



Manage CIFS shares

ONTAP 9.8 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

Introduced In: 9.6

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
volume.uuid	string	query	False	Filter by volume.uuid
volume.name	string	query	False	Filter by volume.name
path	string	query	False	Filter by path
change_notify	boolean	query	False	Filter by change_notify
home_directory	boolean	query	False	Filter by home_directory
access_based_enumeration	boolean	query	False	Filter by access_based_enumeration
name	string	query	False	Filter by name
comment	string	query	False	Filter by comment
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
unix_symlink	string	query	False	Filter by unix_symlink
oplocks	boolean	query	False	Filter by oplocks
svm.uuid	string	query	False	Filter by svm.uuid
svm.name	string	query	False	Filter by svm.name
encryption	boolean	query	False	Filter by encryption
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. <ul style="list-style-type: none"> • Default value: 1
return_timeout	integer	query	False	The number of seconds to allow the call to execute before returning. When iterating over a collection, the default is 15 seconds. ONTAP returns earlier if either max records or the end of the collection is reached. <ul style="list-style-type: none"> • Default value: 1 • Max value: 120 • Min value: 0
order_by	array[string]	query	False	Order results by specified fields and optional [asc

Response

Status: 200, Ok

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

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 • Introduced in: 9.6

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: • Introduced in: 9.6 • 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 • Introduced in: 9.6
svm	svm	
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

Introduced In: 9.6

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](#)

Parameters

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

Request Body

Name	Type	Description
_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 • Introduced in: 9.6 • 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 • Introduced in: 9.6
svm	svm	
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

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	<p>Unique identifier for the volume. This corresponds to the instance-uuid that is exposed in the CLI and ONTAPI. It does not change due to a volume move.</p> <ul style="list-style-type: none"> • example: 028baa66-41bd-11e9-81d5-00a0986138f7 • Introduced in: 9.6

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 • Introduced in: 9.6 • 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 • Introduced in: 9.6
svm	svm	
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

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}

Introduced In: 9.6

Deletes a CIFS share.

Related ONTAP commands

- `vserver cifs share delete`

Learn more

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

Parameters

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

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}

Introduced In: 9.6

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
name	string	path	True	Share Name

Name	Type	In	Required	Description
svm.uuid	string	path	True	UUID of the SVM to which this object belongs.
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 • Introduced in: 9.6 • 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 • Introduced in: 9.6
svm	svm	
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

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	<p>Unique identifier for the volume. This corresponds to the instance-uuid that is exposed in the CLI and ONTAPI. It does not change due to a volume move.</p> <ul style="list-style-type: none"> • example: 028baa66-41bd-11e9-81d5-00a0986138f7 • Introduced in: 9.6

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}

Introduced In: 9.6

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
name	string	path	True	Share Name
svm.uuid	string	path	True	UUID of the SVM to which this object belongs.

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 • Introduced in: 9.6 • 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 • Introduced in: 9.6
svm	svm	
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

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	<p>Unique identifier for the volume. This corresponds to the instance-uuid that is exposed in the CLI and ONTAPI. It does not change due to a volume move.</p> <ul style="list-style-type: none"> • example: 028baa66-41bd-11e9-81d5-00a0986138f7 • Introduced in: 9.6

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 • Introduced in: 9.6 • 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 • Introduced in: 9.6
svm	svm	
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

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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