



SVM

ONTAP 9.7 REST API reference

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SVM

SVM overview

Overview

Storage Virtual Machine (SVM) APIs enable you to manage SVMs and their attributes, including the configuration of the CIFS and NFS protocols, export policies, name mappings between CIFS and NFS users, and network services.

SVMs contain data volumes and one or more network interfaces through which they serve data to the clients. SVMs securely isolate the shared virtualized data storage and network, and each SVM appears as a single dedicated server to the clients. Each SVM has a separate administrator authentication domain, and each SVM can be managed independently by its SVM administrator.

In a cluster, SVMs facilitate data access. A cluster must have at least one SVM to serve data. Multiple SVMs can coexist in a single cluster without being bound to any particular node in the cluster. However, they are bound to the physical cluster on which they exist.

SVMs with volumes can contain files and LUNs. They provide file-level data access by using NFS and CIFS protocols for the NAS clients, and block-level data access by using iSCSI and Fibre Channel (FC) (FCoE included) for SAN hosts. The volumes within each NAS SVM are related to each other through junctions and they are mounted on junction paths. These junctions present the file system in each volume. The root volume of the SVM resides at the top level of the namespace hierarchy; additional volumes are mounted to the SVM root volume to extend the namespace. As volumes are created for the SVM, the root volume of the SVM contains junction paths.

The ONTAP REST APIs only expose data SVMs as an SVM. The information and configuration associated with the cluster and nodes are exposed from REST, but the cluster and nodes are not treated as if they are a type of SVM from REST APIs. Some APIs that expose both cluster-owned resources and SVM-owned resources from the same endpoint only return and support the "svm" sub-object for the resources that are within a data SVM. In those endpoints, the resources that are not in a data SVM do not return the "svm" sub-object. Generally, such endpoints have a "scope" attribute that returns either "svm" or "cluster" to identify the resource as either a cluster-level resource or one that is completely contained in a data SVM.

Manage SVM peer permissions

SVM peer-permissions endpoint overview

Managing SVM peer permissions

A cluster administrator can provide permissions for use during intercluster SVM peer relationship creation. Once this permission exists for a local SVM and peer cluster combination on a local cluster, no explicit SVM peer accept (or REST PATCH) API is required for any incoming SVM peer relationship creation requests from a remote cluster for that local SVM. Peer relationship directly changes the state to peered on both clusters. Use an SVM name as "*" to create permissions that apply to all local SVMs.

SVM peer permission APIs

The following APIs are used to manage SVM peer permissions:

- GET /api/svm/peer-permissions

- POST /api/svm/peer-permissions
- GET /api/svm/peer-permissions/{cluster_peer.uuid}/{svm.uuid}
- PATCH /api/svm/peer-permissions/{cluster_peer.uuid}/{svm.uuid}
- DELETE /api/svm/peer-permissions/{cluster_peer.uuid}/{svm.uuid}

Retrieve SVM peer permissions

GET /svm/peer-permissions

Retrieves the list of SVM peer permissions.

Related ONTAP commands

- vserver peer permission show

Examples

The following examples show how to retrieve a collection of SVM peer permissions based on a query.

1. Retrieves a list of SVM peer permissions of a specific local SVM

```
GET "/api/svm/peer-permissions/?svm.name=VS1"
```

1. Retrieves a list of SVM peer permissions of a specific cluster peer

```
GET "/api/svm/peer-permissions/?cluster_peer.name=cluster2"
```

Learn more

- [DOC /svm/peer-permissions](#)

Parameters

| Name | Type | In | Required | Description |
|-------------------|--------|-------|----------|-----------------------------|
| cluster_peer.uuid | string | query | False | Filter by cluster_peer.uuid |
| cluster_peer.name | string | query | False | Filter by cluster_peer.name |
| svm.uuid | string | query | False | Filter by svm.uuid |
| svm.name | string | query | False | Filter by svm.name |
| applications | string | query | False | Filter by applications |

| Name | Type | In | Required | Description |
|----------------|---------------|-------|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| fields | array[string] | query | False | Specify the fields to return. |
| max_records | integer | query | False | Limit the number of records returned. |
| return_records | boolean | query | False | The default is true for GET calls. When set to false, only the number of records is returned. |
| 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. |
| 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_peer_permission] | |

Example response

```
{
  "_links": {
    "next": {
      "href": "/api/resourcelink"
    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "records": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "applications": [
      "snapmirror",
      "flexcache"
    ],
    "cluster_peer": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "cluster2",
      "uuid": "ebe27c49-1adf-4496-8335-ab862aebebf2"
    },
    "svm": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "svm1",
      "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
    }
  }
}
```

Error

Status: Default

ONTAP Error Response Codes

| Error codes | Description |
|-------------|--------------------------------------------------|
| 26345574 | Failed to find the SVM or volume name with UUID. |

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

Example error

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

Definitions

See Definitions

href

| Name | Type | Description |
|------|--------|-------------|
| href | string | |

_links

| Name | Type | Description |
|------|----------------------|-------------|
| next | href | |
| self | href | |

_links

| Name | Type | Description |
|------|----------------------|-------------|
| self | href | |

cluster_peer

Peer cluster details

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

svm

Local SVM permitted for peer relation. To create peer permissions for all SVMs, specify the SVM name as "*".

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

svm_peer_permission

Manage SVM peer permissions.

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

| Name | Type | Description |
|--------------|------------------------------|--------------------------------------------------------------------------------------------------------------|
| applications | array[string] | A list of applications for an SVM peer relation. |
| cluster_peer | cluster_peer | Peer cluster details |
| svm | svm | Local SVM permitted for peer relation. To create peer permissions for all SVMs, specify the SVM name as "*". |

error_arguments

| Name | Type | Description |
|---------|--------|------------------|
| code | string | Argument code |
| message | string | Message argument |

error

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

Create an SVM peer permission

POST /svm/peer-permissions

Creates an SVM peer permission.

Required properties

- `svm.name` or `svm.uuid` - SVM name
- `cluster_peer.uuid` or `cluster_peer.name` - Peer cluster name or peer cluster UUID
- `applications` - Peering applications

Related ONTAP commands

- `vserver peer permission create`

Examples

The following examples show how to create SVM peer permissions.

1. Creates an SVM peer permission entry with the local SVM and cluster peer names

```
POST "/api/svm/peer-permissions" '{"cluster_peer":{"name":"cluster2"},
"svm":{"name":"VS1"}, "applications":["snapmirror"]}'
```

1. Creates an SVM peer permission entry with the local SVM and cluster peer UUID

```
POST "/api/svm/peer-permissions" '{"cluster_peer":{"uuid":"d3268a74-ee76-
11e8-a9bb-005056ac6dc9"}, "svm":{"uuid":"8f467b93-f2f1-11e8-9027-
005056ac81fc"}, "applications":["snapmirror"]}'
```

1. Creates an SVM peer permission entry with all SVMs and the cluster peer name

```
POST "/api/svm/peer-permissions" '{"cluster_peer":{"name":"cluster2"},
"svm":{"name":"*"}, "applications":["snapmirror"]}'
```

Learn more

- [DOC /svm/peer-permissions](#)

Parameters

| Name | Type | In | Required | Description |
|----------------|---------|-------|----------|-----------------------------------------------------------------|
| return_records | boolean | query | False | The default is false. If set to true, the records are returned. |

Request Body

| Name | Type | Description |
|--------------|------------------------|--------------------------------------------------|
| _links | _links | |
| applications | array[string] | A list of applications for an SVM peer relation. |

| Name | Type | Description |
|--------------|------------------------------|--------------------------------------------------------------------------------------------------------------|
| cluster_peer | cluster_peer | Peer cluster details |
| svm | svm | Local SVM permitted for peer relation. To create peer permissions for all SVMs, specify the SVM name as "*". |

Example request

```
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "applications": [
    "snapmirror",
    "flexcache"
  ],
  "cluster_peer": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "cluster2",
    "uuid": "ebe27c49-1adf-4496-8335-ab862aebef2"
  },
  "svm": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
  }
}
```

Response

Status: 201, Created

| Name | Type | Description |
|--------------|------------------------------|---------------------------------------------------------------------------------------------------------------|
| _links | _links | |
| applications | array[string] | A list of applications for an SVM peer relation. |
| cluster_peer | cluster_peer | Peer cluster details |
| svm | svm | Local SVM permitted for peer relation. To create peer permissions for all SVMs, specify the SVM name as "**". |

Example response

```
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "applications": [
    "snapmirror",
    "flexcache"
  ],
  "cluster_peer": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "cluster2",
    "uuid": "ebe27c49-1adf-4496-8335-ab862aebbf2"
  },
  "svm": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
  }
}
```

Error

Status: Default

ONTAP Error Response Codes

| Error codes | Description |
|-------------|--------------------------------------------------|
| 26345572 | {field} is a required field. |
| 26345573 | Failed to find the SVM or volume UUID with name. |
| 26345574 | Failed to find the SVM or volume name with UUID. |

| Error codes | Description |
|-------------|---------------------------------------------------------------------|
| 26345575 | The specified peer cluster name and peer cluster UUID do not match. |

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

Example error

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

Definitions

See Definitions

href

| Name | Type | Description |
|------|--------|-------------|
| href | string | |

_links

| Name | Type | Description |
|------|----------------------|-------------|
| self | href | |

cluster_peer

Peer cluster details

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

svm

Local SVM permitted for peer relation. To create peer permissions for all SVMs, specify the SVM name as `"*"`.

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

svm_peer_permission

Manage SVM peer permissions.

| Name | Type | Description |
|--------------|------------------------------|--------------------------------------------------|
| _links | _links | |
| applications | array[string] | A list of applications for an SVM peer relation. |
| cluster_peer | cluster_peer | Peer cluster details |

| Name | Type | Description |
|------|---------------------|-------------------------------------------------------------------------------------------------------------|
| svm | svm | Local SVM permitted for peer relation. To create peer permissions for all SVMs, specify the SVM name as "". |

error_arguments

| Name | Type | Description |
|---------|--------|------------------|
| code | string | Argument code |
| message | string | Message argument |

error

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

Delete SVM peer permissions

DELETE /svm/peer-permissions/{cluster_peer.uuid}/{svm.uuid}

Deletes the SVM peer permissions.

Related ONTAP commands

- `verver peer permission delete`

Example

Deletes an SVM peer permission.

```
DELETE "/api/svm/peer-permissions/d3268a74-ee76-11e8-a9bb-005056ac6dc9/8f467b93-f2f1-11e8-9027-005056ac81fc"
```


Learn more

- [DOC /svm/peer-permissions](#)

Parameters

| Name | Type | In | Required | Description |
|-------------------|--------|------|----------|-------------|
| cluster_peer.uuid | string | path | True | |
| svm.uuid | string | path | True | |

Response

Status: 200, Ok

Error

Status: Default

ONTAP Error Response Codes

| Error codes | Description |
|-------------|--------------------------------------------------|
| 26345574 | Failed to find the SVM or volume name with UUID. |

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

Example error

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

Definitions

See Definitions

error_arguments

| Name | Type | Description |
|---------|--------|------------------|
| code | string | Argument code |
| message | string | Message argument |

error

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

Retrieve an SVM peer permission instance

GET /svm/peer-permissions/{cluster_peer.uuid}/{svm.uuid}

Retrieves the SVM peer permission instance.

Related ONTAP commands

- `vserver peer permission show`

Example

The following example shows how to retrieve the parameters for an SVM peer permission.

```
GET "/api/svm/peer-permissions/d3268a74-ee76-11e8-a9bb-005056ac6dc9/8f467b93-f2f1-11e8-9027-005056ac81fc"
```

Learn more

- [DOC /svm/peer-permissions](#)

Parameters

| Name | Type | In | Required | Description |
|-------------------|---------------|-------|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| cluster_peer.uuid | string | path | True | Peer cluster UUID |
| svm.uuid | string | path | True | SVM UUID |
| fields | array[string] | query | False | Specify the fields to return. |
| 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. |

Response

Status: 200, Ok

| Name | Type | Description |
|--------------|------------------------------|--------------------------------------------------------------------------------------------------------------|
| _links | _links | |
| applications | array[string] | A list of applications for an SVM peer relation. |
| cluster_peer | cluster_peer | Peer cluster details |
| svm | svm | Local SVM permitted for peer relation. To create peer permissions for all SVMs, specify the SVM name as "*". |

Example response

```
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "applications": [
    "snapmirror",
    "flexcache"
  ],
  "cluster_peer": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "cluster2",
    "uuid": "ebe27c49-1adf-4496-8335-ab862aebebf2"
  },
  "svm": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
  }
}
```

Error

Status: Default

ONTAP Error Response Codes

| Error codes | Description |
|-------------|--------------------------------------------------|
| 26345574 | Failed to find the SVM or volume name with UUID. |

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

Example error

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

Definitions

See Definitions

href

| Name | Type | Description |
|------|--------|-------------|
| href | string | |

_links

| Name | Type | Description |
|------|----------------------|-------------|
| self | href | |

cluster_peer

Peer cluster details

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

svm

Local SVM permitted for peer relation. To create peer permissions for all SVMs, specify the SVM name as `"*"`.

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

error_arguments

| Name | Type | Description |
|---------|--------|------------------|
| code | string | Argument code |
| message | string | Message argument |

error

| Name | Type | Description |
|-----------|------------------------------------------|-------------------|
| arguments | array[error_arguments] | Message arguments |

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

Update SVM peer permissions

PATCH /svm/peer-permissions/{cluster_peer.uuid}/{svm.uuid}

Updates the SVM peer permissions.

Related ONTAP commands

- `vserver peer permission modify`

Example

Updates an SVM peer permission.

```
PATCH "/api/svm/peer-permissions/d3268a74-ee76-11e8-a9bb-005056ac6dc9/8f467b93-f2f1-11e8-9027-005056ac81fc"
'{"applications":["flexcache"]}'
```

Learn more

- [DOC /svm/peer-permissions](#)

Parameters

| Name | Type | In | Required | Description |
|-------------------|--------|------|----------|-------------------|
| cluster_peer.uuid | string | path | True | Peer cluster UUID |
| svm.uuid | string | path | True | SVM UUID |

Request Body

| Name | Type | Description |
|--------------|------------------------|--------------------------------------------------|
| _links | _links | |
| applications | array[string] | A list of applications for an SVM peer relation. |

| Name | Type | Description |
|--------------|------------------------------|--------------------------------------------------------------------------------------------------------------|
| cluster_peer | cluster_peer | Peer cluster details |
| svm | svm | Local SVM permitted for peer relation. To create peer permissions for all SVMs, specify the SVM name as "*". |

Example request

```
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "applications": [
    "snapmirror",
    "flexcache"
  ],
  "cluster_peer": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "cluster2",
    "uuid": "ebe27c49-1adf-4496-8335-ab862aebbf2"
  },
  "svm": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
  }
}
```

Response

Status: 200, Ok

| Name | Type | Description |
|--------------|------------------------------|---------------------------------------------------------------------------------------------------------------|
| _links | _links | |
| applications | array[string] | A list of applications for an SVM peer relation. |
| cluster_peer | cluster_peer | Peer cluster details |
| svm | svm | Local SVM permitted for peer relation. To create peer permissions for all SVMs, specify the SVM name as "**". |

Example response

```
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "applications": [
    "snapmirror",
    "flexcache"
  ],
  "cluster_peer": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "cluster2",
    "uuid": "ebe27c49-1adf-4496-8335-ab862aebebf2"
  },
  "svm": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
  }
}
```

Error

Status: Default

ONTAP Error Response Codes

| Error codes | Description |
|-------------|--------------------------------------------------|
| 26345572 | {field} is a required field. |
| 26345574 | Failed to find the SVM or volume name with UUID. |

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

Example error

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

Definitions

See Definitions

href

| Name | Type | Description |
|------|--------|-------------|
| href | string | |

_links

| Name | Type | Description |
|------|----------------------|-------------|
| self | href | |

cluster_peer

Peer cluster details

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

svm

Local SVM permitted for peer relation. To create peer permissions for all SVMs, specify the SVM name as `"*"`.

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

svm_peer_permission

Manage SVM peer permissions.

| Name | Type | Description |
|--------------|------------------------------|--------------------------------------------------|
| _links | _links | |
| applications | array[string] | A list of applications for an SVM peer relation. |
| cluster_peer | cluster_peer | Peer cluster details |

| Name | Type | Description |
|------|---------------------|-------------------------------------------------------------------------------------------------------------|
| svm | svm | Local SVM permitted for peer relation. To create peer permissions for all SVMs, specify the SVM name as "". |

error_arguments

| Name | Type | Description |
|---------|--------|------------------|
| code | string | Argument code |
| message | string | Message argument |

error

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

Manage SVM peer relationships

SVM peers endpoint overview

Managing SVM peers

The SVM peer commands allow you to create and manage SVM peering relationships.

SVM peer APIs

The following APIs are used to manage SVM peers:

- GET /api/svm/peers
- POST /api/svm/peers
- GET /api/svm/peers/{uuid}
- PATCH /api/svm/peers/{uuid}
- DELETE /api/svm/peers/{uuid}

Retrieve SVM peer relationships

GET /svm/peers

Retrieves the list of SVM peer relationships.

Related ONTAP commands

- `vserver peer show`

Examples

The following examples show how to retrieve a collection of SVM peer relationships based on a query.

1. Retrieves a list of SVM peers of a specific local SVM

```
GET "/api/svm/peers/?svm.name=VS1"
```

1. Retrieves a list of SVM peers of a specific cluster peer

```
GET "/api/svm/peers/?peer.cluster.name=cluster2"
```

Learn more

- [DOC /svm/peers](#)

Parameters

| Name | Type | In | Required | Description |
|-------------------|--------|-------|----------|-----------------------------|
| state | string | query | False | Filter by state |
| peer.cluster.uuid | string | query | False | Filter by peer.cluster.uuid |
| peer.cluster.name | string | query | False | Filter by peer.cluster.name |
| peer.svm.uuid | string | query | False | Filter by peer.svm.uuid |
| peer.svm.name | string | query | False | Filter by peer.svm.name |
| applications | string | query | False | Filter by applications |
| uuid | string | query | False | Filter by uuid |

| Name | Type | In | Required | Description |
|----------------|---------------|-------|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| name | string | query | False | Filter by name |
| 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 | The default is true for GET calls. When set to false, only the number of records is returned. |
| 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. |
| 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_peer] | |

Example response

```
{
  "_links": {
    "next": {
      "href": "/api/resourcelink"
    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "records": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "applications": [
      "snapmirror",
      "lun_copy"
    ],
    "peer": {
      "cluster": {
        "_links": {
          "self": {
            "href": "/api/resourcelink"
          }
        },
        "name": "cluster2",
        "uuid": "ebe27c49-1adf-4496-8335-ab862aebef2"
      },
      "svm": {
        "_links": {
          "self": {
            "href": "/api/resourcelink"
          }
        },
        "name": "svm1",
        "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
      }
    },
    "state": "peered",
    "svm": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      }
    }
  }
}
```



```

    }
  },
  "name": "svm1",
  "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
},
"uuid": "string"
}
}

```

Error

Status: Default

ONTAP Error Response Codes

| Error codes | Description |
|-------------|------------------------------------------------------------|
| 26345578 | Internal error. Unable to retrieve local or peer SVM name. |

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

Example error

```

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

```

Definitions

See Definitions

href

| Name | Type | Description |
|------|--------|-------------|
| href | string | |

_links

| Name | Type | Description |
|------|----------------------|-------------|
| next | href | |
| self | href | |

_links

| Name | Type | Description |
|------|----------------------|-------------|
| self | href | |

cluster

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

svm

SVM, applies only to SVM-scoped objects.

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

peer

Details for a peer SVM object.

| Name | Type | Description |
|---------|-------------------------|------------------------------------------|
| cluster | cluster | |
| svm | svm | SVM, applies only to SVM-scoped objects. |

svm

Local SVM details

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

svm_peer

An SVM peer relation object.

| Name | Type | Description |
|--------------|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| _links | _links | |
| applications | array[string] | A list of applications for an SVM peer relation. |
| name | string | A peer SVM alias name to avoid a name conflict on the local cluster. |
| peer | peer | Details for a peer SVM object. |
| state | string | SVM peering state. To accept a pending SVM peer request, PATCH the state to "peered". To reject a pending SVM peer request, PATCH the state to "rejected". To suspend a peered SVM peer relation, PATCH the state to "suspended". To resume a suspended SVM peer relation, PATCH the state to "peered". The states "initiated", "pending", and "initializing" are system-generated and cannot be used for PATCH. |
| svm | svm | Local SVM details |
| uuid | string | SVM peer relation UUID |

error_arguments

| Name | Type | Description |
|---------|--------|------------------|
| code | string | Argument code |
| message | string | Message argument |

error

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

Create a new SVM peer relationship

POST `/svm/peers`

Creates a new SVM peer relationship.

Important notes

- The create request accepts peer SVM name as input instead of peer SVM UUID as the local cluster cannot validate peer SVM based on UUID.
- The input parameter `name` refers to the local name of the peer SVM. The `peer_cluster_name` parameter is optional for creating intracluster SVM peer relationships.

Required properties

- `svm.name` or `svm.uuid` - SVM name or SVM UUID
- `peer.svm.name` or `peer.svm.uuid` - Peer SVM name or Peer SVM UUID
- `peer.cluster.name` or `peer.cluster.uuid` - Peer cluster name or peer cluster UUID
- `applications` - Peering applications

Related ONTAP commands

- `vserver peer create`

Example

Creates a new SVM peer relationship.

```
POST "/api/svm/peers" '{"svm":{"name":"vs1",  
"peer.cluster.name":"cluster2", "peer.svm.name":"VS1",  
"applications":["snapmirror"]}]'
```

Learn more

- [DOC /svm/peers](#)

Parameters

| Name | Type | In | Required | Description |
|----------------|---------|-------|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| return_timeout | integer | query | False | The number of seconds to allow the call to execute before returning. When doing a POST, PATCH, or DELETE operation on a single record, the default is 0 seconds. This means that if an asynchronous operation is started, the server immediately returns HTTP code 202 (Accepted) along with a link to the job. If a non-zero value is specified for POST, PATCH, or DELETE operations, ONTAP waits that length of time to see if the job completes so it can return something other than 202. |
| return_records | boolean | query | False | The default is false. If set to true, the records are returned. |

Request Body

| Name | Type | Description |
|--------------|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| _links | _links | |
| applications | array[string] | A list of applications for an SVM peer relation. |
| name | string | A peer SVM alias name to avoid a name conflict on the local cluster. |
| peer | peer | Details for a peer SVM object. |
| state | string | SVM peering state. To accept a pending SVM peer request, PATCH the state to "peered". To reject a pending SVM peer request, PATCH the state to "rejected". To suspend a peered SVM peer relation, PATCH the state to "suspended". To resume a suspended SVM peer relation, PATCH the state to "peered". The states "initiated", "pending", and "initializing" are system-generated and cannot be used for PATCH. |
| svm | svm | Local SVM details |
| uuid | string | SVM peer relation UUID |

Example request

```
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "applications": [
    "snapmirror",
    "lun_copy"
  ],
  "peer": {
    "cluster": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "cluster2",
      "uuid": "ebe27c49-1adf-4496-8335-ab862aebebf2"
    },
    "svm": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "svm1",
      "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
    }
  },
  "state": "peered",
  "svm": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
  },
  "uuid": "string"
}
```

Response

Status: 202, Accepted

| Name | Type | Description |
|--------------|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| _links | _links | |
| applications | array[string] | A list of applications for an SVM peer relation. |
| name | string | A peer SVM alias name to avoid a name conflict on the local cluster. |
| peer | peer | Details for a peer SVM object. |
| state | string | SVM peering state. To accept a pending SVM peer request, PATCH the state to "peered". To reject a pending SVM peer request, PATCH the state to "rejected". To suspend a peered SVM peer relation, PATCH the state to "suspended". To resume a suspended SVM peer relation, PATCH the state to "peered". The states "initiated", "pending", and "initializing" are system-generated and cannot be used for PATCH. |
| svm | svm | Local SVM details |
| uuid | string | SVM peer relation UUID |

Example response

```
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "applications": [
    "snapmirror",
    "lun_copy"
  ],
  "peer": {
    "cluster": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "cluster2",
      "uuid": "ebe27c49-1adf-4496-8335-ab862aebebf2"
    },
    "svm": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "svm1",
      "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
    }
  },
  "state": "peered",
  "svm": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
  },
  "uuid": "string"
}
```

Error

Status: Default

ONTAP Error Response Codes

| Error codes | Description |
|-------------|---------------------------------------------------------------------|
| 13434889 | Internal error. Wait and retry. |
| 26345575 | The specified peer cluster name and peer cluster UUID do not match. |
| 26345579 | The specified field is invalid. |
| 26345580 | SVM name or SVM UUID must be provided. |

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

Example error

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

Definitions

See Definitions

href

| Name | Type | Description |
|------|--------|-------------|
| href | string | |

_links

| Name | Type | Description |
|------|----------------------|-------------|
| self | href | |

cluster

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

svm

SVM, applies only to SVM-scoped objects.

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

peer

Details for a peer SVM object.

| Name | Type | Description |
|---------|-------------------------|------------------------------------------|
| cluster | cluster | |
| svm | svm | SVM, applies only to SVM-scoped objects. |

svm

Local SVM details

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

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

svm_peer

An SVM peer relation object.

| Name | Type | Description |
|--------------|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| _links | _links | |
| applications | array[string] | A list of applications for an SVM peer relation. |
| name | string | A peer SVM alias name to avoid a name conflict on the local cluster. |
| peer | peer | Details for a peer SVM object. |
| state | string | SVM peering state. To accept a pending SVM peer request, PATCH the state to "peered". To reject a pending SVM peer request, PATCH the state to "rejected". To suspend a peered SVM peer relation, PATCH the state to "suspended". To resume a suspended SVM peer relation, PATCH the state to "peered". The states "initiated", "pending", and "initializing" are system-generated and cannot be used for PATCH. |
| svm | svm | Local SVM details |
| uuid | string | SVM peer relation UUID |

error_arguments

| Name | Type | Description |
|---------|--------|------------------|
| code | string | Argument code |
| message | string | Message argument |

error

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

Delete an SVM peer relationship

`DELETE /svm/peers/{uuid}`

Deletes the SVM peer relationship.

Related ONTAP commands

- `vserver peer delete`

Example

Deletes an SVM peer relationship.

```
DELETE "/api/svm/peers/d3268a74-ee76-11e8-a9bb-005056ac6dc9"
```

Learn more

- [DOC /svm/peers](#)

Parameters

| Name | Type | In | Required | Description |
|----------------|---------|-------|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| return_timeout | integer | query | False | The number of seconds to allow the call to execute before returning. When doing a POST, PATCH, or DELETE operation on a single record, the default is 0 seconds. This means that if an asynchronous operation is started, the server immediately returns HTTP code 202 (Accepted) along with a link to the job. If a non-zero value is specified for POST, PATCH, or DELETE operations, ONTAP waits that length of time to see if the job completes so it can return something other than 202. |
| uuid | string | path | True | SVM peer relationship UUID |

Response

Status: 202, Accepted

Error

Status: Default

ONTAP Error Response Codes

| Error codes | Description |
|-------------|------------------------------------------------------------|
| 26345578 | Internal error. Unable to retrieve local or peer SVM name. |

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

Example error

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

Definitions

See Definitions

error_arguments

| Name | Type | Description |
|---------|--------|------------------|
| code | string | Argument code |
| message | string | Message argument |

error

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

Retrieve an SVM peer relationship instance

GET /svm/peers/{uuid}

Retrieves the SVM peer relationship instance.

Related ONTAP commands

- `vserver peer show`

Example

Retrieves the parameters of an SVM peer relationship.

```
GET "/api/svm/peers/d3268a74-ee76-11e8-a9bb-005056ac6dc9"
```

Learn more

- [DOC /svm/peers](#)

Parameters

| Name | Type | In | Required | Description |
|----------------|---------------|-------|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| uuid | string | path | True | SVM peer relation UUID |
| fields | array[string] | query | False | Specify the fields to return. |
| 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. |

Response

```
Status: 200, Ok
```


| Name | Type | Description |
|--------------|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| _links | _links | |
| applications | array[string] | A list of applications for an SVM peer relation. |
| name | string | A peer SVM alias name to avoid a name conflict on the local cluster. |
| peer | peer | Details for a peer SVM object. |
| state | string | SVM peering state. To accept a pending SVM peer request, PATCH the state to "peered". To reject a pending SVM peer request, PATCH the state to "rejected". To suspend a peered SVM peer relation, PATCH the state to "suspended". To resume a suspended SVM peer relation, PATCH the state to "peered". The states "initiated", "pending", and "initializing" are system-generated and cannot be used for PATCH. |
| svm | svm | Local SVM details |
| uuid | string | SVM peer relation UUID |

Example response

```
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "applications": [
    "snapmirror",
    "lun_copy"
  ],
  "peer": {
    "cluster": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "cluster2",
      "uuid": "ebe27c49-1adf-4496-8335-ab862aebebf2"
    },
    "svm": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "svm1",
      "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
    }
  },
  "state": "peered",
  "svm": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
  },
  "uuid": "string"
}
```

Error

Status: Default

ONTAP Error Response Codes

| Error codes | Description |
|-------------|------------------------------------------------------------|
| 26345578 | Internal error. Unable to retrieve local or peer SVM name. |

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

Example error

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

Definitions

See Definitions

href

| Name | Type | Description |
|------|--------|-------------|
| href | string | |

_links

| Name | Type | Description |
|------|----------------------|-------------|
| self | href | |

cluster

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

svm

SVM, applies only to SVM-scoped objects.

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

peer

Details for a peer SVM object.

| Name | Type | Description |
|---------|-------------------------|------------------------------------------|
| cluster | cluster | |
| svm | svm | SVM, applies only to SVM-scoped objects. |

svm

Local SVM details

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

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

error_arguments

| Name | Type | Description |
|---------|--------|------------------|
| code | string | Argument code |
| message | string | Message argument |

error

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

Update an SVM peer relationship

PATCH /svm/peers/{uuid}

Updates the SVM peer relationship.

Related ONTAP commands

- `vserver peer modify`

Examples

The following examples show how to update an SVM peer relationship. The input parameter 'name' refers to the local name of the peer SVM.

1. Accepts an SVM peer relationship

```
PATCH "/api/svm/peers/d3268a74-ee76-11e8-a9bb-005056ac6dc9"
'{"state":"peered"}'
```

1. Updates the local name of an SVM peer relationship

```
PATCH "/api/svm/peers/d3268a74-ee76-11e8-a9bb-005056ac6dc9"
'{"name":"vs2"}'
```

Learn more

- [DOC /svm/peers](#)

Parameters

| Name | Type | In | Required | Description |
|----------------|---------|-------|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| return_timeout | integer | query | False | The number of seconds to allow the call to execute before returning. When doing a POST, PATCH, or DELETE operation on a single record, the default is 0 seconds. This means that if an asynchronous operation is started, the server immediately returns HTTP code 202 (Accepted) along with a link to the job. If a non-zero value is specified for POST, PATCH, or DELETE operations, ONTAP waits that length of time to see if the job completes so it can return something other than 202. |
| uuid | string | path | True | SVM peer relationship UUID |

Request Body

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

| Name | Type | Description |
|--------------|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| applications | array[string] | A list of applications for an SVM peer relation. |
| name | string | A peer SVM alias name to avoid a name conflict on the local cluster. |
| peer | peer | Details for a peer SVM object. |
| state | string | SVM peering state. To accept a pending SVM peer request, PATCH the state to "peered". To reject a pending SVM peer request, PATCH the state to "rejected". To suspend a peered SVM peer relation, PATCH the state to "suspended". To resume a suspended SVM peer relation, PATCH the state to "peered". The states "initiated", "pending", and "initializing" are system-generated and cannot be used for PATCH. |
| svm | svm | Local SVM details |
| uuid | string | SVM peer relation UUID |

Example request

```
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "applications": [
    "snapmirror",
    "lun_copy"
  ],
  "peer": {
    "cluster": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "cluster2",
      "uuid": "ebe27c49-1adf-4496-8335-ab862aebebf2"
    },
    "svm": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "svm1",
      "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
    }
  },
  "state": "peered",
  "svm": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
  },
  "uuid": "string"
}
```


Response

Status: 202, Accepted

Error

Status: Default

ONTAP Error Response Codes

| Error codes | Description |
|-------------|---------------------------------------------------------------------|
| 13434889 | Internal error. Wait and retry. |
| 26345575 | The specified peer cluster name and peer cluster UUID do not match. |
| 26345576 | Given peer state is invalid. |
| 26345577 | One of the following is required: applications, state, or name. |
| 26345578 | Internal error. Unable to retrieve local or peer SVM name. |
| 26345579 | The specified field is invalid. |
| 26345581 | Peer cluster name could not be retrieved or validated. |

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

Example error

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

Definitions

See Definitions

href

| Name | Type | Description |
|------|--------|-------------|
| href | string | |

_links

| Name | Type | Description |
|------|----------------------|-------------|
| self | href | |

cluster

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

svm

SVM, applies only to SVM-scoped objects.

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

peer

Details for a peer SVM object.

| Name | Type | Description |
|---------|-------------------------|------------------------------------------|
| cluster | cluster | |
| svm | svm | SVM, applies only to SVM-scoped objects. |

svm

Local SVM details

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

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

svm_peer

An SVM peer relation object.

| Name | Type | Description |
|--------------|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| _links | _links | |
| applications | array[string] | A list of applications for an SVM peer relation. |
| name | string | A peer SVM alias name to avoid a name conflict on the local cluster. |
| peer | peer | Details for a peer SVM object. |
| state | string | SVM peering state. To accept a pending SVM peer request, PATCH the state to "peered". To reject a pending SVM peer request, PATCH the state to "rejected". To suspend a peered SVM peer relation, PATCH the state to "suspended". To resume a suspended SVM peer relation, PATCH the state to "peered". The states "initiated", "pending", and "initializing" are system-generated and cannot be used for PATCH. |
| svm | svm | Local SVM details |
| uuid | string | SVM peer relation UUID |

error_arguments

| Name | Type | Description |
|---------|--------|------------------|
| code | string | Argument code |
| message | string | Message argument |

error

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

Manage SVMs

SVM svms endpoint overview

Managing SVMs

Cluster administrators can manage any SVM bound to the cluster. In addition, SVMs can also be managed by their SVM administrators. The SVM administrator manages the SVM resources, such as volumes, protocols and services, depending on the capabilities assigned by the cluster administrator. SVM administrators cannot create, modify, or delete SVMs. The cluster administrator manages SVM create, modify, or delete operations.

While configuring CIFS, you must also configure IP interfaces and DNS. No other protocol configuration is allowed when configuring NVMe. NFS, FCP, CIFS and iSCSI protocols can be configured together.

SVM administrators might have all or some of the following administration capabilities:

1. Data access protocol configuration Configures data access protocols, such as NFS, CIFS, iSCSI, and Fibre Channel (FC) protocol (Fibre Channel over Ethernet included).
2. Services configuration Configures services such as LDAP, NIS, and DNS.
3. Monitoring SVM Monitors jobs, network connections, network interfaces, and SVM health.
4. Updating the TLS certificate for this SVM.

Retrieve SVMs and SVM properties

GET /svm/svms

Retrieves a list of SVMs and individual SVM properties. This includes protocol configurations such as CIFS and NFS, export policies, name service configurations, and network services.

Important notes

- The SVM object includes a large set of fields and can be expensive to retrieve. Use this API to list the collection of SVMs, and to retrieve only the full details of individual SVMs as needed.
- It is not recommended to create or delete more than five SVMs in parallel.
- REST APIs only expose a data SVM as an SVM.

Expensive properties

There is an added cost to retrieving values for these properties. They are not included by default in GET results and must be explicitly requested using the `fields` query parameter. See [DOC Requesting specific fields](#) to learn more.

- `snapmirror.*`

Related ONTAP commands

- `vserver show`

Examples

1. Retrieves a list of SVMs in the cluster sorted by name

```
GET "/api/svm/svms?order_by=name"
```

1. Retrieves a list of SVMs in the cluster that have the NFS protocol enabled

```
GET "/api/svm/svms?nfs.enabled=true"
```

1. Retrieves a list of SVMs in the cluster that have the CIFS protocol enabled

```
GET "/api/svm/svms?cifs.enabled=true"
```

1. Retrieves a list of SVMs in the cluster that have the S3 protocol enabled

```
GET "/api/svm/svms?s3.enabled=true"
```

Learn more

- [DOC /svm/svms](#)

Parameters

| Name | Type | In | Required | Description |
|--------------------------|---------|-------|----------|------------------------------------|
| <code>nis.enabled</code> | boolean | query | False | Filter by <code>nis.enabled</code> |
| <code>nis.servers</code> | string | query | False | Filter by <code>nis.servers</code> |
| <code>nis.domain</code> | string | query | False | Filter by <code>nis.domain</code> |

| Name | Type | In | Required | Description |
|-----------------|---------|-------|----------|---------------------------|
| nvme.enabled | boolean | query | False | Filter by nvme.enabled |
| language | string | query | False | Filter by language |
| nfs.enabled | boolean | query | False | Filter by nfs.enabled |
| comment | string | query | False | Filter by comment |
| aggregates.name | string | query | False | Filter by aggregates.name |
| aggregates.uuid | string | query | False | Filter by aggregates.uuid |
| subtype | string | query | False | Filter by subtype |
| dns.servers | string | query | False | Filter by dns.servers |
| dns.domains | string | query | False | Filter by dns.domains |
| fcp.enabled | boolean | query | False | Filter by fcp.enabled |
| iscsi.enabled | boolean | query | False | Filter by iscsi.enabled |
| name | string | query | False | Filter by name |
| ipspace.uuid | string | query | False | Filter by ipspace.uuid |
| ipspace.name | string | query | False | Filter by ipspace.name |
| ldap.base_dn | string | query | False | Filter by ldap.base_dn |
| ldap.servers | string | query | False | Filter by ldap.servers |
| ldap.enabled | boolean | query | False | Filter by ldap.enabled |

| Name | Type | In | Required | Description |
|------------------------------------|---------|-------|----------|----------------------------------------------|
| ldap.bind_dn | string | query | False | Filter by ldap.bind_dn |
| ldap.ad_domain | string | query | False | Filter by ldap.ad_domain |
| uuid | string | query | False | Filter by uuid |
| cifs.name | string | query | False | Filter by cifs.name |
| cifs.ad_domain.fqdn | string | query | False | Filter by cifs.ad_domain.fqdn |
| cifs.ad_domain.organizational_unit | string | query | False | Filter by cifs.ad_domain.organizational_unit |
| cifs.enabled | boolean | query | False | Filter by cifs.enabled |
| s3.name | string | query | False | Filter by s3.name |
| s3.enabled | boolean | query | False | Filter by s3.enabled |
| nsswitch.netgroup | string | query | False | Filter by nsswitch.netgroup |
| nsswitch.group | string | query | False | Filter by nsswitch.group |
| nsswitch.hosts | string | query | False | Filter by nsswitch.hosts |
| nsswitch.namemap | string | query | False | Filter by nsswitch.namemap |
| nsswitch.passwd | string | query | False | Filter by nsswitch.passwd |
| fc_interfaces.name | string | query | False | Filter by fc_interfaces.name |
| fc_interfaces.data_protocol | string | query | False | Filter by fc_interfaces.data_protocol |

| Name | Type | In | Required | Description |
|----------------------|---------------|-------|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| snapshot_policy.uuid | string | query | False | Filter by snapshot_policy.uuid |
| snapshot_policy.name | string | query | False | Filter by snapshot_policy.name |
| state | string | query | False | Filter by state |
| certificate.uuid | string | query | False | Filter by certificate.uuid |
| fields | array[string] | query | False | Specify the fields to return. |
| max_records | integer | query | False | Limit the number of records returned. |
| return_records | boolean | query | False | The default is true for GET calls. When set to false, only the number of records is returned. |
| 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. |
| 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] | |

Example response

```
{
  "_links": {
    "next": {
      "href": "/api/resourcelink"
    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "records": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "aggregates": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "aggr1",
      "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
    },
    "certificate": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
    },
    "cifs": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "ad_domain": {
        "fqdn": "example.com"
      },
      "name": "CIFS1"
    },
    "comment": "string",
  }
```

```

"dns": {
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "domains": [
    "example.com",
    "example2.example3.com"
  ],
  "servers": [
    "10.224.65.20",
    "2001:db08:a0b:12f0::1"
  ]
},
"fc_interfaces": {
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "data_protocol": "fcp",
  "location": {
    "port": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "0a",
      "node": {
        "name": "node1"
      },
      "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
    },
    "name": "lif1",
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
  },
  "fcp": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    }
  }
},

```

```

"ip_interfaces": {
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "ip": {
    "address": "10.10.10.7",
    "netmask": "24"
  },
  "location": {
    "broadcast_domain": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "bd1",
      "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
    },
    "home_node": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "node1",
      "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
    }
  },
  "name": "lif1",
  "service_policy": "default-management",
  "services": {
  },
  "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
},
"ipspace": {
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "name": "exchange",
  "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
},
"iscsi": {

```

```

    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "language": "c.utf_8",
    "ldap": {
      "servers": {
      }
    },
    "name": "svm1",
    "nfs": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      }
    },
    "nis": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "servers": {
      }
    },
    "nsswitch": {
      "group": {
      },
      "hosts": {
      },
      "namemap": {
      },
      "netgroup": {
      },
      "passwd": {
      }
    },
    "nvme": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      }
    }
  }

```

```

    },
    "routes": {
      "destination": {
        "address": "10.10.10.7",
        "family": "ipv4",
        "netmask": "24"
      },
      "gateway": "10.1.1.1"
    },
    "s3": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "s3-server-1"
    },
    "snapmirror": {
      "protected_volumes_count": 0
    },
    "snapshot_policy": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "default",
      "uuid": "lcd8a442-86d1-11e0-ae1c-123478563412"
    },
    "state": "running",
    "subtype": "default",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
  }
}

```

Error

Status: Default, Error

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

Example error

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

Definitions

See Definitions

href

| Name | Type | Description |
|------|--------|-------------|
| href | string | |

_links

| Name | Type | Description |
|------|----------------------|-------------|
| next | href | |
| self | href | |

_links

| Name | Type | Description |
|------|----------------------|-------------|
| self | href | |

aggregates

Aggregate

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

certificate

Certificate for incoming TLS connection requests.

| Name | Type | Description |
|--------|------------------------|------------------|
| _links | _links | |
| uuid | string | Certificate UUID |

ad_domain

| Name | Type | Description |
|---------------------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| fqdn | string | The fully qualified domain name of the Windows Active Directory to which this CIFS server belongs. A CIFS server appears as a member of Windows server object in the Active Directory store. |
| organizational_unit | string | Specifies the organizational unit within the Active Directory domain to associate with the CIFS server. |
| password | string | The account password used to add this CIFS server to the Active Directory. This is not audited. Valid in POST only. |
| user | string | The user account used to add this CIFS server to the Active Directory. Valid in POST only. |

cifs

| Name | Type | Description |
|-----------|---------------------------|------------------------------------------------------------------------|
| _links | _links | |
| ad_domain | ad_domain | |
| enabled | boolean | Specifies whether or not the CIFS service is administratively enabled. |
| name | string | The NetBIOS name of the CIFS server. |

dns

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

| Name | Type | Description |
|---------|---------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| domains | array[string] | <p>A list of DNS domains. Domain names have the following requirements:</p> <ul style="list-style-type: none"> • The name must contain only the following characters: A through Z, a through z, 0 through 9, ".", "-", or "_". • The first character of each label, delimited by ".", must be one of the following characters: A through Z or a through z or 0 through 9. • The last character of each label, delimited by ".", must be one of the following characters: A through Z, a through z, or 0 through 9. • The top level domain must contain only the following characters: A through Z, a through z. • The system reserves the following names: "all", "local", and "localhost". |
| servers | array[string] | The list of IP addresses of the DNS servers. Addresses can be either IPv4 or IPv6 addresses. |

node

The node on which the FC port is located.

| Name | Type | Description |
|------|--------|-------------------------------------------------------|
| name | string | The name of the node on which the FC port is located. |

fc_port_reference

An FC port is the physical port of an FC adapter on a cluster node that can be connected to an FC network.

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

| Name | Type | Description |
|------|----------------------|-------------------------------------------|
| name | string | The name of the FC port. |
| node | node | The node on which the FC port is located. |
| uuid | string | The unique identifier of the FC port. |

location

The location of the Fibre Channel interface is defined by the location of its port.

| Name | Type | Description |
|------|-----------------------------------|------------------------------------------------------------------------------------------------------------|
| port | fc_port_reference | An FC port is the physical port of an FC adapter on a cluster node that can be connected to an FC network. |

fc_interface_svm

| Name | Type | Description |
|---------------|--------------------------|-------------------------------------------------------------------------------------|
| _links | _links | |
| data_protocol | string | The data protocol for which the Fibre Channel interface is configured. |
| location | location | The location of the Fibre Channel interface is defined by the location of its port. |
| name | string | The name of the Fibre Channel interface. |
| uuid | string | The unique identifier of the Fibre Channel interface. |

fcv

| Name | Type | Description |
|---------|------------------------|------------------------------------------------------------------------------------------------|
| _links | _links | |
| enabled | boolean | Enable Fiber Channel Protocol (FCP)? Setting to true creates a service if not already created. |

ip

IP information

| Name | Type | Description |
|---------|--------|----------------------------------------------------------|
| address | string | IPv4 or IPv6 address |
| netmask | string | Input as netmask length (16) or IPv4 mask (255.255.0.0). |

broadcast_domain

Broadcast domain UUID along with a readable name.

| Name | Type | Description |
|--------|------------------------|-----------------------------------------------------|
| _links | _links | |
| name | string | Name of the broadcast domain, scoped to its IPspace |
| uuid | string | Broadcast domain UUID |

home_node

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

location

Home_node is optional.

| Name | Type | Description |
|------------------|----------------------------------|---------------------------------------------------|
| broadcast_domain | broadcast_domain | Broadcast domain UUID along with a readable name. |
| home_node | home_node | |

ip_interface_svm

Interface parameters. Name and home_node are optional.

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

| Name | Type | Description |
|----------------|--------------------------|--------------------------------------------------|
| ip | ip | IP information |
| location | location | Home_node is optional. |
| name | string | The name of the interface (optional). |
| service_policy | string | Built-in service policies for SVMs. |
| services | array[string] | The services associated with the interface. |
| uuid | string | The UUID that uniquely identifies the interface. |

ipspace

Either the UUID or name may be supplied on input.

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

iscsi

| Name | Type | Description |
|------------------------|------------------------|-------------------------------------------------------------------------|
| _links | _links | |
| enabled | boolean | Enable iSCSI? Setting to true creates a service if not already created. |

ldap

| Name | Type | Description |
|-----------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ad_domain | string | This parameter specifies the name of the Active Directory domain used to discover LDAP servers for use by this client. This is mutually exclusive with <code>servers</code> during POST. |

| Name | Type | Description |
|---------|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| base_dn | string | Specifies the default base DN for all searches. |
| bind_dn | string | Specifies the user that binds to the LDAP servers. SVM API supports anonymous binding. For Simple and SASL LDAP binding, use the LDAP API endpoint. |
| enabled | boolean | Enable LDAP? Setting to true creates a configuration if not already created. |
| servers | array[string] | |

nfs

| Name | Type | Description |
|------------------------|------------------------|-----------------------------------------------------------------------|
| _links | _links | |
| enabled | boolean | Enable NFS? Setting to true creates a service if not already created. |

nis

| Name | Type | Description |
|------------------------|------------------------|------------------------------------------------------------------------------------------|
| _links | _links | |
| domain | string | The NIS domain to which this configuration belongs. |
| enabled | boolean | Enable NIS? Setting to true creates a configuration if not already created. |
| servers | array[string] | A list of hostnames or IP addresses of NIS servers used by the NIS domain configuration. |

nsswitch

Name service switch configuration

| Name | Type | Description |
|-------|---------------|---------------|
| group | array[string] | Group sources |

| Name | Type | Description |
|----------|---------------|------------------|
| hosts | array[string] | Host sources |
| namemap | array[string] | NameMap sources |
| netgroup | array[string] | NetGroup sources |
| passwd | array[string] | Password sources |

nvme

| Name | Type | Description |
|---------|------------------------|------------------------------------------------------------------------|
| _links | _links | |
| enabled | boolean | Enable NVMe? Setting to true creates a service if not already created. |

ip_info

IP information

| Name | Type | Description |
|---------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| address | string | IPv4 or IPv6 address |
| family | string | IPv4 or IPv6 |
| netmask | string | Input as netmask length (16) or IPv4 mask (255.255.0.0). For IPv6, you must set the netmask length. The default value is 64. Output is always netmask length. |

network_route_for_svm

| Name | Type | Description |
|-------------|-------------------------|------------------------------------------------------------------|
| destination | ip_info | IP information |
| gateway | string | The IP address of the gateway router leading to the destination. |

s3

| Name | Type | Description |
|---------|------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| _links | _links | |
| enabled | boolean | Specifies whether or not to enable S3. Setting this value to true creates a service if one is not yet created. |
| name | string | Specifies the name of the S3 server. A server name length can range from 1 to 15 characters and can only contain the following combination of characters 0-9, A-Z, a-z, ".", and "-". |

snapmirror

Specifies attributes for SVM DR protection.

| Name | Type | Description |
|-------------------------|---------|---------------------------------------------------------------------------------------------|
| is_protected | boolean | Specifies whether the SVM is a SnapMirror source SVM, using SnapMirror to protect its data. |
| protected_volumes_count | integer | Specifies the number of SVM DR protected volumes in the SVM. |

snapshot_policy

This is a reference to the Snapshot copy policy.

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

svm

| Name | Type | Description |
|------------|-------------------------------------|----------------------------------------------------------------------------------------------------------------|
| _links | _links | |
| aggregates | array[aggregates] | List of allowed aggregates for SVM volumes. An administrator is allowed to create volumes on these aggregates. |

| Name | Type | Description |
|----------------------|------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| aggregates_delegated | boolean | This property is true when the administrator has delegated the aggregates for the SVM volumes. |
| certificate | certificate | Certificate for incoming TLS connection requests. |
| cifs | cifs | |
| comment | string | Comment |
| dns | dns | |
| fc_interfaces | array[fc_interface_svm] | FC Interface for the SVM |
| fcp | fcp | |
| ip_interfaces | array[ip_interface_svm] | IP interfaces for the SVM |
| ipspace | ipspace | Either the UUID or name may be supplied on input. |
| iscsi | iscsi | |
| language | string | Default volume language code. UTF-8 encoded languages are valid in POST or PATCH. Non UTF-8 language encodings are for backward compatibility and are not valid input for POST and PATCH requests. |
| ldap | ldap | |
| name | string | The name of the SVM. |
| nfs | nfs | |
| nis | nis | |
| nsswitch | nsswitch | Name service switch configuration |
| nvme | nvme | |
| routes | array[network_route_for_svm] | Optional array of routes for the SVM |
| s3 | s3 | |

| Name | Type | Description |
|-----------------|---------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| snapmirror | snapmirror | Specifies attributes for SVM DR protection. |
| snapshot_policy | snapshot_policy | This is a reference to the Snapshot copy policy. |
| state | string | SVM State |
| subtype | string | SVM subtype. The SVM subtype sync_destination is created automatically when an SVM of subtype sync_source is created on the source MetroCluster cluster. A POST request with sync_destination as SVM subtype is invalid. |
| uuid | string | The unique identifier of the SVM. |

error_arguments

| Name | Type | Description |
|---------|--------|------------------|
| code | string | Argument code |
| message | string | Message argument |

error

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

Create and provision an SVM

POST /svm/svms

Creates and provisions an SVM. If no IPspace is provided, then the SVM is created on the `Default` IPspace.

- The number of parallel SVMs that can be created must not be greater than five.
- If a sixth SVM POST request is issued, the following error message is generated: "Maximum allowed SVM jobs exceeded. Wait for the existing SVM jobs to complete and try again."

Required properties

- `name` - Name of the SVM to be created.

Recommended optional properties

- `ipspace.name` or `ipspace.uuid` - IPspace of the SVM
- `ip_interfaces` - If provided, the following fields are required:
 - `ip_interfaces.name` - Name of the interface
 - `ip_interfaces.ip.address` - IP address
 - `ip_interfaces.ip.netmask` - Netmask length or IP address
 - `ip_interfaces.location.broadcast_domain.uuid` or `ip_interfaces.location.broadcast_domain.name` - Broadcast domain name or UUID belonging to the same IPspace of the SVM.
- `routes` - If provided, the following field is required:
 - `routes.gateway` - Gateway IP address
- `cifs` - If provided, interfaces, routes and DNS must be provided. The following fields are also required:
 - `cifs.name` - Name of the CIFS server to be created for the SVM.
 - `cifs.ad_domain.fqdn` - Fully qualified domain name
 - `cifs.ad_domain.user` - Administrator username
 - `cifs.ad_domain.password` - User password
- `ldap` - If provided, the following fields are required:
 - `ldap.servers` or `ldap.ad_domain` - LDAP server list or Active Directory domain
 - `ldap.bind_dn` - Bind DN
 - `ldap.base_dn` - Base DN
- `nis` - If provided, the following fields are required:
 - `nis.servers` - NIS servers
 - `nis.domain` - NIS domain
- `dns` - If provided, the following fields are required:
 - `dns.servers` - Name servers
 - `dns.domains` - Domains
- `fc_interfaces` - If provided, the following fields are required:
 - `fc_interfaces.name` - Fibre Channel interface name
 - `fc_interfaces.data_protocol` - Fibre Channel interface data protocol

- `fc_interfaces.location.port.uuid` or `fc_interfaces.location.port.name` and `fc_interfaces.location.port.node.name` - Either port UUID or port name and node name together must be provided.

- `s3` - If provided, the following field should also be specified:
 - `s3.name` - Name of the S3 server. If `s3.name` is not specified while `s3.enabled` is set to 'true', the S3 server will be created with the default name `_S3Server`.

Default property values

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

- `language` - *C.UTF-8*
- `ipspace.name` - *Default*
- `snapshot_policy.name` - *Default*
- `subtype` - *Default* (*sync-source* if MetroCluster configuration)

Related ONTAP commands

- `vserver create`
- `vserver add-aggregates`
- `network interface create`
- `network route create`
- `vserver services name-service dns create`
- `vserver nfs create`
- `vserver services name-service ldap client create`
- `vserver cifs create`
- `vserver services name-service nis-domain create`
- `vserver iscsi create`
- `vserver nvme create`
- `vserver fcp create`
- `vserver services name-service ns-switch create`
- `vserver object-store-server create`

Examples

1. Creates an SVM with default "snapshot_policy"

```
POST "/api/svm/svms" '{"name":"testVs",
"snapshot_policy":{"name":"default"}}'
```

1. Creates an SVM and configures NFS, iSCSI and FCP

```
POST "/api/svm/svms" '{"name":"testVs", "nfs":{"enabled":"true"},  
"fcp":{"enabled":"true"}, "iscsi":{"enabled":"true"}}'
```

1. Creates an SVM and configures NVMe

```
POST "/api/svm/svms" '{"name":"testVs", "nvme":{"enabled":"true"}}'
```

1. Creates an SVM and configures LDAP

```
POST "/api/svm/svms" '{"name":"testVs",  
"snapshot_policy":{"name":"default"},  
"ldap":{"servers":["10.140.101.1","10.140.101.2"], "ad_domain":"abc.com",  
"base_dn":"dc=netapp,dc=com", "bind_dn":"dc=netapp,dc=com"}}'
```

1. Creates an SVM and configures NIS

```
POST "/api/svm/svms" '{"name":"testVs",  
"snapshot_policy":{"name":"default"}, "nis":{"enabled":"true",  
"domain":"def.com","servers":["10.224.223.130", "10.224.223.131"]}}'
```

1. Creates an SVM and configures DNS

```
POST "/api/svm/svms" '{"name":"testVs",  
"snapshot_policy":{"name":"default"},  
"dns":{"domains":["abc.com","def.com"], "servers":["10.224.223.130",  
"10.224.223.131"]}}'
```

1. Creates an SVM and configures a LIF

```
POST "/api/svm/svms" '{"name":"testVs", "ip_interfaces":  
[{"name":"lif1", "ip":{"address":"10.10.10.7", "netmask":  
"255.255.255.0"}, "location":{"broadcast_domain":{"name":"bd1"},  
"home_node":{"name":"node1"}}}, {"name":"lif2", "ip":{"address":"10.10.10.8", "netmask":  
"255.255.255.0"}, "location":{"broadcast_domain":{"name":"bd1"},  
"home_node":{"name":"node1"}}}], "service_policy": "default-management"}}'
```

1. Creates an SVM and configures a LIF with IPV6 address

```
POST "/api/svm/svms" '{"name":"testVs", "ip_interfaces":
[{"name":"lif2", "ip":{"address":"fd22:8b1e:b255:202:2a0:98ff:fe01:7d5b",
"netmask":"24"}, "location":{"broadcast_domain":{"name":"bd1"},
"home_node":{"name":"node1"}}, "service_policy": "default-management"]}]'
```

1. Creates an SVM and configures CIFS

```
POST "/api/svm/svms" '{"name":"testVs", "cifs":{"name":"CIFDOC",
"ad_domain":{"fqdn":"abc.def.com", "organizational_unit":"CN=Computers",
"user":"cif_admin", "password":"abc123"}},
"ip_interfaces":[{"name":"lif1", "ip":{"address":"10.10.10.7", "netmask":
"255.255.255.0"}, "location":{"broadcast_domain":{"name":"bd1"},
"home_node":{"name":"node1"}}, "service_policy": "default-
management"}], "routes": [{"destination": {"address": "0.0.0.0", "netmask":
"0"}, "gateway": "10.10.10.7"}], "dns":{"domains":["abc.def.com",
"def.com"], "servers":["10.224.223.130", "10.224.223.131"]}]'
```

1. Creates an SVM and configures an S3 server

```
POST "/api/svm/svms" '{"name":"svm5", "s3":{"name":"s3-server-1",
"enabled":true}]'
```

Learn more

- [DOC /svm/svms](#)

Parameters

| Name | Type | In | Required | Description |
|----------------|---------|-------|----------|-----------------------------------------------------------------|
| return_records | boolean | query | False | The default is false. If set to true, the records are returned. |

| Name | Type | In | Required | Description |
|----------------|---------|-------|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| return_timeout | integer | query | False | The number of seconds to allow the call to execute before returning. When doing a POST, PATCH, or DELETE operation on a single record, the default is 0 seconds. This means that if an asynchronous operation is started, the server immediately returns HTTP code 202 (Accepted) along with a link to the job. If a non-zero value is specified for POST, PATCH, or DELETE operations, ONTAP waits that length of time to see if the job completes so it can return something other than 202. |

Request Body

| Name | Type | Description |
|----------------------|-------------------------------------|----------------------------------------------------------------------------------------------------------------|
| _links | _links | |
| aggregates | array[aggregates] | List of allowed aggregates for SVM volumes. An administrator is allowed to create volumes on these aggregates. |
| aggregates_delegated | boolean | This property is true when the administrator has delegated the aggregates for the SVM volumes. |
| certificate | certificate | Certificate for incoming TLS connection requests. |
| cifs | cifs | |
| comment | string | Comment |

| Name | Type | Description |
|-----------------|------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| dns | dns | |
| fc_interfaces | array[fc_interface_svm] | FC Interface for the SVM |
| fcv | fcv | |
| ip_interfaces | array[ip_interface_svm] | IP interfaces for the SVM |
| ipspace | ipspace | Either the UUID or name may be supplied on input. |
| iscsi | iscsi | |
| language | string | Default volume language code. UTF-8 encoded languages are valid in POST or PATCH. Non UTF-8 language encodings are for backward compatibility and are not valid input for POST and PATCH requests. |
| ldap | ldap | |
| name | string | The name of the SVM. |
| nfs | nfs | |
| nis | nis | |
| nsswitch | nsswitch | Name service switch configuration |
| nvme | nvme | |
| routes | array[network_route_for_svm] | Optional array of routes for the SVM |
| s3 | s3 | |
| snapmirror | snapmirror | Specifies attributes for SVM DR protection. |
| snapshot_policy | snapshot_policy | This is a reference to the Snapshot copy policy. |
| state | string | SVM State |

| Name | Type | Description |
|---------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| subtype | string | SVM subtype. The SVM subtype sync_destination is created automatically when an SVM of subtype sync_source is created on the source MetroCluster cluster. A POST request with sync_destination as SVM subtype is invalid. |
| uuid | string | The unique identifier of the SVM. |

Example request

```
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "aggregates": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "aggr1",
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
  },
  "certificate": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
  },
  "cifs": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "ad_domain": {
      "fqdn": "example.com"
    },
    "name": "CIFS1"
  },
  "comment": "string",
  "dns": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "domains": [
      "example.com",
      "example2.example3.com"
    ]
  }
}
```

```

    ],
    "servers": [
        "10.224.65.20",
        "2001:db08:a0b:12f0::1"
    ]
},
"fc_interfaces": {
    "_links": {
        "self": {
            "href": "/api/resourcelink"
        }
    },
    "data_protocol": "fcp",
    "location": {
        "port": {
            "_links": {
                "self": {
                    "href": "/api/resourcelink"
                }
            },
            "name": "0a",
            "node": {
                "name": "node1"
            },
            "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
        }
    },
    "name": "lif1",
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
},
"fcp": {
    "_links": {
        "self": {
            "href": "/api/resourcelink"
        }
    }
},
"ip_interfaces": {
    "_links": {
        "self": {
            "href": "/api/resourcelink"
        }
    },
    "ip": {
        "address": "10.10.10.7",
        "netmask": "24"
    }
}

```

```

    },
    "location": {
      "broadcast_domain": {
        "_links": {
          "self": {
            "href": "/api/resourcelink"
          }
        },
        "name": "bd1",
        "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
      },
      "home_node": {
        "_links": {
          "self": {
            "href": "/api/resourcelink"
          }
        },
        "name": "node1",
        "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
      }
    },
    "name": "lif1",
    "service_policy": "default-management",
    "services": {
    },
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
  },
  "ipspace": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "exchange",
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
  },
  "iscsi": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    }
  },
  "language": "c.utf_8",
  "ldap": {
    "servers": {

```

```

    }
  },
  "name": "svm1",
  "nfs": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    }
  },
  "nis": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    }
  },
  "servers": {
  },
},
"nsswitch": {
  "group": {
  },
  "hosts": {
  },
  "namemap": {
  },
  "netgroup": {
  },
  "passwd": {
  }
},
"nvme": {
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  }
},
},
"routes": {
  "destination": {
    "address": "10.10.10.7",
    "family": "ipv4",
    "netmask": "24"
  },
  "gateway": "10.1.1.1"
},

```

```

"s3": {
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "name": "s3-server-1"
},
"snapmirror": {
  "protected_volumes_count": 0
},
"snapshot_policy": {
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "name": "default",
  "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
},
"state": "running",
"subtype": "default",
"uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
}

```

Response

Status: 202, Accepted

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

Example response

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

Error

Status: Default

ONTAP Error Response Codes

| Error codes | Description |
|-------------|---------------------------------------------------------------------------------------------------------------------------------------|
| 2621580 | Cannot specify options other than SVM name, comment and ipspace for a Vserver that is being configured as the destination for SVM DR. |
| 2621634 | "sync-source" SVM can only be created in a MetroCluster configuration. |
| 2621657 | "sync-destination" SVM can only be created by the system. |
| 13434884 | Cannot create an SVM because of incorrect fields. |
| 13434885 | Non-UTF8 language(s) not supported. |
| 13434888 | IPspace UUID and IPspace name mismatch. |
| 13434889 | Internal Error. Wait and retry. |
| 13434894 | Maximum allowed SVM jobs exceeded. Wait for the existing SVM jobs to complete and try again. |
| 13434908 | Invalid SVM name. The name is already in use by another SVM, IPspace or cluster. |
| 13434909 | Internal Error. Failed to identify the aggregate to host SVM root volume. |
| 13434910 | Internal Error. Failed to allocate new SVM ID. |
| 13434911 | Invalid SVM name. Maximum supported length is 41 if SVM is of type \"sync-source\", otherwise 47. |

| Error codes | Description |
|-------------|-------------------------------------------------------------------------------------------------------------------------------|
| 13434912 | Failed to find IPspace. |
| 13434913 | Internal error: Failed to check if an SVM create operation is in progress. Contact technical support for assistance. |
| 13434914 | Request to create the root volume of the SVM failed because there is not enough space in specified aggregate. |
| 13434915 | Failed to unlock the SVM because SVM create or delete job is in progress. Wait a few minutes, and then try the command again. |
| 13434916 | SVM is in the process of being created. Wait a few minutes, and then try the command again. |
| 13434917 | SVM creation successful. |
| 13434918 | IPspace name not provided for creating an SVM. |

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

Example error

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

Definitions

See Definitions

href

| Name | Type | Description |
|------|--------|-------------|
| href | string | |

_links

| Name | Type | Description |
|------|----------------------|-------------|
| self | href | |

aggregates

Aggregate

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

certificate

Certificate for incoming TLS connection requests.

| Name | Type | Description |
|--------|------------------------|------------------|
| _links | _links | |
| uuid | string | Certificate UUID |

ad_domain

| Name | Type | Description |
|---------------------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| fqdn | string | The fully qualified domain name of the Windows Active Directory to which this CIFS server belongs. A CIFS server appears as a member of Windows server object in the Active Directory store. |
| organizational_unit | string | Specifies the organizational unit within the Active Directory domain to associate with the CIFS server. |

| Name | Type | Description |
|----------|--------|---------------------------------------------------------------------------------------------------------------------|
| password | string | The account password used to add this CIFS server to the Active Directory. This is not audited. Valid in POST only. |
| user | string | The user account used to add this CIFS server to the Active Directory. Valid in POST only. |

cifs

| Name | Type | Description |
|-----------|---------------------------|------------------------------------------------------------------------|
| _links | _links | |
| ad_domain | ad_domain | |
| enabled | boolean | Specifies whether or not the CIFS service is administratively enabled. |
| name | string | The NetBIOS name of the CIFS server. |

dns

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

| Name | Type | Description |
|---------|---------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| domains | array[string] | <p>A list of DNS domains. Domain names have the following requirements:</p> <ul style="list-style-type: none"> • The name must contain only the following characters: A through Z, a through z, 0 through 9, ".", "-", or "_". • The first character of each label, delimited by ".", must be one of the following characters: A through Z or a through z or 0 through 9. • The last character of each label, delimited by ".", must be one of the following characters: A through Z, a through z, or 0 through 9. • The top level domain must contain only the following characters: A through Z, a through z. • The system reserves the following names: "all", "local", and "localhost". |
| servers | array[string] | The list of IP addresses of the DNS servers. Addresses can be either IPv4 or IPv6 addresses. |

node

The node on which the FC port is located.

| Name | Type | Description |
|------|--------|-------------------------------------------------------|
| name | string | The name of the node on which the FC port is located. |

fc_port_reference

An FC port is the physical port of an FC adapter on a cluster node that can be connected to an FC network.

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

| Name | Type | Description |
|------|----------------------|-------------------------------------------|
| name | string | The name of the FC port. |
| node | node | The node on which the FC port is located. |
| uuid | string | The unique identifier of the FC port. |

location

The location of the Fibre Channel interface is defined by the location of its port.

| Name | Type | Description |
|------|-----------------------------------|------------------------------------------------------------------------------------------------------------|
| port | fc_port_reference | An FC port is the physical port of an FC adapter on a cluster node that can be connected to an FC network. |

fc_interface_svm

| Name | Type | Description |
|---------------|--------------------------|-------------------------------------------------------------------------------------|
| _links | _links | |
| data_protocol | string | The data protocol for which the Fibre Channel interface is configured. |
| location | location | The location of the Fibre Channel interface is defined by the location of its port. |
| name | string | The name of the Fibre Channel interface. |
| uuid | string | The unique identifier of the Fibre Channel interface. |

fcv

| Name | Type | Description |
|---------|------------------------|------------------------------------------------------------------------------------------------|
| _links | _links | |
| enabled | boolean | Enable Fiber Channel Protocol (FCP)? Setting to true creates a service if not already created. |

ip

IP information

| Name | Type | Description |
|---------|--------|----------------------------------------------------------|
| address | string | IPv4 or IPv6 address |
| netmask | string | Input as netmask length (16) or IPv4 mask (255.255.0.0). |

broadcast_domain

Broadcast domain UUID along with a readable name.

| Name | Type | Description |
|--------|------------------------|-----------------------------------------------------|
| _links | _links | |
| name | string | Name of the broadcast domain, scoped to its IPspace |
| uuid | string | Broadcast domain UUID |

home_node

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

location

Home_node is optional.

| Name | Type | Description |
|------------------|----------------------------------|---------------------------------------------------|
| broadcast_domain | broadcast_domain | Broadcast domain UUID along with a readable name. |
| home_node | home_node | |

ip_interface_svm

Interface parameters. Name and home_node are optional.

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

| Name | Type | Description |
|----------------|--------------------------|--------------------------------------------------|
| ip | ip | IP information |
| location | location | Home_node is optional. |
| name | string | The name of the interface (optional). |
| service_policy | string | Built-in service policies for SVMs. |
| services | array[string] | The services associated with the interface. |
| uuid | string | The UUID that uniquely identifies the interface. |

ipspace

Either the UUID or name may be supplied on input.

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

iscsi

| Name | Type | Description |
|------------------------|------------------------|-------------------------------------------------------------------------|
| _links | _links | |
| enabled | boolean | Enable iSCSI? Setting to true creates a service if not already created. |

ldap

| Name | Type | Description |
|-----------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ad_domain | string | This parameter specifies the name of the Active Directory domain used to discover LDAP servers for use by this client. This is mutually exclusive with <code>servers</code> during POST. |

| Name | Type | Description |
|---------|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| base_dn | string | Specifies the default base DN for all searches. |
| bind_dn | string | Specifies the user that binds to the LDAP servers. SVM API supports anonymous binding. For Simple and SASL LDAP binding, use the LDAP API endpoint. |
| enabled | boolean | Enable LDAP? Setting to true creates a configuration if not already created. |
| servers | array[string] | |

nfs

| Name | Type | Description |
|------------------------|------------------------|-----------------------------------------------------------------------|
| _links | _links | |
| enabled | boolean | Enable NFS? Setting to true creates a service if not already created. |

nis

| Name | Type | Description |
|------------------------|------------------------|------------------------------------------------------------------------------------------|
| _links | _links | |
| domain | string | The NIS domain to which this configuration belongs. |
| enabled | boolean | Enable NIS? Setting to true creates a configuration if not already created. |
| servers | array[string] | A list of hostnames or IP addresses of NIS servers used by the NIS domain configuration. |

nsswitch

Name service switch configuration

| Name | Type | Description |
|-------|---------------|---------------|
| group | array[string] | Group sources |

| Name | Type | Description |
|----------|---------------|------------------|
| hosts | array[string] | Host sources |
| namemap | array[string] | NameMap sources |
| netgroup | array[string] | NetGroup sources |
| passwd | array[string] | Password sources |

nvme

| Name | Type | Description |
|---------|------------------------|------------------------------------------------------------------------|
| _links | _links | |
| enabled | boolean | Enable NVMe? Setting to true creates a service if not already created. |

ip_info

IP information

| Name | Type | Description |
|---------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| address | string | IPv4 or IPv6 address |
| family | string | IPv4 or IPv6 |
| netmask | string | Input as netmask length (16) or IPv4 mask (255.255.0.0). For IPv6, you must set the netmask length. The default value is 64. Output is always netmask length. |

network_route_for_svm

| Name | Type | Description |
|-------------|-------------------------|------------------------------------------------------------------|
| destination | ip_info | IP information |
| gateway | string | The IP address of the gateway router leading to the destination. |

s3

| Name | Type | Description |
|---------|------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| _links | _links | |
| enabled | boolean | Specifies whether or not to enable S3. Setting this value to true creates a service if one is not yet created. |
| name | string | Specifies the name of the S3 server. A server name length can range from 1 to 15 characters and can only contain the following combination of characters 0-9, A-Z, a-z, ".", and "-". |

snapmirror

Specifies attributes for SVM DR protection.

| Name | Type | Description |
|-------------------------|---------|---------------------------------------------------------------------------------------------|
| is_protected | boolean | Specifies whether the SVM is a SnapMirror source SVM, using SnapMirror to protect its data. |
| protected_volumes_count | integer | Specifies the number of SVM DR protected volumes in the SVM. |

snapshot_policy

This is a reference to the Snapshot copy policy.

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

svm

| Name | Type | Description |
|------------|-------------------------------------|----------------------------------------------------------------------------------------------------------------|
| _links | _links | |
| aggregates | array[aggregates] | List of allowed aggregates for SVM volumes. An administrator is allowed to create volumes on these aggregates. |

| Name | Type | Description |
|----------------------|------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| aggregates_delegated | boolean | This property is true when the administrator has delegated the aggregates for the SVM volumes. |
| certificate | certificate | Certificate for incoming TLS connection requests. |
| cifs | cifs | |
| comment | string | Comment |
| dns | dns | |
| fc_interfaces | array[fc_interface_svm] | FC Interface for the SVM |
| fcp | fcp | |
| ip_interfaces | array[ip_interface_svm] | IP interfaces for the SVM |
| ipspace | ipspace | Either the UUID or name may be supplied on input. |
| iscsi | iscsi | |
| language | string | Default volume language code. UTF-8 encoded languages are valid in POST or PATCH. Non UTF-8 language encodings are for backward compatibility and are not valid input for POST and PATCH requests. |
| ldap | ldap | |
| name | string | The name of the SVM. |
| nfs | nfs | |
| nis | nis | |
| nsswitch | nsswitch | Name service switch configuration |
| nvme | nvme | |
| routes | array[network_route_for_svm] | Optional array of routes for the SVM |
| s3 | s3 | |

| Name | Type | Description |
|-----------------|---------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| snapmirror | snapmirror | Specifies attributes for SVM DR protection. |
| snapshot_policy | snapshot_policy | This is a reference to the Snapshot copy policy. |
| state | string | SVM State |
| subtype | string | SVM subtype. The SVM subtype sync_destination is created automatically when an SVM of subtype sync_source is created on the source MetroCluster cluster. A POST request with sync_destination as SVM subtype is invalid. |
| uuid | string | The unique identifier of the SVM. |

job_link

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

error_arguments

| Name | Type | Description |
|---------|--------|------------------|
| code | string | Argument code |
| message | string | Message argument |

error

| Name | Type | Description |
|-----------|------------------------------------------|-------------------|
| arguments | array[error_arguments] | Message arguments |
| code | string | Error code |
| message | string | Error message |

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

Delete an SVM

DELETE /svm/svms/{uuid}

Deletes an SVM. As a prerequisite, SVM objects must be deleted first. SnapMirror relationships must be deleted and data volumes must be offline and deleted.

- The number of parallel SVMs that can be created must not be greater than five.
- If a sixth SVM POST request is issued, the following error message is generated: "Maximum allowed SVM jobs exceeded. Wait for the existing SVM jobs to complete and try again."

Related ONTAP commands

- `vserver delete`

Example

Deleting an individual SVM in the cluster.

```
DELETE "/api/svm/svms/f16f0935-5281-11e8-b94d-005056b46485"
```

Learn more

- [DOC /svm/svms](#)

Parameters

| Name | Type | In | Required | Description |
|------|--------|------|----------|----------------|
| uuid | string | path | True | Filter by UUID |

| Name | Type | In | Required | Description |
|----------------|---------|-------|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| return_timeout | integer | query | False | The number of seconds to allow the call to execute before returning. When doing a POST, PATCH, or DELETE operation on a single record, the default is 0 seconds. This means that if an asynchronous operation is started, the server immediately returns HTTP code 202 (Accepted) along with a link to the job. If a non-zero value is specified for POST, PATCH, or DELETE operations, ONTAP waits that length of time to see if the job completes so it can return something other than 202. |

Response

Status: 202, Accepted

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

Example response

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

Error

Status: Default

ONTAP Error Response Codes

| Error codes | Description |
|-------------|----------------------------------------------------|
| 13434894 | Maximum allowed SVM jobs exceeded. Wait and retry. |

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

Example error

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

Definitions

See Definitions

href

| Name | Type | Description |
|------|--------|-------------|
| href | string | |

_links

| Name | Type | Description |
|------|----------------------|-------------|
| self | href | |

job_link

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

error_arguments

| Name | Type | Description |
|---------|--------|------------------|
| code | string | Argument code |
| message | string | Message argument |

error

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

Retrieve SVM properties

GET /svm/svms/{uuid}

Retrieves the properties for an individual SVM. This includes protocol configurations such as CIFS and NFS, export policies, name service configurations, and network services.

Important notes

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

Expensive properties

There is an added cost to retrieving values for these properties. They are not included by default in GET results and must be explicitly requested using the `fields` query parameter. See [DOC Requesting specific fields](#) to learn more.

- `snapmirror.*`

Example

Retrieving an individual SVM in the cluster

```
GET "/api/svm/svms/f16f0935-5281-11e8-b94d-005056b46485"
```

Learn more

- [DOC /svm/svms](#)

Parameters

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

Response

```
Status: 200, Ok
```

| Name | Type | Description |
|---------------------|------------------------|-------------|
| <code>_links</code> | _links | |

| Name | Type | Description |
|----------------------|------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| aggregates | array[aggregates] | List of allowed aggregates for SVM volumes. An administrator is allowed to create volumes on these aggregates. |
| aggregates_delegated | boolean | This property is true when the administrator has delegated the aggregates for the SVM volumes. |
| certificate | certificate | Certificate for incoming TLS connection requests. |
| cifs | cifs | |
| comment | string | Comment |
| dns | dns | |
| fc_interfaces | array[fc_interface_svm] | FC Interface for the SVM |
| fcv | fcv | |
| ip_interfaces | array[ip_interface_svm] | IP interfaces for the SVM |
| ipspace | ipspace | Either the UUID or name may be supplied on input. |
| iscsi | iscsi | |
| language | string | Default volume language code. UTF-8 encoded languages are valid in POST or PATCH. Non UTF-8 language encodings are for backward compatibility and are not valid input for POST and PATCH requests. |
| ldap | ldap | |
| name | string | The name of the SVM. |
| nfs | nfs | |
| nis | nis | |
| nsswitch | nsswitch | Name service switch configuration |
| nvme | nvme | |
| routes | array[network_route_for_svm] | Optional array of routes for the SVM |

| Name | Type | Description |
|-----------------|-----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| s3 | s3 | |
| snapmirror | snapmirror | Specifies attributes for SVM DR protection. |
| snapshot_policy | snapshot_policy | This is a reference to the Snapshot copy policy. |
| state | string | SVM State |
| subtype | string | SVM subtype. The SVM subtype sync_destination is created automatically when an SVM of subtype sync_source is created on the source MetroCluster cluster. A POST request with sync_destination as SVM subtype is invalid. |
| uuid | string | The unique identifier of the SVM. |

Example response

```
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "aggregates": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "aggr1",
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
  },
  "certificate": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
  },
  "cifs": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "ad_domain": {
      "fqdn": "example.com"
    },
    "name": "CIFS1"
  },
  "comment": "string",
  "dns": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "domains": [
      "example.com",
      "example2.example3.com"
    ]
  }
}
```

```

    ],
    "servers": [
        "10.224.65.20",
        "2001:db08:a0b:12f0::1"
    ]
},
"fc_interfaces": {
    "_links": {
        "self": {
            "href": "/api/resourcelink"
        }
    },
    "data_protocol": "fcp",
    "location": {
        "port": {
            "_links": {
                "self": {
                    "href": "/api/resourcelink"
                }
            },
            "name": "0a",
            "node": {
                "name": "node1"
            },
            "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
        }
    },
    "name": "lif1",
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
},
"fcp": {
    "_links": {
        "self": {
            "href": "/api/resourcelink"
        }
    }
},
"ip_interfaces": {
    "_links": {
        "self": {
            "href": "/api/resourcelink"
        }
    },
    "ip": {
        "address": "10.10.10.7",
        "netmask": "24"
    }
}

```

```

    },
    "location": {
      "broadcast_domain": {
        "_links": {
          "self": {
            "href": "/api/resourcelink"
          }
        },
        "name": "bd1",
        "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
      },
      "home_node": {
        "_links": {
          "self": {
            "href": "/api/resourcelink"
          }
        },
        "name": "node1",
        "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
      }
    },
    "name": "lif1",
    "service_policy": "default-management",
    "services": {
    },
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
  },
  "ipspace": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "exchange",
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
  },
  "iscsi": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    }
  },
  "language": "c.utf_8",
  "ldap": {
    "servers": {

```

```

    }
  },
  "name": "svm1",
  "nfs": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    }
  },
  "nis": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    }
  },
  "servers": {
  },
},
"nsswitch": {
  "group": {
  },
  "hosts": {
  },
  "namemap": {
  },
  "netgroup": {
  },
  "passwd": {
  }
},
"nvme": {
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  }
},
"routes": {
  "destination": {
    "address": "10.10.10.7",
    "family": "ipv4",
    "netmask": "24"
  },
  "gateway": "10.1.1.1"
},

```

```

"s3": {
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "name": "s3-server-1"
},
"snapmirror": {
  "protected_volumes_count": 0
},
"snapshot_policy": {
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "name": "default",
  "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
},
"state": "running",
"subtype": "default",
"uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
}

```

Error

Status: Default, Error

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

Example error

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

Definitions

See Definitions

href

| Name | Type | Description |
|------|--------|-------------|
| href | string | |

_links

| Name | Type | Description |
|------|----------------------|-------------|
| self | href | |

aggregates

Aggregate

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

certificate

Certificate for incoming TLS connection requests.

| Name | Type | Description |
|--------|------------------------|------------------|
| _links | _links | |
| uuid | string | Certificate UUID |

ad_domain

| Name | Type | Description |
|---------------------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| fqdn | string | The fully qualified domain name of the Windows Active Directory to which this CIFS server belongs. A CIFS server appears as a member of Windows server object in the Active Directory store. |
| organizational_unit | string | Specifies the organizational unit within the Active Directory domain to associate with the CIFS server. |

| Name | Type | Description |
|----------|--------|---------------------------------------------------------------------------------------------------------------------|
| password | string | The account password used to add this CIFS server to the Active Directory. This is not audited. Valid in POST only. |
| user | string | The user account used to add this CIFS server to the Active Directory. Valid in POST only. |

cifs

| Name | Type | Description |
|---------------------------|---------------------------|------------------------------------------------------------------------|
| _links | _links | |
| ad_domain | ad_domain | |
| enabled | boolean | Specifies whether or not the CIFS service is administratively enabled. |
| name | string | The NetBIOS name of the CIFS server. |

dns

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

| Name | Type | Description |
|---------|---------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| domains | array[string] | <p>A list of DNS domains. Domain names have the following requirements:</p> <ul style="list-style-type: none"> • The name must contain only the following characters: A through Z, a through z, 0 through 9, ".", "-", or "_". • The first character of each label, delimited by ".", must be one of the following characters: A through Z or a through z or 0 through 9. • The last character of each label, delimited by ".", must be one of the following characters: A through Z, a through z, or 0 through 9. • The top level domain must contain only the following characters: A through Z, a through z. • The system reserves the following names: "all", "local", and "localhost". |
| servers | array[string] | The list of IP addresses of the DNS servers. Addresses can be either IPv4 or IPv6 addresses. |

node

The node on which the FC port is located.

| Name | Type | Description |
|------|--------|-------------------------------------------------------|
| name | string | The name of the node on which the FC port is located. |

fc_port_reference

An FC port is the physical port of an FC adapter on a cluster node that can be connected to an FC network.

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

| Name | Type | Description |
|------|----------------------|-------------------------------------------|
| name | string | The name of the FC port. |
| node | node | The node on which the FC port is located. |
| uuid | string | The unique identifier of the FC port. |

location

The location of the Fibre Channel interface is defined by the location of its port.

| Name | Type | Description |
|------|-----------------------------------|------------------------------------------------------------------------------------------------------------|
| port | fc_port_reference | An FC port is the physical port of an FC adapter on a cluster node that can be connected to an FC network. |

fc_interface_svm

| Name | Type | Description |
|---------------|--------------------------|-------------------------------------------------------------------------------------|
| _links | _links | |
| data_protocol | string | The data protocol for which the Fibre Channel interface is configured. |
| location | location | The location of the Fibre Channel interface is defined by the location of its port. |
| name | string | The name of the Fibre Channel interface. |
| uuid | string | The unique identifier of the Fibre Channel interface. |

fcv

| Name | Type | Description |
|---------|------------------------|------------------------------------------------------------------------------------------------|
| _links | _links | |
| enabled | boolean | Enable Fiber Channel Protocol (FCP)? Setting to true creates a service if not already created. |

ip

IP information

| Name | Type | Description |
|---------|--------|----------------------------------------------------------|
| address | string | IPv4 or IPv6 address |
| netmask | string | Input as netmask length (16) or IPv4 mask (255.255.0.0). |

broadcast_domain

Broadcast domain UUID along with a readable name.

| Name | Type | Description |
|--------|------------------------|-----------------------------------------------------|
| _links | _links | |
| name | string | Name of the broadcast domain, scoped to its IPspace |
| uuid | string | Broadcast domain UUID |

home_node

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

location

Home_node is optional.

| Name | Type | Description |
|------------------|----------------------------------|---------------------------------------------------|
| broadcast_domain | broadcast_domain | Broadcast domain UUID along with a readable name. |
| home_node | home_node | |

ip_interface_svm

Interface parameters. Name and home_node are optional.

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

| Name | Type | Description |
|----------------|--------------------------|--------------------------------------------------|
| ip | ip | IP information |
| location | location | Home_node is optional. |
| name | string | The name of the interface (optional). |
| service_policy | string | Built-in service policies for SVMs. |
| services | array[string] | The services associated with the interface. |
| uuid | string | The UUID that uniquely identifies the interface. |

ipspace

Either the UUID or name may be supplied on input.

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

iscsi

| Name | Type | Description |
|------------------------|------------------------|-------------------------------------------------------------------------|
| _links | _links | |
| enabled | boolean | Enable iSCSI? Setting to true creates a service if not already created. |

ldap

| Name | Type | Description |
|-----------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ad_domain | string | This parameter specifies the name of the Active Directory domain used to discover LDAP servers for use by this client. This is mutually exclusive with <code>servers</code> during POST. |

| Name | Type | Description |
|---------|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| base_dn | string | Specifies the default base DN for all searches. |
| bind_dn | string | Specifies the user that binds to the LDAP servers. SVM API supports anonymous binding. For Simple and SASL LDAP binding, use the LDAP API endpoint. |
| enabled | boolean | Enable LDAP? Setting to true creates a configuration if not already created. |
| servers | array[string] | |

nfs

| Name | Type | Description |
|------------------------|------------------------|-----------------------------------------------------------------------|
| _links | _links | |
| enabled | boolean | Enable NFS? Setting to true creates a service if not already created. |

nis

| Name | Type | Description |
|------------------------|------------------------|------------------------------------------------------------------------------------------|
| _links | _links | |
| domain | string | The NIS domain to which this configuration belongs. |
| enabled | boolean | Enable NIS? Setting to true creates a configuration if not already created. |
| servers | array[string] | A list of hostnames or IP addresses of NIS servers used by the NIS domain configuration. |

nsswitch

Name service switch configuration

| Name | Type | Description |
|-------|---------------|---------------|
| group | array[string] | Group sources |

| Name | Type | Description |
|----------|---------------|------------------|
| hosts | array[string] | Host sources |
| namemap | array[string] | NameMap sources |
| netgroup | array[string] | NetGroup sources |
| passwd | array[string] | Password sources |

nvme

| Name | Type | Description |
|---------|------------------------|------------------------------------------------------------------------|
| _links | _links | |
| enabled | boolean | Enable NVMe? Setting to true creates a service if not already created. |

ip_info

IP information

| Name | Type | Description |
|---------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| address | string | IPv4 or IPv6 address |
| family | string | IPv4 or IPv6 |
| netmask | string | Input as netmask length (16) or IPv4 mask (255.255.0.0). For IPv6, you must set the netmask length. The default value is 64. Output is always netmask length. |

network_route_for_svm

| Name | Type | Description |
|-------------|-------------------------|------------------------------------------------------------------|
| destination | ip_info | IP information |
| gateway | string | The IP address of the gateway router leading to the destination. |

s3

| Name | Type | Description |
|---------|------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| _links | _links | |
| enabled | boolean | Specifies whether or not to enable S3. Setting this value to true creates a service if one is not yet created. |
| name | string | Specifies the name of the S3 server. A server name length can range from 1 to 15 characters and can only contain the following combination of characters 0-9, A-Z, a-z, ".", and "-". |

snapmirror

Specifies attributes for SVM DR protection.

| Name | Type | Description |
|-------------------------|---------|---------------------------------------------------------------------------------------------|
| is_protected | boolean | Specifies whether the SVM is a SnapMirror source SVM, using SnapMirror to protect its data. |
| protected_volumes_count | integer | Specifies the number of SVM DR protected volumes in the SVM. |

snapshot_policy

This is a reference to the Snapshot copy policy.

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

error_arguments

| Name | Type | Description |
|---------|--------|------------------|
| code | string | Argument code |
| message | string | Message argument |

error

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

Update SVM properties

PATCH /svm/svms/{uuid}

Updates one or more of the following properties of an individual SVM: SVM name, SVM default volume language code, SVM comment, and SVM state.

Related ONTAP commands

- `vserver modify`
- `vserver rename`
- `vserver start`
- `vserver stop`
- `security ssl modify`

Examples

1. Stops an SVM and updates the "comment" field for an individual SVM

```
PATCH "/api/svm/svms/f16f0935-5281-11e8-b94d-005056b46485"
'{"state":"stopped", "comment":"This SVM is stopped."}'
```

1. Starts an SVM and updates the "comment" field for an individual SVM

```
PATCH "/api/svm/svms/f16f0935-5281-11e8-b94d-005056b46485"
'{"state":"running", "comment":"This SVM is running."}'
```

1. Updates the "language" field for an individual SVM

```
PATCH "/api/svm/svms/f16f0935-5281-11e8-b94d-005056b46485"
'{"language":"en.UTF-8"}'
```

1. Updates the "name" field for an SVM or renames the SVM

```
PATCH "/api/svm/svms/f16f0935-5281-11e8-b94d-005056b46485"
'{"name":"svm_new"}'
```

1. Updates the aggregates for an individual SVM

```
PATCH "/api/svm/svms/f16f0935-5281-11e8-b94d-005056b46485"
'{"aggregates":{"name":["aggr1","aggr2","aggr3"]}}'
```

1. Updates the Snapshot copy policy for an individual SVM

```
PATCH "/api/svm/svms/f16f0935-5281-11e8-b94d-005056b46485"
'{"snapshot_policy":{"name":"custom1"}}'
```

1. Updates the TLS certificate for an individual SVM

```
PATCH "/api/svm/svms/f16f0935-5281-11e8-b94d-005056b46485"
'{"certificate":{"uuid":"1cd8a442-86d1-11e0-ae1c-123478563412"}}'
```

Learn more

- [DOC /svm/svms](#)

Parameters

| Name | Type | In | Required | Description |
|------|--------|------|----------|----------------|
| uuid | string | path | True | Filter by UUID |

| Name | Type | In | Required | Description |
|----------------|---------|-------|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| return_timeout | integer | query | False | The number of seconds to allow the call to execute before returning. When doing a POST, PATCH, or DELETE operation on a single record, the default is 0 seconds. This means that if an asynchronous operation is started, the server immediately returns HTTP code 202 (Accepted) along with a link to the job. If a non-zero value is specified for POST, PATCH, or DELETE operations, ONTAP waits that length of time to see if the job completes so it can return something other than 202. |

Request Body

| Name | Type | Description |
|----------------------|-------------------------------------|----------------------------------------------------------------------------------------------------------------|
| _links | _links | |
| aggregates | array[aggregates] | List of allowed aggregates for SVM volumes. An administrator is allowed to create volumes on these aggregates. |
| aggregates_delegated | boolean | This property is true when the administrator has delegated the aggregates for the SVM volumes. |
| certificate | certificate | Certificate for incoming TLS connection requests. |
| cifs | cifs | |
| comment | string | Comment |

| Name | Type | Description |
|-----------------|------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| dns | dns | |
| fc_interfaces | array[fc_interface_svm] | FC Interface for the SVM |
| fcv | fcv | |
| ip_interfaces | array[ip_interface_svm] | IP interfaces for the SVM |
| ipspace | ipspace | Either the UUID or name may be supplied on input. |
| iscsi | iscsi | |
| language | string | Default volume language code. UTF-8 encoded languages are valid in POST or PATCH. Non UTF-8 language encodings are for backward compatibility and are not valid input for POST and PATCH requests. |
| ldap | ldap | |
| name | string | The name of the SVM. |
| nfs | nfs | |
| nis | nis | |
| nsswitch | nsswitch | Name service switch configuration |
| nvme | nvme | |
| routes | array[network_route_for_svm] | Optional array of routes for the SVM |
| s3 | s3 | |
| snapmirror | snapmirror | Specifies attributes for SVM DR protection. |
| snapshot_policy | snapshot_policy | This is a reference to the Snapshot copy policy. |
| state | string | SVM State |

| Name | Type | Description |
|---------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| subtype | string | SVM subtype. The SVM subtype sync_destination is created automatically when an SVM of subtype sync_source is created on the source MetroCluster cluster. A POST request with sync_destination as SVM subtype is invalid. |
| uuid | string | The unique identifier of the SVM. |

Example request

```
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "aggregates": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "aggr1",
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
  },
  "certificate": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
  },
  "cifs": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "ad_domain": {
      "fqdn": "example.com"
    },
    "name": "CIFS1"
  },
  "comment": "string",
  "dns": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "domains": [
      "example.com",
      "example2.example3.com"
    ]
  }
}
```



```

    ],
    "servers": [
        "10.224.65.20",
        "2001:db08:a0b:12f0::1"
    ]
},
"fc_interfaces": {
    "_links": {
        "self": {
            "href": "/api/resourcelink"
        }
    },
    "data_protocol": "fcp",
    "location": {
        "port": {
            "_links": {
                "self": {
                    "href": "/api/resourcelink"
                }
            },
            "name": "0a",
            "node": {
                "name": "node1"
            },
            "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
        }
    },
    "name": "lif1",
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
},
"fcp": {
    "_links": {
        "self": {
            "href": "/api/resourcelink"
        }
    }
},
"ip_interfaces": {
    "_links": {
        "self": {
            "href": "/api/resourcelink"
        }
    },
    "ip": {
        "address": "10.10.10.7",
        "netmask": "24"
    }
}

```

```

},
"location": {
  "broadcast_domain": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "bd1",
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
  },
  "home_node": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "node1",
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
  }
},
"name": "lif1",
"service_policy": "default-management",
"services": {
},
"uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
},
"ipspace": {
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "name": "exchange",
  "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
},
"iscsi": {
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  }
},
"language": "c.utf_8",
"ldap": {
  "servers": {

```

```

    }
  },
  "name": "svm1",
  "nfs": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    }
  },
  "nis": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    }
  },
  "servers": {
  },
},
"nsswitch": {
  "group": {
  },
  "hosts": {
  },
  "namemap": {
  },
  "netgroup": {
  },
  "passwd": {
  },
},
"nvme": {
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  }
},
},
"routes": {
  "destination": {
    "address": "10.10.10.7",
    "family": "ipv4",
    "netmask": "24"
  },
  "gateway": "10.1.1.1"
},
},

```

```

"s3": {
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "name": "s3-server-1"
},
"snapmirror": {
  "protected_volumes_count": 0
},
"snapshot_policy": {
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "name": "default",
  "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
},
"state": "running",
"subtype": "default",
"uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
}

```

Response

Status: 202, Accepted

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

Example response

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

Error

Status: Default

ONTAP Error Response Codes

| Error codes | Description |
|-------------|-------------------------------------------------------------------------------------------------------------------------------|
| 13434880 | Failed to modify SVM parameters. |
| 13434881 | Failed to rename SVM. |
| 13434883 | SVM parameters except name modified successfully. |
| 13434885 | Non-UTF8 language(s) not supported. |
| 13434886 | Invalid Snapshot copy policy. |
| 13434902 | Modification of NSSwitch parameters failed for the SVM. |
| 13434906 | Operation not supported for an SVM of type sync-destination. |
| 12451843 | Certificate does not exist. |
| 13434908 | Invalid SVM name. The name is already in use by another SVM, IPspace or cluster. |
| 13434916 | SVM is in the process of being created. Wait a few minutes, and then try the command again. |
| 13434915 | Failed to unlock the SVM because SVM create or delete job is in progress. Wait a few minutes, and then try the command again. |
| 13434911 | Invalid SVM name. Maximum supported length is 41 if SVM is of type \"sync-source\", otherwise 47. |

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

Example error

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

Definitions

See Definitions

href

| Name | Type | Description |
|------|--------|-------------|
| href | string | |

_links

| Name | Type | Description |
|------|----------------------|-------------|
| self | href | |

aggregates

Aggregate

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

certificate

Certificate for incoming TLS connection requests.

| Name | Type | Description |
|--------|------------------------|------------------|
| _links | _links | |
| uuid | string | Certificate UUID |

ad_domain

| Name | Type | Description |
|---------------------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| fqdn | string | The fully qualified domain name of the Windows Active Directory to which this CIFS server belongs. A CIFS server appears as a member of Windows server object in the Active Directory store. |
| organizational_unit | string | Specifies the organizational unit within the Active Directory domain to associate with the CIFS server. |

| Name | Type | Description |
|----------|--------|---------------------------------------------------------------------------------------------------------------------|
| password | string | The account password used to add this CIFS server to the Active Directory. This is not audited. Valid in POST only. |
| user | string | The user account used to add this CIFS server to the Active Directory. Valid in POST only. |

cifs

| Name | Type | Description |
|-----------|---------------------------|------------------------------------------------------------------------|
| _links | _links | |
| ad_domain | ad_domain | |
| enabled | boolean | Specifies whether or not the CIFS service is administratively enabled. |
| name | string | The NetBIOS name of the CIFS server. |

dns

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

| Name | Type | Description |
|---------|---------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| domains | array[string] | <p>A list of DNS domains. Domain names have the following requirements:</p> <ul style="list-style-type: none"> • The name must contain only the following characters: A through Z, a through z, 0 through 9, ".", "-", or "_". • The first character of each label, delimited by ".", must be one of the following characters: A through Z or a through z or 0 through 9. • The last character of each label, delimited by ".", must be one of the following characters: A through Z, a through z, or 0 through 9. • The top level domain must contain only the following characters: A through Z, a through z. • The system reserves the following names: "all", "local", and "localhost". |
| servers | array[string] | The list of IP addresses of the DNS servers. Addresses can be either IPv4 or IPv6 addresses. |

node

The node on which the FC port is located.

| Name | Type | Description |
|------|--------|-------------------------------------------------------|
| name | string | The name of the node on which the FC port is located. |

fc_port_reference

An FC port is the physical port of an FC adapter on a cluster node that can be connected to an FC network.

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

| Name | Type | Description |
|------|----------------------|-------------------------------------------|
| name | string | The name of the FC port. |
| node | node | The node on which the FC port is located. |
| uuid | string | The unique identifier of the FC port. |

location

The location of the Fibre Channel interface is defined by the location of its port.

| Name | Type | Description |
|------|-----------------------------------|------------------------------------------------------------------------------------------------------------|
| port | fc_port_reference | An FC port is the physical port of an FC adapter on a cluster node that can be connected to an FC network. |

fc_interface_svm

| Name | Type | Description |
|---------------|--------------------------|-------------------------------------------------------------------------------------|
| _links | _links | |
| data_protocol | string | The data protocol for which the Fibre Channel interface is configured. |
| location | location | The location of the Fibre Channel interface is defined by the location of its port. |
| name | string | The name of the Fibre Channel interface. |
| uuid | string | The unique identifier of the Fibre Channel interface. |

fcv

| Name | Type | Description |
|---------|------------------------|------------------------------------------------------------------------------------------------|
| _links | _links | |
| enabled | boolean | Enable Fiber Channel Protocol (FCP)? Setting to true creates a service if not already created. |

ip

IP information

| Name | Type | Description |
|---------|--------|----------------------------------------------------------|
| address | string | IPv4 or IPv6 address |
| netmask | string | Input as netmask length (16) or IPv4 mask (255.255.0.0). |

broadcast_domain

Broadcast domain UUID along with a readable name.

| Name | Type | Description |
|--------|------------------------|-----------------------------------------------------|
| _links | _links | |
| name | string | Name of the broadcast domain, scoped to its IPspace |
| uuid | string | Broadcast domain UUID |

home_node

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

location

Home_node is optional.

| Name | Type | Description |
|------------------|----------------------------------|---------------------------------------------------|
| broadcast_domain | broadcast_domain | Broadcast domain UUID along with a readable name. |
| home_node | home_node | |

ip_interface_svm

Interface parameters. Name and home_node are optional.

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

| Name | Type | Description |
|----------------|--------------------------|--------------------------------------------------|
| ip | ip | IP information |
| location | location | Home_node is optional. |
| name | string | The name of the interface (optional). |
| service_policy | string | Built-in service policies for SVMs. |
| services | array[string] | The services associated with the interface. |
| uuid | string | The UUID that uniquely identifies the interface. |

ipspace

Either the UUID or name may be supplied on input.

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

iscsi

| Name | Type | Description |
|------------------------|------------------------|-------------------------------------------------------------------------|
| _links | _links | |
| enabled | boolean | Enable iSCSI? Setting to true creates a service if not already created. |

ldap

| Name | Type | Description |
|-----------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ad_domain | string | This parameter specifies the name of the Active Directory domain used to discover LDAP servers for use by this client. This is mutually exclusive with <code>servers</code> during POST. |

| Name | Type | Description |
|---------|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| base_dn | string | Specifies the default base DN for all searches. |
| bind_dn | string | Specifies the user that binds to the LDAP servers. SVM API supports anonymous binding. For Simple and SASL LDAP binding, use the LDAP API endpoint. |
| enabled | boolean | Enable LDAP? Setting to true creates a configuration if not already created. |
| servers | array[string] | |

nfs

| Name | Type | Description |
|------------------------|------------------------|-----------------------------------------------------------------------|
| _links | _links | |
| enabled | boolean | Enable NFS? Setting to true creates a service if not already created. |

nis

| Name | Type | Description |
|------------------------|------------------------|------------------------------------------------------------------------------------------|
| _links | _links | |
| domain | string | The NIS domain to which this configuration belongs. |
| enabled | boolean | Enable NIS? Setting to true creates a configuration if not already created. |
| servers | array[string] | A list of hostnames or IP addresses of NIS servers used by the NIS domain configuration. |

nsswitch

Name service switch configuration

| Name | Type | Description |
|-------|---------------|---------------|
| group | array[string] | Group sources |

| Name | Type | Description |
|----------|---------------|------------------|
| hosts | array[string] | Host sources |
| namemap | array[string] | NameMap sources |
| netgroup | array[string] | NetGroup sources |
| passwd | array[string] | Password sources |

nvme

| Name | Type | Description |
|---------|------------------------|------------------------------------------------------------------------|
| _links | _links | |
| enabled | boolean | Enable NVMe? Setting to true creates a service if not already created. |

ip_info

IP information

| Name | Type | Description |
|---------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| address | string | IPv4 or IPv6 address |
| family | string | IPv4 or IPv6 |
| netmask | string | Input as netmask length (16) or IPv4 mask (255.255.0.0). For IPv6, you must set the netmask length. The default value is 64. Output is always netmask length. |

network_route_for_svm

| Name | Type | Description |
|-------------|-------------------------|------------------------------------------------------------------|
| destination | ip_info | IP information |
| gateway | string | The IP address of the gateway router leading to the destination. |

s3

| Name | Type | Description |
|---------|------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| _links | _links | |
| enabled | boolean | Specifies whether or not to enable S3. Setting this value to true creates a service if one is not yet created. |
| name | string | Specifies the name of the S3 server. A server name length can range from 1 to 15 characters and can only contain the following combination of characters 0-9, A-Z, a-z, ".", and "-". |

snapmirror

Specifies attributes for SVM DR protection.

| Name | Type | Description |
|-------------------------|---------|---------------------------------------------------------------------------------------------|
| is_protected | boolean | Specifies whether the SVM is a SnapMirror source SVM, using SnapMirror to protect its data. |
| protected_volumes_count | integer | Specifies the number of SVM DR protected volumes in the SVM. |

snapshot_policy

This is a reference to the Snapshot copy policy.

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

svm

| Name | Type | Description |
|------------|-------------------------------------|----------------------------------------------------------------------------------------------------------------|
| _links | _links | |
| aggregates | array[aggregates] | List of allowed aggregates for SVM volumes. An administrator is allowed to create volumes on these aggregates. |

| Name | Type | Description |
|----------------------|------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| aggregates_delegated | boolean | This property is true when the administrator has delegated the aggregates for the SVM volumes. |
| certificate | certificate | Certificate for incoming TLS connection requests. |
| cifs | cifs | |
| comment | string | Comment |
| dns | dns | |
| fc_interfaces | array[fc_interface_svm] | FC Interface for the SVM |
| fcp | fcp | |
| ip_interfaces | array[ip_interface_svm] | IP interfaces for the SVM |
| ipspace | ipspace | Either the UUID or name may be supplied on input. |
| iscsi | iscsi | |
| language | string | Default volume language code. UTF-8 encoded languages are valid in POST or PATCH. Non UTF-8 language encodings are for backward compatibility and are not valid input for POST and PATCH requests. |
| ldap | ldap | |
| name | string | The name of the SVM. |
| nfs | nfs | |
| nis | nis | |
| nsswitch | nsswitch | Name service switch configuration |
| nvme | nvme | |
| routes | array[network_route_for_svm] | Optional array of routes for the SVM |
| s3 | s3 | |

| Name | Type | Description |
|-----------------|---------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| snapmirror | snapmirror | Specifies attributes for SVM DR protection. |
| snapshot_policy | snapshot_policy | This is a reference to the Snapshot copy policy. |
| state | string | SVM State |
| subtype | string | SVM subtype. The SVM subtype sync_destination is created automatically when an SVM of subtype sync_source is created on the source MetroCluster cluster. A POST request with sync_destination as SVM subtype is invalid. |
| uuid | string | The unique identifier of the SVM. |

job_link

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

error_arguments

| Name | Type | Description |
|---------|--------|------------------|
| code | string | Argument code |
| message | string | Message argument |

error

| Name | Type | Description |
|-----------|------------------------------------------|-------------------|
| arguments | array[error_arguments] | Message arguments |
| code | string | Error code |
| message | string | Error message |

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

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