfaces. Note that the SVM migration does not perform any reachability checks on the IP interfaces provided.
last_failed_state	string	Indicates the state of the migration.
last_operation	string	
messages	array[messages]	Errors and warnings returned/displayed during migration.
point_of_no_return	boolean	Indicates if the migration has progressed beyond the point of no return. When true, the migration cannot be aborted or paused. When false, the migration can be paused or aborted.

Name	Type	Description
restart_count	integer	Number of times migrate restarted the transfer, for example, rollback to transfer after starting the cutover.
source	source	Source cluster details for the SVM migration.
state	string	Indicates the state of the migration.
throttle	integer	Optional property to specify a throttle value in KB/s for each individual volume transfer. Defaults to 0 if not set, which is interpreted as unlimited. The minimum throttle value is 4 KB/s, so if you specify a throttle value between 1 and 4, it will be treated as if you specified 4.
time_metrics	time_metrics	Various time metrics details
uuid	string	SVM migration UUID

job_link

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

array[error_arguments]