



Manage SVM migration

ONTAP 9.14.1 REST API reference

NetApp
May 08, 2024

This PDF was generated from https://docs.netapp.com/us-en/ontap-restapi/ontap/svm_migrations_endpoint_overview.html on May 08, 2024. Always check docs.netapp.com for the latest.

Table of Contents

- Manage SVM migration 1
 - SVM migrations endpoint overview 1
 - Overview 1
 - Retrieve the SVM migration status 11
 - Create an SVM migration operation 26
 - Retrieve the transfer status of volumes in an SVM 46
 - Retrieve the volume transfer status for a volume 52
 - Delete SVM migrations 59
 - Retrieve the migration status for an SVM 63
 - Update actions performed during an SVM migration 76

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}

Important notes

The migration of temperature-sensitive storage efficiency (TSSE) volumes from AFF to FAS systems has a known limitation. The migration preserves the TSSE savings and after migration completes, the volume will not receive any further TSSE savings for the new data written on the volume.

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 successful 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 during 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-a40f-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 |
|---------------------|--------|-------|----------|-------------------------------|
| source.cluster.uuid | string | query | False | Filter by source.cluster.uuid |

| Name | Type | In | Required | Description |
|------------------------------------|---------|-------|----------|----------------------------------------------|
| source.cluster.name | string | query | False | Filter by source.cluster.name |
| source.svm.uuid | string | query | False | Filter by source.svm.uuid |
| source.svm.name | string | query | False | Filter by source.svm.name |
| destination.ipspace.uuid | string | query | False | Filter by destination.ipspace.uuid |
| destination.ipspace.name | string | query | False | Filter by destination.ipspace.name |
| last_operation | string | query | False | Filter by last_operation |
| state | string | query | False | Filter by state |
| uuid | string | query | False | Filter by uuid |
| auto_cutover | boolean | query | False | Filter by auto_cutover |
| time_metrics.cutover_complete_time | string | query | False | Filter by time_metrics.cutover_complete_time |
| time_metrics.cutover_start_time | string | query | False | Filter by time_metrics.cutover_start_time |
| time_metrics.last_pause_time | string | query | False | Filter by time_metrics.last_pause_time |
| time_metrics.start_time | string | query | False | Filter by time_metrics.start_time |
| time_metrics.last_resume_time | string | query | False | Filter by time_metrics.last_resume_time |

| Name | Type | In | Required | Description |
|-----------------------------------|---------------|-------|----------|------------------------------------------------------------------------------------------|
| time_metrics.cutover_trigger_time | string | query | False | Filter by time_metrics.cutover_trigger_time |
| time_metrics.end_time | string | query | False | Filter by time_metrics.end_time |
| point_of_no_return | boolean | query | False | Filter by point_of_no_return |
| throttle | integer | query | False | Filter by throttle <ul style="list-style-type: none"> Introduced in: 9.12 |
| restart_count | integer | query | False | Filter by restart_count |
| messages.code | string | query | False | Filter by messages.code |
| messages.message | string | query | False | Filter by messages.message |
| auto_source_cleanup | boolean | query | False | Filter by auto_source_cleanup |
| current_operation | string | query | False | Filter by current_operation |
| last_failed_state | string | query | False | Filter by last_failed_state |
| 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": "2020-12-03 03:30:19 +0000",
  "cutover_start_time": "2020-12-03 02:20:19 +0000",
  "cutover_trigger_time": "2020-12-03 03:15:19 +0000",
  "end_time": "2020-12-03 03:36:19 +0000",
  "last_pause_time": "2020-12-03 02:50:19 +0000",
  "last_resume_time": "2020-12-03 02:54:19 +0000",
  "start_time": "2020-12-03 02:36:19 +0000"
},
"uuid": "4ea7a442-86d1-11e0-ae1c-123478563412"
}
}

```

Error

Status: Default

ONTAP Error Response Codes

| Error Code | Description |
|------------|---------------------------|
| 13172783 | Migrate RDB lookup failed |

Also see the table of common errors in the [Response body](#) overview section of this documentation.

| 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 | |

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

Aggregate

| Name | Type | Description |
|--------|------------------------|-------------|
| _links | _links | |
| name | string | |
| uuid | string | |

aggregate

Aggregate to use for volume creation.

| Name | Type | Description |
|--------|------------------------|-------------|
| _links | _links | |

| Name | Type | Description |
|------|--------|-------------|
| name | string | |
| uuid | string | |

volume

Property indicating the source volume.

| Name | Type | Description |
|------------------------|------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| _links | _links | |
| name | string | The name of the volume. This field cannot be specified in a POST or PATCH method. |
| uuid | string | <p>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.</p> <ul style="list-style-type: none"> • example: 028baa66-41bd-11e9-81d5-00a0986138f7 • Introduced in: 9.6 • x-nullable: true |

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. Volume placement is ignored if the migration resumes from the cleanup_failed state.

| 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. Volume placement is ignored if the migration resumes from the cleanup_failed state. |

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 | Type | Description |
|------|--------|-----------------------------------------------------------------------------------------------------------------------------------|
| 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 | |
| uuid | string | |

svm

Source SVM

| 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. |

source

Source cluster details for the SVM migration.

| Name | Type | Description |
|---------|-------------------------|---------------------------------------|
| cluster | cluster | Source cluster for the SVM migration. |

| Name | Type | Description |
|------|---------------------|-------------|
| 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. |

| Name | Type | Description |
|------------------------|------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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 |

| Name | Type | Description |
|------|--------|--------------------|
| uuid | string | SVM migration UUID |

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. |

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 source 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 | <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: 1 • Max value: 120 • Min value: 0 |
| 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: |

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". |

| Name | Type | Description |
|------------------------|------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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. |
| state | string | Indicates the state of the migration. |

| Name | Type | Description |
|--------------|------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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

```
{
  "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": "elb",
      "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": "2020-12-03 03:30:19 +0000",
  "cutover_start_time": "2020-12-03 02:20:19 +0000",
  "cutover_trigger_time": "2020-12-03 03:15:19 +0000",
  "end_time": "2020-12-03 03:36:19 +0000",
  "last_pause_time": "2020-12-03 02:50:19 +0000",
  "last_resume_time": "2020-12-03 02:54:19 +0000",
  "start_time": "2020-12-03 02:36:19 +0000"
},
"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

```
{
  "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": "2020-12-03 03:30:19 +0000",
  "cutover_start_time": "2020-12-03 02:20:19 +0000",
  "cutover_trigger_time": "2020-12-03 03:15:19 +0000",
  "end_time": "2020-12-03 03:36:19 +0000",
  "last_pause_time": "2020-12-03 02:50:19 +0000",
  "last_resume_time": "2020-12-03 02:54:19 +0000",
  "start_time": "2020-12-03 02:36:19 +0000"
},
"uuid": "4ea7a442-86d1-11e0-ae1c-123478563412"
}
}

```

Headers

| Name | Description | Type |
|----------|-------------------------------------------|--------|
| Location | Useful for tracking the resource location | string |

Response

Status: 201, Created

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. |
| 13173748 | Migrate request cannot contain both \"aggregates\" and \"volume_aggregate_pairs\" within the \"volume_placement\" object. |
| 13173758 | The property \"{property}\" is not supported for this operation. |
| 13173759 | Migrate operation failed. To use LIF placement specify either the port UUID, or both the port name and the port node name. |
| 13173760 | Migrate operation failed. LIF placement requires either the port node name or the port UUID to be specified if the port name is specified. |
| 13173761 | Migrate operation failed. LIF placement requires either the port name or the port UUID to be specified if the port node name is specified. |
| 13173762 | Migrate operation failed. To use LIF placement specify at least one of the following: IP interface UUID, IP interface name, or IP interface IP. |
| 13173764 | Migrate operation failed because LIF placement is not supported on the destination cluster. Both clusters must have an effective cluster version of 9.12.1 or later. |
| 13173765 | Migrate operation failed. Unable to determine if LIF placement is supported. Reason: \"{Reason}\" |

Also see the table of common errors in the [Response body](#) overview section of this documentation.

| 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 | |

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

Aggregate

| 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. This field cannot be specified in a POST or PATCH method. |
| uuid | string | <p>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.</p> <ul style="list-style-type: none"> • example: 028baa66-41bd-11e9-81d5-00a0986138f7 • Introduced in: 9.6 • x-nullable: true |

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. Volume placement is ignored if the migration resumes from the cleanup_failed state.

| 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. Volume placement is ignored if the migration resumes from the cleanup_failed state. |

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 | |
| uuid | string | |

svm

Source SVM

| 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. |

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 |

| Name | Type | Description |
|------------------|--------|----------------------------|
| 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. |

| Name | Type | Description |
|--------------------|------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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 |

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 |

| Name | Type | Description |
|---------|--------|------------------|
| 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 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. |

| 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_volume] | |

Example response

```
{
  "_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 |

Also see the table of common errors in the [Response body](#) overview section of this documentation.

| 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 | |

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. 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. |

volume

Volume information in the destination cluster

| Name | Type | Description |
|--------|------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| _links | _links | |
| name | string | The name of the volume. This field cannot be specified in a POST or PATCH method. |
| uuid | string | <p>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.</p> <ul style="list-style-type: none"> • example: 028baa66-41bd-11e9-81d5-00a0986138f7 • Introduced in: 9.6 • x-nullable: true |

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 |

| Name | Type | Description |
|----------------|------------------------|-----------------------------------------------|
| 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 |

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 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 |
| transfer_state | string | query | False | Filter by transfer_state |
| volume.name | string | query | False | Filter by volume.name |
| node.name | string | query | False | Filter by node.name |
| node.uuid | string | query | False | Filter by node.uuid |
| healthy | boolean | query | False | Filter by healthy |
| errors.code | string | query | False | Filter by errors.code |
| errors.message | string | query | False | Filter by errors.message |
| svm.uuid | string | query | False | Filter by svm.uuid |
| svm.name | string | query | False | Filter by svm.name |
| fields | array[string] | query | False | Specify the fields to return. |
| max_records | integer | query | False | Limit the number of records returned. |
| return_records | boolean | query | False | <p>The default is true for GET calls. When set to false, only the number of records is returned.</p> <ul style="list-style-type: none"> • Default value: 1 |

| Name | Type | In | Required | Description |
|----------------|---------------|-------|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| return_timeout | integer | query | False | <p>The number of seconds to allow the call to execute before returning. When iterating over a collection, the default is 15 seconds. ONTAP returns earlier if either max records or the end of the collection is reached.</p> <ul style="list-style-type: none"> • 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

```
{
  "_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 |

Also see the table of common errors in the [Response body](#) overview section of this documentation.

| 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 | |

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. This field cannot be specified in a PATCH method. |

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

volume

Volume information in the destination cluster

| Name | Type | Description |
|--------|------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| _links | _links | |
| name | string | The name of the volume. This field cannot be specified in a POST or PATCH method. |
| uuid | string | <p>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.</p> <ul style="list-style-type: none"> • example: 028baa66-41bd-11e9-81d5-00a0986138f7 • Introduced in: 9.6 • x-nullable: true |

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 |

| Name | Type | Description |
|--------|--------|---------------------------------------------|
| 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. |

| 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: 1 • Max value: 120 • Min value: 0 |

Response

Status: 200, Ok

| Name | Type | Description |
|------|--------------------------|-------------|
| job | job_link | |

Example response

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

Response

Status: 202, Accepted

Error

Status: Default

ONTAP Error Response Codes

| Error Code | Description |
|------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 13172783 | Migrate RDB lookup failed |
| 13173738 | REST API DELETE method <code>\"/api/svm/migrations\"</code> is only supported on the destination cluster. Issue the REST API DELETE request to the destination cluster. |

Also see the table of common errors in the [Response body](#) overview section of this documentation.

| 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 | |

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 |

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 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.
- There are subsystem specific errors that can be returned from this endpoint. If a subsystem specific error is returned and this is the first migrate operation attempt, it is embedded in one of the following errors. If a subsystem specific error is returned and this is not the first migrate operation attempt, the subsystem specific error is returned directly.

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. |

| Name | Type | Description |
|------------------------|------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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. |
| state | string | Indicates the state of the migration. |

| Name | Type | Description |
|--------------|------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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 response

```
{
  "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": "elb",
      "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": "2020-12-03 03:30:19 +0000",
  "cutover_start_time": "2020-12-03 02:20:19 +0000",
  "cutover_trigger_time": "2020-12-03 03:15:19 +0000",
  "end_time": "2020-12-03 03:36:19 +0000",
  "last_pause_time": "2020-12-03 02:50:19 +0000",
  "last_resume_time": "2020-12-03 02:54:19 +0000",
  "start_time": "2020-12-03 02:36:19 +0000"
},
"uuid": "4ea7a442-86d1-11e0-ae1c-123478563412"
}

```

Error

Status: Default

ONTAP Error Response Codes

| Error Code | Description |
|------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 13172783 | Migrate RDB lookup failed |
| 13173739 | Migrate pause operation failed. Retry pause operation using REST API PATCH method "/api/svm/migrations/<migration_uuid>?action=pause\". Reason: {Reason}</migration_uuid> |
| 13173740 | Migrate abort operation failed. Retry abort operation by using REST API DELETE method "/api/svm/migrations/<migration_uuid>\". Reason: {Reason}</migration_uuid> |
| 13173741 | Migrate failed. Retry the migrate by running the resume operation using REST API PATCH method "/api/svm/migrations/<migration_uuid>?action=resume\". Reason: {Reason}</migration_uuid> |

| Error Code | Description |
|------------|-------------------------------------|
| 13173742 | Migrate operation status: {Reason}. |

Also see the table of common errors in the [Response body](#) overview section of this documentation.

| 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 | |

ipospace

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

Aggregate

| 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. This field cannot be specified in a POST or PATCH method. |
| uuid | string | <p>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.</p> <ul style="list-style-type: none"> • example: 028baa66-41bd-11e9-81d5-00a0986138f7 • Introduced in: 9.6 • x-nullable: true |

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. Volume placement is ignored if the migration resumes from the cleanup_failed state.

| 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. Volume placement is ignored if the migration resumes from the cleanup_failed state. |

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 | |
| uuid | string | |

svm

Source SVM

| 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. |

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 |

| Name | Type | Description |
|------------------|--------|----------------------------|
| 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 |

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. |

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 |
| action | string | query | False | <p>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. If the SVM migration is in a cleanup_failed state, volume placement is ignored. 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_cleanup action performs a clean up of the SVM on the source cluster.</p> <ul style="list-style-type: none"> enum: ["pause", "resume", "cutover", "source_cleanup"] |
| auto_cutover | boolean | query | False | <p>Optional property that when set to true automatically performs cutover when the migration state reaches "ready for cutover".</p> <ul style="list-style-type: none"> Default value: 1 |

| Name | Type | In | Required | Description |
|---------------------|---------|-------|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| auto_source_cleanup | boolean | query | False | <p>Optional property that when set to true automatically cleans up the SVM on the source cluster after the migration cutover.</p> <ul style="list-style-type: none"> • Default value: 1 |
| 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: 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

```
{
  "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": "elb",
      "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": "2020-12-03 03:30:19 +0000",
  "cutover_start_time": "2020-12-03 02:20:19 +0000",
  "cutover_trigger_time": "2020-12-03 03:15:19 +0000",
  "end_time": "2020-12-03 03:36:19 +0000",
  "last_pause_time": "2020-12-03 02:50:19 +0000",
  "last_resume_time": "2020-12-03 02:54:19 +0000",
  "start_time": "2020-12-03 02:36:19 +0000"
},
"uuid": "4ea7a442-86d1-11e0-ae1c-123478563412"
}

```

Response

Status: 200, Ok

| Name | Type | Description |
|------|--------------------------|-------------|
| job | job_link | |

Example response

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

Response

Status: 202, Accepted

Error

Status: Default

ONTAP Error Response Codes

| Error Code | Description |
|------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 13172783 | Migrate RDB lookup failed |
| 13173737 | REST API PATCH method <code>\"/api/svm/migrations\"</code> is only supported on the destination cluster. Issue the REST API PATCH request to the destination cluster. |
| 13173746 | Migrate resume operation failed. Cannot specify volume granular placement during resume if aggregate placement was specified during start operation. |
| 13173747 | Migrate operation failed. Volume placement can only be specified on PATCH with an action of <code>\\"resume\"</code> . |
| 13173748 | Migrate request cannot contain both <code>\\"aggregates\"</code> and <code>\\"volume_aggregate_pairs\"</code> within the <code>\\"volume_placement\"</code> object. |
| 13173763 | Migrate operation failed. LIF placement is not supported in PATCH operations. |

Also see the table of common errors in the [Response body](#) overview section of this documentation.

| 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 | |

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

Aggregate

| 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. This field cannot be specified in a POST or PATCH method. |
| uuid | string | <p>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.</p> <ul style="list-style-type: none"> • example: 028baa66-41bd-11e9-81d5-00a0986138f7 • Introduced in: 9.6 • x-nullable: true |

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. Volume placement is ignored if the migration resumes from the cleanup_failed state.

| 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. Volume placement is ignored if the migration resumes from the cleanup_failed state. |

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 | |
| uuid | string | |

svm

Source SVM

| 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. |

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 |

| Name | Type | Description |
|------------------|--------|----------------------------|
| 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. |

| Name | Type | Description |
|--------------------|------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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 |

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 |

| Name | Type | Description |
|---------|--------|------------------|
| 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 © 2024 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—without 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.