



Manage CIFS shares

ONTAP 9.6 REST API reference

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Manage CIFS shares

Protocols CIFS shares endpoint overview

Overview

Before any users or applications can access data on the CIFS server over SMB, a CIFS share must be created with sufficient share permissions. CIFS share is a named access point in a volume which is tied to the CIFS server on the SVM. Before creating a CIFS share make sure that the path is valid within the scope of the SVM and that it is reachable.

Permissions can be assigned to this newly created share by specifying the 'acls' field. When a CIFS share is created, ONTAP creates a default ACL for this share with 'Full-Control' permissions for an 'Everyone' user.

Examples

Creating a CIFS share

To create a CIFS share for a CIFS server, use the following API. Note the *return_records=true* query parameter used to obtain the newly created entry in the response.

```

# The API:
POST /api/protocols/cifs/shares

# The call:
curl -X POST "https://<mgmt-
ip>/api/protocols/cifs/shares?return_records=true" -H "accept:
application/json" -H "Content-Type: application/json" -d "{
\"access_based_enumeration\": false, \"acls\": [ { \"permission\":
\"no_access\", \"type\": \"unix_user\", \"user_or_group\": \"root\" } ],
\"change_notify\": true, \"comment\": \"HR Department Share\",
\"encryption\": false, \"home_directory\": false, \"name\": \"TEST\",
\"oplocks\": true, \"path\": \"/\", \"svm\": { \"name\": \"vs1\",
\"uuid\": \"000c5cd2-ebdf-11e8-a96e-0050568ea3cb\" }, \"unix_symlink\":
\"local\"}"

# The response:
{
  "num_records": 1,
  "records": [
    {
      "svm": {
        "uuid": "000c5cd2-ebdf-11e8-a96e-0050568ea3cb",
        "name": "vs1"
      },
      "name": "TEST",
      "path": "/",
      "comment": "HR Department Share",
      "home_directory": false,
      "oplocks": true,
      "access_based_enumeration": false,
      "change_notify": true,
      "encryption": false,
      "unix_symlink": "local",
      "acls": [
        {
          "user_or_group": "root",
          "type": "unix_user",
          "permission": "no_access",
          "winsid_unixId": "0"
        }
      ]
    }
  ]
}

```

Retrieving CIFS Shares for all SVMs in the cluster

```
# The API:
GET /api/protocols/cifs/shares

# The call:
curl -X GET "https://<mgmt-
ip>/api/protocols/cifs/shares?fields=*&return_records=true&return_timeout=
15" -H "accept application/hal+json"

# The response:
{
  "records": [
    {
      "svm": {
        "uuid": "000c5cd2-ebdf-11e8-a96e-0050568ea3cb",
        "name": "vs1",
        "_links": {
          "self": {
            "href": "/api/svm/svms/000c5cd2-ebdf-11e8-a96e-0050568ea3cb"
          }
        }
      },
      "name": "admin$",
      "path": "/",
      "home_directory": false,
      "oplocks": false,
      "access_based_enumeration": false,
      "change_notify": false,
      "encryption": false,
      "volume": {
        "name": "vol1",
        "uuid": "4e06f1bc-1ddc-42e2-abb2-f221c6a2ab2a"
      },
      "_links": {
        "self": {
          "href": "/api/protocols/cifs/shares/000c5cd2-ebdf-11e8-a96e-
0050568ea3cb/admin%24"
        }
      }
    },
    {
      "svm": {
        "uuid": "000c5cd2-ebdf-11e8-a96e-0050568ea3cb",
```

```

    "name": "vs1",
    "_links": {
      "self": {
        "href": "/api/svm/svms/000c5cd2-ebdf-11e8-a96e-0050568ea3cb"
      }
    }
  },
  "name": "c$",
  "path": "/",
  "home_directory": false,
  "oplocks": true,
  "access_based_enumeration": false,
  "change_notify": true,
  "encryption": false,
  "unix_symlink": "local",
  "acls": [
    {
      "user_or_group": "BUILTIN\\Administrators",
      "type": "windows",
      "permission": "full_control"
    }
  ],
  "volume": {
    "name": "vol1",
    "uuid": "4e06f1bc-1ddc-42e2-abb2-f221c6a2ab2a"
  },
  "_links": {
    "self": {
      "href": "/api/protocols/cifs/shares/000c5cd2-ebdf-11e8-a96e-0050568ea3cb/c%24"
    }
  }
},
{
  "svm": {
    "uuid": "000c5cd2-ebdf-11e8-a96e-0050568ea3cb",
    "name": "vs1",
    "_links": {
      "self": {
        "href": "/api/svm/svms/000c5cd2-ebdf-11e8-a96e-0050568ea3cb"
      }
    }
  },
  "name": "ipc$",
  "path": "/",
  "home_directory": false,

```

```

"oplocks": false,
"access_based_enumeration": false,
"change_notify": false,
"encryption": false,
"volume": {
  "name": "vol1",
  "uuid": "4e06f1bc-1ddc-42e2-abb2-f221c6a2ab2a"
},
"_links": {
  "self": {
    "href": "/api/protocols/cifs/shares/000c5cd2-ebdf-11e8-a96e-0050568ea3cb/ipc%24"
  }
},
{
  "svm": {
    "uuid": "000c5cd2-ebdf-11e8-a96e-0050568ea3cb",
    "name": "vs1",
    "_links": {
      "self": {
        "href": "/api/svm/svms/000c5cd2-ebdf-11e8-a96e-0050568ea3cb"
      }
    }
  },
  "name": "TEST",
  "path": "/",
  "comment": "HR Department Share",
  "home_directory": false,
  "oplocks": true,
  "access_based_enumeration": false,
  "change_notify": true,
  "encryption": false,
  "unix_symlink": "local",
  "acls": [
    {
      "user_or_group": "Everyone",
      "type": "windows",
      "permission": "full_control"
    },
    {
      "user_or_group": "root",
      "type": "unix_user",
      "permission": "no_access"
    }
  ],

```

```
"volume": {
  "name": "vol1",
  "uuid": "4e06f1bc-1ddc-42e2-abb2-f221c6a2ab2a"
},
"_links": {
  "self": {
    "href": "/api/protocols/cifs/shares/000c5cd2-ebdf-11e8-a96e-0050568ea3cb/TEST"
  }
}
],
"num_records": 4,
"_links": {
  "self": {
    "href":
"/api/protocols/cifs/shares?fields=*&return_records=true&return_timeout=15
"
  }
}
}
```

Retrieving all CIFS Shares for all SVMs in the cluster for which the acls are configured for a "root" user

```

# The API:
GET /api/protocols/cifs/shares

# The call:
curl -X GET "https://<mgmt-
ip>/api/protocols/cifs/shares?acls.user_or_group=root&fields=*&return_reco
rds=true&return_timeout=15" -H "accept: application/json"

# The response:
{
  "records": [
    {
      "svm": {
        "uuid": "000c5cd2-ebdf-11e8-a96e-0050568ea3cb",
        "name": "vs1"
      },
      "name": "TEST",
      "path": "/",
      "comment": "HR Department Share",
      "home_directory": false,
      "oplocks": true,
      "access_based_enumeration": false,
      "change_notify": true,
      "encryption": false,
      "unix_symlink": "local",
      "acls": [
        {
          "user_or_group": "Everyone",
          "type": "windows",
          "permission": "full_control"
        },
        {
          "user_or_group": "root",
          "type": "unix_user",
          "permission": "no_access"
        }
      ],
      "volume": {
        "name": "vol1",
        "uuid": "4e06f1bc-1ddc-42e2-abb2-f221c6a2ab2a"
      }
    }
  ],
  "num_records": 1
}

```

Retrieving a specific CIFS share configuration for an SVM

The configuration being returned is identified by the UUID of its SVM and the name of the share.

```
# The API:
GET /api/protocols/cifs/shares/{svm.uuid}/{name}

# The call:
curl -X GET "https://<mgmt-ip>/api/protocols/cifs/shares/000c5cd2-ebdf-11e8-a96e-0050568ea3cb/TEST" -H "accept: application/json"

# The response:
{
  "svm": {
    "uuid": "000c5cd2-ebdf-11e8-a96e-0050568ea3cb",
    "name": "vs1"
  },
  "name": "TEST",
  "path": "/",
  "comment": "HR Department Share",
  "home_directory": false,
  "oplocks": true,
  "access_based_enumeration": false,
  "change_notify": true,
  "encryption": false,
  "unix_symlink": "local",
  "acls": [
    {
      "user_or_group": "Everyone",
      "type": "windows",
      "permission": "full_control"
    },
    {
      "user_or_group": "root",
      "type": "unix_user",
      "permission": "no_access"
    }
  ],
  "volume": {
    "name": "vol1",
    "uuid": "4e06f1bc-1ddc-42e2-abb2-f221c6a2ab2a"
  }
}
```

Updating a specific CIFS share for an SVM

The CIFS share being modified is identified by the UUID of its SVM and the CIFS share name. The CIFS share ACLs cannot be modified with this API.

```
# The API:
PATCH /api/protocols/cifs/shares/{svm.uuid}/{name}

# The call:
curl -X PATCH "https://<mgmt-ip>/api/protocols/cifs/shares/000c5cd2-ebdf-11e8-a96e-0050568ea3cb/TEST" -H "accept: application/json" -H "Content-Type: application/json" -d '{"access_based_enumeration": true, "change_notify": true, "comment": "HR Department Share", "encryption": false, "oplocks": true, "path": "/", "unix_symlink": "widelink"}'
```

Removing a specific CIFS share for an SVM

The CIFS share being removed is identified by the UUID of its SVM and the CIFS share name.

```
# The API:
DELETE /api/protocols/cifs/shares/{svm.uuid}/{name}

# The call:
curl -X DELETE "https://<mgmt-ip>/api/protocols/cifs/shares/000c5cd2-ebdf-11e8-a96e-0050568ea3cb/test" -H "accept: application/json"
```

Retrieve CIFS shares

GET /protocols/cifs/shares

Retrieves CIFS shares.

Related ONTAP commands

- `vserver cifs share show`
- `vserver cifs share properties show`

Learn more

- [DOC /protocols/cifs/shares](#)

Parameters

| Name | Type | In | Required | Description |
|--------------------------|---------------|-------|----------|------------------------------------|
| encryption | boolean | query | False | Filter by encryption |
| change_notify | boolean | query | False | Filter by change_notify |
| path | string | query | False | Filter by path |
| comment | string | query | False | Filter by comment |
| unix_symlink | string | query | False | Filter by unix_symlink |
| oplocks | boolean | query | False | Filter by oplocks |
| access_based_enumeration | boolean | query | False | Filter by access_based_enumeration |
| home_directory | boolean | query | False | Filter by home_directory |
| name | string | query | False | Filter by name |
| acls.permission | string | query | False | Filter by acls.permission |
| acls.user_or_group | string | query | False | Filter by acls.user_or_group |
| acls.type | string | query | False | Filter by acls.type |
| volume.name | string | query | False | Filter by volume.name |
| volume.uuid | string | query | False | Filter by volume.uuid |
| 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. |

| Name | Type | In | Required | Description |
|----------------|---------------|-------|----------|--|
| 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[cifs_share] | |

Example response

```
{
  "_links": {
    "next": {
      "href": "/api/resourcelink"
    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "records": [
    {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "acls": [
        {
          "_links": {
            "self": {
              "href": "/api/resourcelink"
            }
          },
          "permission": "string",
          "type": "string",
          "user_or_group": "ENGDOMAIN\\ad_user"
        }
      ],
      "comment": "HR Department Share",
      "name": "HR_SHARE",
      "path": "/volume_1/eng_vol/",
      "svm": {
        "_links": {
          "self": {
            "href": "/api/resourcelink"
          }
        },
        "name": "svm1",
        "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
      },
      "unix_symlink": "string",
      "volume": {
        "_links": {
          "self": {
```

```
        "href": "/api/resourcelink"
      }
    },
    "name": "volume1",
    "uuid": "028baa66-41bd-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 | |

cifs_share_acl

The permissions that users and groups have on a CIFS share.

| Name | Type | Description |
|------------|------------------------|---|
| _links | _links | |
| permission | string | Specifies the access rights that a user or group has on the defined CIFS Share. The following values are allowed: <ul style="list-style-type: none">• no_access - User does not have CIFS share access• read - User has only read access• change - User has change access• full_control - User has full_control access |

| Name | Type | Description |
|---------------|--------|--|
| type | string | Specifies the type of the user or group to add to the access control list of a CIFS share. The following values are allowed: <ul style="list-style-type: none"> • windows - Windows user or group • unix_user - UNIX user • unix_group - UNIX group |
| user_or_group | string | Specifies the user or group name to add to the access control list of a CIFS share. |

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. |

volume

| Name | Type | Description |
|------------------------|------------------------|---|
| _links | _links | |
| name | string | The name of the volume. |
| uuid | string | Unique identifier for the volume. This corresponds to the instance-uuid that is exposed in the CLI and ONTAPI. It does not change due to a volume move. <ul style="list-style-type: none"> • example: 028baa66-41bd-11e9-81d5-00a0986138f7 |

cifs_share

CIFS share is a named access point in a volume. Before users and applications can access data on the CIFS server over SMB, a CIFS share must be created with sufficient share permission. CIFS shares are tied to the CIFS server on the SVM. When a CIFS share is created, ONTAP creates a default ACL for the share with Full Control permissions for Everyone.

| Name | Type | Description |
|--------------------------|---|--|
| _links | _links | |
| access_based_enumeration | boolean | If enabled, all folders inside this share are visible to a user based on that individual user access right; prevents the display of folders or other shared resources that the user does not have access to. |
| acls | array[cifs_share_acl] | |
| change_notify | boolean | Specifies whether CIFS clients can request for change notifications for directories on this share. |
| comment | string | Specify the CIFS share descriptions. |
| encryption | boolean | Specifies that SMB encryption must be used when accessing this share. Clients that do not support encryption are not able to access this share. |

| Name | Type | Description |
|----------------|---------|--|
| home_directory | boolean | <p>Specifies whether or not the share is a home directory share, where the share and path names are dynamic. ONTAP home directory functionality automatically offer each user a dynamic share to their home directory without creating an individual SMB share for each user. The ONTAP CIFS home directory feature enable us to configure a share that maps to different directories based on the user that connects to it. Instead of creating a separate shares for each user, a single share with a home directory parameters can be created. In a home directory share, ONTAP dynamically generates the share-name and share-path by substituting %w, %u, and %d variables with the corresponding Windows user name, UNIX user name, and domain name, respectively.</p> <ul style="list-style-type: none"> • Default value: • readCreate: 1 |
| name | string | <p>Specifies the name of the CIFS share that you want to create. If this is a home directory share then the share name includes the pattern as %w (Windows user name), %u (UNIX user name) and %d (Windows domain name) variables in any combination with this parameter to generate shares dynamically.</p> |
| oplocks | boolean | <p>Specify whether opportunistic locks are enabled on this share. "Oplocks" allow clients to lock files and cache content locally, which can increase performance for file operations.</p> |

| Name | Type | Description |
|--------------|--------|---|
| path | string | <p>The fully-qualified pathname in the owning SVM namespace that is shared through this share. If this is a home directory share then the path should be dynamic by specifying the pattern %w (Windows user name), %u (UNIX user name), or %d (domain name) variables in any combination. ONTAP generates the path dynamically for the connected user and this path is appended to each search path to find the full Home Directory path.</p> <ul style="list-style-type: none"> • example: /volume_1/eng_vol/ • maxLength: 256 • minLength: 1 |
| svm | svm | SVM, applies only to SVM-scoped objects. |
| unix_symlink | string | <p>Controls the access of UNIX symbolic links to CIFS clients. The supported values are:</p> <ul style="list-style-type: none"> • local - Enables only local symbolic links which is within the same CIFS share. • widelink - Enables both local symlinks and widelinks. • disable - Disables local symlinks and widelinks. |
| volume | volume | |

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 CIFS share

POST /protocols/cifs/shares

Creates a CIFS share.

Required properties

- `svm.uuid` or `svm.name` - Existing SVM in which to create the CIFS share.
- `name` - Name of the CIFS share.
- `path` - Path in the owning SVM namespace that is shared through this share.

Recommended optional properties

- `comment` - Optionally choose to add a text comment of up to 256 characters about the CIFS share.
- `acls` - Optionally choose to add share permissions that users and groups have on the CIFS share.

Default property values

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

- `home_directory` - *false*
- `oplocks` - *true*
- `access_based_enumeration` - *false*
- `change_notify` - *true*
- `encryption` - *false*
- `unix_symlink` - *local*

Related ONTAP commands

- `vserver cifs share create`
- `vserver cifs share properties add`

- `vserver cifs share access-control create`

Learn more

- [DOC /protocols/cifs/shares](#)

Request Body

| Name | Type | Description |
|---------------------------------------|---|--|
| <code>_links</code> | _links | |
| <code>access_based_enumeration</code> | boolean | If enabled, all folders inside this share are visible to a user based on that individual user access right; prevents the display of folders or other shared resources that the user does not have access to. |
| <code>acls</code> | array[cifs_share_acl] | |
| <code>change_notify</code> | boolean | Specifies whether CIFS clients can request for change notifications for directories on this share. |
| <code>comment</code> | string | Specify the CIFS share descriptions. |
| <code>encryption</code> | boolean | Specifies that SMB encryption must be used when accessing this share. Clients that do not support encryption are not able to access this share. |

| Name | Type | Description |
|----------------|---------|--|
| home_directory | boolean | <p>Specifies whether or not the share is a home directory share, where the share and path names are dynamic. ONTAP home directory functionality automatically offer each user a dynamic share to their home directory without creating an individual SMB share for each user. The ONTAP CIFS home directory feature enable us to configure a share that maps to different directories based on the user that connects to it. Instead of creating a separate shares for each user, a single share with a home directory parameters can be created. In a home directory share, ONTAP dynamically generates the share-name and share-path by substituting %w, %u, and %d variables with the corresponding Windows user name, UNIX user name, and domain name, respectively.</p> <ul style="list-style-type: none"> • Default value: 1 • readCreate: 1 |
| name | string | <p>Specifies the name of the CIFS share that you want to create. If this is a home directory share then the share name includes the pattern as %w (Windows user name), %u (UNIX user name) and %d (Windows domain name) variables in any combination with this parameter to generate shares dynamically.</p> |
| oplocks | boolean | <p>Specify whether opportunistic locks are enabled on this share. "Oplocks" allow clients to lock files and cache content locally, which can increase performance for file operations.</p> |

| Name | Type | Description |
|--------------|--------|---|
| path | string | <p>The fully-qualified pathname in the owning SVM namespace that is shared through this share. If this is a home directory share then the path should be dynamic by specifying the pattern %w (Windows user name), %u (UNIX user name), or %d (domain name) variables in any combination. ONTAP generates the path dynamically for the connected user and this path is appended to each search path to find the full Home Directory path.</p> <ul style="list-style-type: none"> • example: /volume_1/eng_vol/ • maxLength: 256 • minLength: 1 |
| svm | svm | SVM, applies only to SVM-scoped objects. |
| unix_symlink | string | <p>Controls the access of UNIX symbolic links to CIFS clients. The supported values are:</p> <ul style="list-style-type: none"> • local - Enables only local symbolic links which is within the same CIFS share. • widelink - Enables both local symlinks and widelinks. • disable - Disables local symlinks and widelinks. |
| volume | volume | |

Example request

```
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "acls": [
    {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "permission": "string",
      "type": "string",
      "user_or_group": "ENGDOMAIN\\ad_user"
    }
  ],
  "comment": "HR Department Share",
  "name": "HR_SHARE",
  "path": "/volume_1/eng_vol/",
  "svm": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
  },
  "unix_symlink": "string",
  "volume": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "volume1",
    "uuid": "028baa66-41bd-11e9-81d5-00a0986138f7"
  }
}
```

Response

Status: 201, Created

Error

Status: Default

ONTAP Error Response Codes

| Error Code | Description |
|------------|--|
| 655628 | CIFS Share Creation with property 'SMB_ENCRYPTION' failed because the CIFS server does not support SMB3.0 |
| 655551 | CIFS Share Creation failed because the specified path does not exist |
| 655577 | The CIFS share name cannot be more than 80 characters long |
| 655399 | Failed to create CIFS share. The CIFS server does not exist for specified SVM |
| 656422 | Failed to create the home directory share because the directory shares must specify a path relative to one or more home directory search paths |
| 656423 | Failed to create CIFS share. The Shares must define an absolute share path |
| 656424 | Failed to create CIFS the administrator share 'c\$' because you are not permitted to created any admin shares |
| 655625 | Failed to create CIFS share. The Shares path is not a valid file-type for CIFS share |
| 656426 | CIFS Share Creation failed because the share name is invalid |

| 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 | |

cifs_share_acl

The permissions that users and groups have on a CIFS share.

| Name | Type | Description |
|---------------|------------------------|---|
| _links | _links | |
| permission | string | Specifies the access rights that a user or group has on the defined CIFS Share. The following values are allowed: <ul style="list-style-type: none">• no_access - User does not have CIFS share access• read - User has only read access• change - User has change access• full_control - User has full_control access |
| type | string | Specifies the type of the user or group to add to the access control list of a CIFS share. The following values are allowed: <ul style="list-style-type: none">• windows - Windows user or group• unix_user - UNIX user• unix_group - UNIX group |
| user_or_group | string | Specifies the user or group name to add to the access control list of a CIFS share. |

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. |

volume

| Name | Type | Description |
|------------------------|------------------------|---|
| _links | _links | |
| name | string | The name of the volume. |
| uuid | string | Unique identifier for the volume. This corresponds to the instance-uuid that is exposed in the CLI and ONTAPI. It does not change due to a volume move. <ul style="list-style-type: none">• example: 028baa66-41bd-11e9-81d5-00a0986138f7 |

cifs_share

CIFS share is a named access point in a volume. Before users and applications can access data on the CIFS server over SMB, a CIFS share must be created with sufficient share permission. CIFS shares are tied to the CIFS server on the SVM. When a CIFS share is created, ONTAP creates a default ACL for the share with Full Control permissions for Everyone.

| Name | Type | Description |
|--------------------------|---|--|
| _links | _links | |
| access_based_enumeration | boolean | If enabled, all folders inside this share are visible to a user based on that individual user access right; prevents the display of folders or other shared resources that the user does not have access to. |
| acls | array[cifs_share_acl] | |
| change_notify | boolean | Specifies whether CIFS clients can request for change notifications for directories on this share. |

| Name | Type | Description |
|----------------|---------|--|
| comment | string | Specify the CIFS share descriptions. |
| encryption | boolean | Specifies that SMB encryption must be used when accessing this share. Clients that do not support encryption are not able to access this share. |
| home_directory | boolean | <p>Specifies whether or not the share is a home directory share, where the share and path names are dynamic. ONTAP home directory functionality automatically offer each user a dynamic share to their home directory without creating an individual SMB share for each user. The ONTAP CIFS home directory feature enable us to configure a share that maps to different directories based on the user that connects to it. Instead of creating a separate shares for each user, a single share with a home directory parameters can be created. In a home directory share, ONTAP dynamically generates the share-name and share-path by substituting %w, %u, and %d variables with the corresponding Windows user name, UNIX user name, and domain name, respectively.</p> <ul style="list-style-type: none"> • Default value: 1 • readCreate: 1 |
| name | string | Specifies the name of the CIFS share that you want to create. If this is a home directory share then the share name includes the pattern as %w (Windows user name), %u (UNIX user name) and %d (Windows domain name) variables in any combination with this parameter to generate shares dynamically. |

| Name | Type | Description |
|--------------|---------|--|
| oplocks | boolean | Specify whether opportunistic locks are enabled on this share. "Oplocks" allow clients to lock files and cache content locally, which can increase performance for file operations. |
| path | string | The fully-qualified pathname in the owning SVM namespace that is shared through this share. If this is a home directory share then the path should be dynamic by specifying the pattern %w (Windows user name), %u (UNIX user name), or %d (domain name) variables in any combination. ONTAP generates the path dynamically for the connected user and this path is appended to each search path to find the full Home Directory path. <ul style="list-style-type: none"> • example: /volume_1/eng_vol/ • maxLength: 256 • minLength: 1 |
| svm | svm | SVM, applies only to SVM-scoped objects. |
| unix_symlink | string | Controls the access of UNIX symbolic links to CIFS clients. The supported values are: <ul style="list-style-type: none"> • local - Enables only local symbolic links which is within the same CIFS share. • widelink - Enables both local symlinks and widelinks. • disable - Disables local symlinks and widelinks. |
| volume | volume | |

error_arguments

| Name | Type | Description |
|------|--------|---------------|
| code | string | Argument code |

| Name | Type | Description |
|---------|--------|------------------|
| 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 a CIFS share

```
DELETE /protocols/cifs/shares/{svm.uuid}/{name}
```

Deletes a CIFS share.

Related ONTAP commands

- `vserver cifs share delete`

Learn more

- [DOC /protocols/cifs/shares](#)

Parameters

| Name | Type | In | Required | Description |
|----------|--------|------|----------|---|
| svm.uuid | string | path | True | UUID of the SVM to which this object belongs. |
| name | string | path | True | Share Name |

Response

```
Status: 200, Ok
```


Error

Status: Default

ONTAP Error Response Codes

| Error Code | Description |
|------------|---|
| 655393 | Standard admin shares cannot be removed |

| 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 a CIFS share

GET /protocols/cifs/shares/{svm.uuid}/{name}

Retrieves a CIFS share.

Related ONTAP commands

- `vserver cifs share show`
- `vserver cifs share properties show`

Learn more

- [DOC /protocols/cifs/shares](#)

Parameters

| Name | Type | In | Required | Description |
|----------|--------|------|----------|---|
| svm.uuid | string | path | True | UUID of the SVM to which this object belongs. |

| Name | Type | In | Required | Description |
|--------|---------------|-------|----------|-------------------------------|
| name | string | path | True | Share Name |
| fields | array[string] | query | False | Specify the fields to return. |

Response

Status: 200, Ok

| Name | Type | Description |
|--------------------------|------------------------|--|
| _links | _links | |
| access_based_enumeration | boolean | If enabled, all folders inside this share are visible to a user based on that individual user access right; prevents the display of folders or other shared resources that the user does not have access to. |
| acls | array[cifs_share_acl] | |
| change_notify | boolean | Specifies whether CIFS clients can request for change notifications for directories on this share. |
| comment | string | Specify the CIFS share descriptions. |
| encryption | boolean | Specifies that SMB encryption must be used when accessing this share. Clients that do not support encryption are not able to access this share. |

| Name | Type | Description |
|----------------|---------|--|
| home_directory | boolean | <p>Specifies whether or not the share is a home directory share, where the share and path names are dynamic. ONTAP home directory functionality automatically offer each user a dynamic share to their home directory without creating an individual SMB share for each user. The ONTAP CIFS home directory feature enable us to configure a share that maps to different directories based on the user that connects to it. Instead of creating a separate shares for each user, a single share with a home directory parameters can be created. In a home directory share, ONTAP dynamically generates the share-name and share-path by substituting %w, %u, and %d variables with the corresponding Windows user name, UNIX user name, and domain name, respectively.</p> <ul style="list-style-type: none"> • Default value: 1 • readCreate: 1 |
| name | string | <p>Specifies the name of the CIFS share that you want to create. If this is a home directory share then the share name includes the pattern as %w (Windows user name), %u (UNIX user name) and %d (Windows domain name) variables in any combination with this parameter to generate shares dynamically.</p> |
| oplocks | boolean | <p>Specify whether opportunistic locks are enabled on this share. "Oplocks" allow clients to lock files and cache content locally, which can increase performance for file operations.</p> |

| Name | Type | Description |
|--------------|--------|---|
| path | string | <p>The fully-qualified pathname in the owning SVM namespace that is shared through this share. If this is a home directory share then the path should be dynamic by specifying the pattern %w (Windows user name), %u (UNIX user name), or %d (domain name) variables in any combination. ONTAP generates the path dynamically for the connected user and this path is appended to each search path to find the full Home Directory path.</p> <ul style="list-style-type: none"> • example: /volume_1/eng_vol/ • maxLength: 256 • minLength: 1 |
| svm | svm | SVM, applies only to SVM-scoped objects. |
| unix_symlink | string | <p>Controls the access of UNIX symbolic links to CIFS clients. The supported values are:</p> <ul style="list-style-type: none"> • local - Enables only local symbolic links which is within the same CIFS share. • widelink - Enables both local symlinks and widelinks. • disable - Disables local symlinks and widelinks. |
| volume | volume | |

Example response

```
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "acls": [
    {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "permission": "string",
      "type": "string",
      "user_or_group": "ENGDOMAIN\\ad_user"
    }
  ],
  "comment": "HR Department Share",
  "name": "HR_SHARE",
  "path": "/volume_1/eng_vol/",
  "svm": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
  },
  "unix_symlink": "string",
  "volume": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "volume1",
    "uuid": "028baa66-41bd-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 | |

cifs_share_acl

The permissions that users and groups have on a CIFS share.

| Name | Type | Description |
|---------------|------------------------|---|
| _links | _links | |
| permission | string | Specifies the access rights that a user or group has on the defined CIFS Share. The following values are allowed: <ul style="list-style-type: none">• no_access - User does not have CIFS share access• read - User has only read access• change - User has change access• full_control - User has full_control access |
| type | string | Specifies the type of the user or group to add to the access control list of a CIFS share. The following values are allowed: <ul style="list-style-type: none">• windows - Windows user or group• unix_user - UNIX user• unix_group - UNIX group |
| user_or_group | string | Specifies the user or group name to add to the access control list of a CIFS share. |

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. |

volume

| Name | Type | Description |
|------------------------|------------------------|---|
| _links | _links | |
| name | string | The name of the volume. |
| uuid | string | Unique identifier for the volume. This corresponds to the instance-uuid that is exposed in the CLI and ONTAPI. It does not change due to a volume move. <ul style="list-style-type: none">• example: 028baa66-41bd-11e9-81d5-00a0986138f7 |

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 a CIFS share

PATCH /protocols/cifs/shares/{svm.uuid}/{name}

Updates a CIFS share.

Related ONTAP commands

- `vserver cifs share modify`
- `vserver cifs share properties add`
- `vserver cifs share properties remove`

Learn more

- [DOC /protocols/cifs/shares](#)

Parameters

| Name | Type | In | Required | Description |
|----------|--------|------|----------|---|
| svm.uuid | string | path | True | UUID of the SVM to which this object belongs. |
| name | string | path | True | Share Name |

Request Body

| Name | Type | Description |
|--------------------------|---|--|
| _links | _links | |
| access_based_enumeration | boolean | If enabled, all folders inside this share are visible to a user based on that individual user access right; prevents the display of folders or other shared resources that the user does not have access to. |
| acls | array[cifs_share_acl] | |
| change_notify | boolean | Specifies whether CIFS clients can request for change notifications for directories on this share. |
| comment | string | Specify the CIFS share descriptions. |

| Name | Type | Description |
|----------------|---------|--|
| encryption | boolean | Specifies that SMB encryption must be used when accessing this share. Clients that do not support encryption are not able to access this share. |
| home_directory | boolean | <p>Specifies whether or not the share is a home directory share, where the share and path names are dynamic. ONTAP home directory functionality automatically offer each user a dynamic share to their home directory without creating an individual SMB share for each user. The ONTAP CIFS home directory feature enable us to configure a share that maps to different directories based on the user that connects to it. Instead of creating a separate shares for each user, a single share with a home directory parameters can be created. In a home directory share, ONTAP dynamically generates the share-name and share-path by substituting %w, %u, and %d variables with the corresponding Windows user name, UNIX user name, and domain name, respectively.</p> <ul style="list-style-type: none"> • Default value: 1 • readCreate: 1 |
| name | string | Specifies the name of the CIFS share that you want to create. If this is a home directory share then the share name includes the pattern as %w (Windows user name), %u (UNIX user name) and %d (Windows domain name) variables in any combination with this parameter to generate shares dynamically. |

| Name | Type | Description |
|--------------|---------|---|
| oplocks | boolean | Specify whether opportunistic locks are enabled on this share. "Oplocks" allow clients to lock files and cache content locally, which can increase performance for file operations. |
| path | string | <p>The fully-qualified pathname in the owning SVM namespace that is shared through this share. If this is a home directory share then the path should be dynamic by specifying the pattern %w (Windows user name), %u (UNIX user name), or %d (domain name) variables in any combination. ONTAP generates the path dynamically for the connected user and this path is appended to each search path to find the full Home Directory path.</p> <ul style="list-style-type: none"> • example: /volume_1/eng_vol/ • maxLength: 256 • minLength: 1 |
| svm | svm | SVM, applies only to SVM-scoped objects. |
| unix_symlink | string | <p>Controls the access of UNIX symbolic links to CIFS clients. The supported values are:</p> <ul style="list-style-type: none"> • local - Enables only local symbolic links which is within the same CIFS share. • widelink - Enables both local symlinks and widelinks. • disable - Disables local symlinks and widelinks. |
| volume | volume | |

Example request

```
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "acls": [
    {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "permission": "string",
      "type": "string",
      "user_or_group": "ENGDOMAIN\\ad_user"
    }
  ],
  "comment": "HR Department Share",
  "name": "HR_SHARE",
  "path": "/volume_1/eng_vol/",
  "svm": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
  },
  "unix_symlink": "string",
  "volume": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "volume1",
    "uuid": "028baa66-41bd-11e9-81d5-00a0986138f7"
  }
}
```

Response

Status: 200, Ok

Error

Status: Default

ONTAP Error Response Codes

| Error Code | Description |
|------------|--|
| 655628 | 'SMB_ENCRYPTION' property cannot be set on CIFS share because the CIFS server does not support SMB3.0 |
| 655551 | CIFS Share modification failed because the specified path does not exist |
| 655620 | Cannot set symlink properties for admin shares |
| 656420 | Cannot modify the standard share ipc\$ |
| 656421 | Cannot modify the standard share admin\$ |
| 656422 | Failed to modify the home directory share because the directory shares must specify a path relative to one or more home directory search paths |
| 656423 | Failed to modify CIFS share. The Shares must define an absolute share path |
| 656425 | Failed to modify the CIFS share because the path for an administrative share cannot be modified |

| 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 | |

cifs_share_acl

The permissions that users and groups have on a CIFS share.

| Name | Type | Description |
|---------------|------------------------|---|
| _links | _links | |
| permission | string | Specifies the access rights that a user or group has on the defined CIFS Share. The following values are allowed: <ul style="list-style-type: none">• no_access - User does not have CIFS share access• read - User has only read access• change - User has change access• full_control - User has full_control access |
| type | string | Specifies the type of the user or group to add to the access control list of a CIFS share. The following values are allowed: <ul style="list-style-type: none">• windows - Windows user or group• unix_user - UNIX user• unix_group - UNIX group |
| user_or_group | string | Specifies the user or group name to add to the access control list of a CIFS share. |

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. |

volume

| Name | Type | Description |
|------------------------|------------------------|---|
| _links | _links | |
| name | string | The name of the volume. |
| uuid | string | Unique identifier for the volume. This corresponds to the instance-uuid that is exposed in the CLI and ONTAPI. It does not change due to a volume move. <ul style="list-style-type: none">• example: 028baa66-41bd-11e9-81d5-00a0986138f7 |

cifs_share

CIFS share is a named access point in a volume. Before users and applications can access data on the CIFS server over SMB, a CIFS share must be created with sufficient share permission. CIFS shares are tied to the CIFS server on the SVM. When a CIFS share is created, ONTAP creates a default ACL for the share with Full Control permissions for Everyone.

| Name | Type | Description |
|--------------------------|---|--|
| _links | _links | |
| access_based_enumeration | boolean | If enabled, all folders inside this share are visible to a user based on that individual user access right; prevents the display of folders or other shared resources that the user does not have access to. |
| acls | array[cifs_share_acl] | |
| change_notify | boolean | Specifies whether CIFS clients can request for change notifications for directories on this share. |

| Name | Type | Description |
|----------------|---------|--|
| comment | string | Specify the CIFS share descriptions. |
| encryption | boolean | Specifies that SMB encryption must be used when accessing this share. Clients that do not support encryption are not able to access this share. |
| home_directory | boolean | <p>Specifies whether or not the share is a home directory share, where the share and path names are dynamic. ONTAP home directory functionality automatically offer each user a dynamic share to their home directory without creating an individual SMB share for each user. The ONTAP CIFS home directory feature enable us to configure a share that maps to different directories based on the user that connects to it. Instead of creating a separate shares for each user, a single share with a home directory parameters can be created. In a home directory share, ONTAP dynamically generates the share-name and share-path by substituting %w, %u, and %d variables with the corresponding Windows user name, UNIX user name, and domain name, respectively.</p> <ul style="list-style-type: none"> • Default value: 1 • readCreate: 1 |
| name | string | Specifies the name of the CIFS share that you want to create. If this is a home directory share then the share name includes the pattern as %w (Windows user name), %u (UNIX user name) and %d (Windows domain name) variables in any combination with this parameter to generate shares dynamically. |

| Name | Type | Description |
|--------------|---------|--|
| oplocks | boolean | Specify whether opportunistic locks are enabled on this share. "Oplocks" allow clients to lock files and cache content locally, which can increase performance for file operations. |
| path | string | The fully-qualified pathname in the owning SVM namespace that is shared through this share. If this is a home directory share then the path should be dynamic by specifying the pattern %w (Windows user name), %u (UNIX user name), or %d (domain name) variables in any combination. ONTAP generates the path dynamically for the connected user and this path is appended to each search path to find the full Home Directory path. <ul style="list-style-type: none"> • example: /volume_1/eng_vol/ • maxLength: 256 • minLength: 1 |
| svm | svm | SVM, applies only to SVM-scoped objects. |
| unix_symlink | string | Controls the access of UNIX symbolic links to CIFS clients. The supported values are: <ul style="list-style-type: none"> • local - Enables only local symbolic links which is within the same CIFS share. • widelink - Enables both local symlinks and widelinks. • disable - Disables local symlinks and widelinks. |
| volume | volume | |

error_arguments

| Name | Type | Description |
|------|--------|---------------|
| code | string | Argument code |

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

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