vserver cifs commands

ONTAP 9.14.1 commands

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Table of Contents

vserver cifs commands

vserver cifs add-netbios-aliases

Add NetBIOS aliases for the CIFS server name

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

```
The `vserver cifs add-netbios-aliases` command creates or adds a list of
NetBIOS aliases for the CIFS server name.
```

Parameters

-vserver <vserver name> - Vserver

This parameter specifies the name of the Vserver for which NetBIOS alias are to be created or added.

-netbios-aliases <NetBIOS>,... - List of NetBIOS Aliases

This parameter specifies one or more NetBIOS aliases to be added to an existing list of NetBIOS aliases. A new list of NetBIOS aliases is created if the list is currently empty.

Examples

The following example creates a new list of NetBIOS aliases for Vserver vs_a.

```
cluster1::> cifs show -display-netbios-aliases

Vserver: vs_a
Server Name: CIFS_SERVER
  NetBIOS Aliases: -

cluster1::> cifs add-netbios-aliases -netbios-aliases
alias_1,alias_2,alias_3

cluster1::> cifs show -display-netbios-aliases

Vserver: vs_a
Server Name: CIFS_SERVER
  NetBIOS Aliases: ALIAS_1, ALIAS_2, ALIAS_3
```

The following example adds several NetBIOS aliases for the CIFS server CIFS_SERVER on Vserver vs_a.

```
cluster1::> cifs add-netbios-aliases -netbios-aliases
alias_4,alias_5,alias_6

cluster1::> cifs show -display-netbios-aliases

Vserver: vs_a

      Server Name: CIFS_SERVER
  NetBIOS Aliases: ALIAS_1, ALIAS_2, ALIAS_3, ALIAS_4,
                   ALIAS_5, ALIAS_6

cluster1::> vserver cifs add-netbios-aliases -vserver v1 -netbios-aliases
alias_7

cluster1::> cifs show -display-netbios-aliases

Vserver: vs_a

      Server Name: CIFS_SERVER
  NetBIOS Aliases: ALIAS_1, ALIAS_2, ALIAS_3, ALIAS_4,
                   ALIAS_5, ALIAS_6, ALIAS_7
```

vserver cifs check

Display Validation Status of CIFS Configuration from Each Node

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

Use the `vserver cifs check` command to check the status of configured CIFS server on a particular vserver.

Parameters

{ [-fields <fieldname>,…]

If you specify the `-fields <fieldname>, …` parameter, the command output also includes the specified field or fields. You can use '-fields ?' to display the fields to specify.

| [-instance] }

If you specify the `-instance` parameter, the command displays detailed information about all fields.

[-vserver <vserver name>] - Vserver

Use this parameter to specify the Vserver whose CIFS server needs to be validated.

[-node {<nodename>|local}] - Node

Use this parameter to specify the node name from which CIFS server connectivity needs to be validated.

[-netbios-name <TextNoCase>] - CIFS NetBIOS Name

Use this parameter to display netbios-name of the configured CIFS server.

[-cifs-status <TextNoCase>] - CIFS Server Status

Use this parameter to display status of configured CIFS server.

[-site <TextNoCase>] - CIFS Server Site

This parameter specifies the site discovered from Data ONTAP for the Active Directory domain associated with the CIFS server. If the discovery fails, this parameter will be updated with the default-site of associated cifs server.

[-server <TextNoCase>] - Domain Controller Name

Use this parameter to display Domain name of the configured CIFS server.

[-server-ip <text>] - Domain Controller IP Addr

Use this parameter to display IP-address of the configured CIFS server.

[-status {down|up}] - Connectivity Status

Use this parameter to display information only about CIFS servers with a status that matches the value you specify.

[-status-details <text>] - Connectivity Status Details

Use this parameter to display information only about CIFS servers with status details that match the value you specify.

Examples

The following example checks the connectivity of CIFS server on vserver vs0 from each node.

```
cluster1::> vserver cifs check -vserver vs0
Vserver : vs0
                Cifs NetBIOS Name : NEWSERVER
                      Cifs Status : up
                             Site : Bangalore

Node Name DC Server Name    DC Server IP  Status  Status Details
--------- ----------------  ------------  ------- --------------
node1     CIFSSERVER.COM    10.11.12.13    up     Response time (msec): 55
node2     CIFSSERVER.COM    10.11.12.13    up     Response time (msec): 70
node3     CIFSSERVER.COM    10.11.12.13    down   Secd: No Server
available.
```

vserver cifs create

Create a CIFS server

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

The `vserver cifs create` command creates a CIFS server on a Vserver. When you create the CIFS server, you can add it to an existing CIFS domain, or you can join it to a workgroup. When you add it to an existing CIFS domain, the storage system prompts you to provide the credentials of a user account that has sufficient privileges to add computers to the `-ou` container within the `-domain` domain. The user account must have a password that cannot be empty. If the new CIFS server is joining a domain, this command might take several minutes to complete.

Each Vserver can have only one CIFS server.

Parameters

`-vserver <vserver name>` - Vserver

This parameter specifies the name of the Vserver on which to create the CIFS server. The Vserver must already exist.

`-cifs-server <NetBIOS>` - CIFS Server NetBIOS Name

This parameter specifies the name of the CIFS server (up to 15 characters).

`{ -domain <TextNoCase>` - Fully Qualified Domain Name

This parameter specifies the name of the Active Directory domain to associate with the CIFS server.

`[-ou <text>]` - Organizational Unit

This parameter specifies the organizational unit within the Active Directory domain to associate with the CIFS server. By default, this parameter is set to CN=Computers. When specifying this parameter, specify only the organizational unit portion of the distinguished name. Data ONTAP appends the value provided for the required `-domain` parameter onto the value provided for `-ou` parameter to produce the Active Directory distinguished name, which is used to associate with the CIFS server.

Nested OUs must be provided in a specific order with all containers separated by a comma. Reading from left to right you travel up the directory tree until you reach the root OU.

`[-default-site <text>]` - Default Site Used by LIFs Without Site Membership

This parameter specifies the site within the Active Directory domain to associate with the CIFS server if Data ONTAP cannot determine an appropriate site. This parameter will also be used for discovering KDCs in the trusted domain if Data ONTAP cannot determine an appropriate site in the trusted domain.

`| -workgroup <NetBIOS>` - Workgroup Name `}`

This parameter specifies the name of the workgroup (up to 15 characters).

`[-keytab-uri {scheme://(hostname|IPv4 Address|'['IPv6 Address']')…}]` - Kerberos Keytab File URI (privilege: advanced)

This parameter specifies loading a keytab file from the specified URI. This is applicabe if the CIFS server is

being created in realm mode or domain mode.

[-status-admin {down|up}] - CIFS Server Administrative Status

Use this parameter to specify whether the initial administrative status of the cifs server is up or down. The default setting is `up` .

[-comment <text>] - CIFS Server Description

This optional parameter specifies a text comment for the server. CIFS clients can see this CIFS server description when browsing servers on the network. The comment can be up to 256 characters long. If there is a space in the descriptive remark or the path, you must enclose the entire string in quotation marks.

[-netbios-aliases <NetBIOS>,…] - List of NetBIOS Aliases

This parameter specifies a list of NetBIOS aliases, which are alternate names to the CIFS server name.

Examples

The following example creates a CIFS server CIFSSERVER1 for Vserver vs1 and domain EXAMPLE.com.

```
cluster1::> vserver cifs create -vserver vs1 -cifs-server CIFSSERVER1
-domain EXAMPLE.com
In order to create an Active Directory machine account for the CIFS
server, you
must supply the name and password of a Windows account with sufficient
privileges to add computers to the "CN=Computers" container within the
"EXAMPLE.com" domain.

Enter the user name: Administrator

Enter the password:
```

```
cluster1::> vserver cifs create -vserver vs1 -cifs-server CIFSSERVER2
-domain EXAMPLE.com -keytab-uri
http://nbsweb.eng.btc.netapp.in/~user/Sample1.keytab
Info: SMB1 protocol version is disabled on this CIFS server. If required,
use
the (privilege: advanced) command "vserver cifs options modify -vserver
vs1
-smb1-enabled true" to enable it.
```

The following example creates a CIFS server CIFSSERVER1 for Vserver vs1 and workgroup Sales:

```
cluster1::> vserver cifs create -vserver vs1 -cifs-server CIFSSERVER1
-workgroup Sales
```

The following example creates a CIFS server CIFSSERVER1 for Vserver vs1 and domain EXAMPLE.com with

a user Administrator1 from a different domain, in this case an administrator from a trusted domain TRUST.LAB.COM:

```
cluster1::> vserver cifs create -vserver vs1 -cifs-server CIFSSERVER1
-domain EXAMPLE.com
In order to create an Active Directory machine account for the CIFS
server, you
must supply the name and password of a Windows account with sufficient
privileges to add computers to the "CN=Computers" container within the
"EXAMPLE.com" domain.

Enter the user name: Administrator1@TRUST.LAB.COM

Enter the password:
```

The following example creates a CIFS server CIFSSERVER1 for Vserver vs1 with domain EXAMPLE.com using nested OUs:

```
cluster1::> vserver cifs create -vserver vs1 -cifs-server CIFSSERVER1
-domain EXAMPLE.com -ou OU=developers,OU=engineering,OU=corp
In order to create an Active Directory machine account for the CIFS
server, you
must supply the name and password of a Windows account with sufficient
privileges to add computers to the "OU=developers,OU=engineering,OU=corp"
container within the
"EXAMPLE.com" domain.

Enter the user name: Administrator

Enter the password:
```

vserver cifs delete

Delete a CIFS server.

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

The `vserver cifs delete` command deletes a CIFS server.

Parameters

`-vserver <vserver name>` - Vserver

This parameter specifies the Vserver for the CIFS server you want to delete.

[-force-account-delete {true|false}] - If this is set, the local CIFS configuration will be deleted irrespective of any communication errors. The default value for this field is false.

This parameter specifies the force-delete of CIFS server irrespective of any communication errors.

Examples

The following example deletes the CIFS server from a Vserver named vs1:

```
cluster1::> vserver cifs delete -vserver vs1
```

vserver cifs modify

Modify a CIFS server

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

The `vserver cifs modify` command modifies the site within the Active Directory domain to associate with the CIFS server if Data ONTAP cannot determine an appropriate site. You also can modify the name and ou of the CIFS server, join to a new domain or a workgroup, or rejoin to current domain. When a CIFS server is joining a domain, this command might take several minutes to complete.

Parameters

-vserver <vserver name> - Vserver

This parameter specifies the Vserver for the CIFS server whose associated site you want to modify.

[-cifs-server <NetBIOS>] - CIFS Server NetBIOS Name

This parameter specifies the name of the CIFS server (up to 15 characters). Before setting this parameter, the CIFS server must be stopped using the `vserver cifs modify -status-admin` *down* `command. When the command completes successfully, the administrative status of the CIFS server is automatically set to` *up* `.`

{ [-domain <TextNoCase>] - Fully Qualified Domain Name

This parameter specifies the fully qualified name of the Active Directory domain to associate with the CIFS server. Before setting this parameter, the CIFS server must be stopped using the `vserver cifs modify -status-admin` *down* `command. When the command completes successfully, the administrative status of the CIFS server is automatically set to` *up* `.`

[-ou <text>] - Organizational Unit

This parameter specifies the organization unit within the Active Directory domain to associate with the CIFS server. By default, this parameter is set to CN=Computers. Before setting this parameter, the CIFS server must be stopped using the `vserver cifs modify -status-admin` *down* `command. When the command completes successfully, the administrative status of the CIFS server is automatically set to` *up* `.` Modifications to this parameter are not supported for workgroup CIFS servers.

[-default-site <text>] - Default Site Used by LIFs Without Site Membership

This parameter specifies the site within the Active Directory domain to associate with the CIFS server if Data ONTAP cannot determine an appropriate site. Modifications to this parameter are not supported for workgroup CIFS servers.

| [-workgroup <NetBIOS>] - Workgroup Name }

This parameter specifies the name of the workgroup (up to 15 characters).

[-keytab-uri {scheme://(hostname|IPv4 Address|'['IPv6 Address']')…}] - Kerberos Keytab File URI (privilege: advanced)

This parameter specifies loading a keytab file from the specified URI. This is applicabe if the CIFS server is being created in realm mode or domain mode.

[-status-admin {down|up}] - CIFS Server Administrative Status

Use this parameter to modify the administrative status of the cifs server. Modify the administrator status to `down` to stop cifs access.

[-comment <text>] - CIFS Server Description

Use this parameter to modify the comment of the server.

Examples

The following example changes the default site and administrative status of the CIFS server associated with Vserver "vs1":

```
cluster1::> vserver cifs modify -vserver vs1 -default-site default -status
-admin up
```

The following example modifies the Active Directory domain and ou for the CIFS server associated with Vserver "vs1". The administrative status of the CIFS server must be set to "down" to proceed with Active Directory domain modification. If the command completes successfully, the administrative status is automatically set to "up".

```
cluster1::> vserver cifs modify -vserver vs1 -domain example.com -ou
ou=example_ou -cifs-server example -status-admin down

In order to create an Active Directory machine account for the CIFS
server, you
must supply the name and password of a Windows account with sufficient
privileges to add computers to the "ou=example_ou" container within the
"example.com"
domain.

Enter the user name: administrator

Enter the password:

cluster1::>
```

The following example modifies the CIFS server associated with Vserver "vs1" from a domain to a workgroup. The administrative status of the CIFS server must be set to "down" for this command. If the command completes successfully, the administrative status is automatically set to "up".

```
cluster1::> vserver cifs modify -vserver vs1 -workgroup Sales -status
-admin down

Warning: To enter workgroup mode, all domain-based features must be
disabled
         and their configuration removed automatically by the system,
         including continuously-available shares, shadow copies, and AES.
         However, domain-configured share ACLs such as
         "EXAMPLE.COM\userName" will not work properly, but cannot be
         removed by Data ONTAP. Remove these share ACLs as soon as
possible
         using external tools after the command completes. If AES is
enabled,
         you may be asked to supply the name and password of a Windows
account
         with sufficient privileges to disable it in the "EXAMPLE.COM"
domain.
Do you want to continue? {y|n}: y

cluster1::>
```

The following example modifies the CIFS server associated with Vserver "vs1" from a workgroup to a domain. The administrative status of the CIFS server must be set to "down" for this command. If the command completes successfully, the administrative status is automatically set to "up".

```
cluster1::> vserver cifs modify -vserver vs1 -domain example.com -status
-admin down

In order to create an Active Directory machine account for the CIFS
server, you
must supply the name and password of a Windows account with sufficient
privileges to add computers to the "ou=example_ou" container within the
"example.com"
domain.

Enter the user name: administrator

Enter the password:

cluster1::>
```

The following example modifies the CIFS server associated with Vserver "vs1" from a workgroup to a domain using keytab-uri. The administrative status of the CIFS server must be set to "down" for this command. If the command completes successfully, the administrative status is automatically set to "up".

```
cluster1::> vserver cifs modify -vserver vs1 -domain example.com -keytab
-uri http://nbsweb.eng.btc.netapp.in/~shravanp/Sample1.keytab -status
-admin down

cluster1::>
```

The following example modifies the CIFS server name associated with Vserver "vs1" from above example. The administrative status of the CIFS server must be set to "down" to proceed with Active Directory domain modification. If the command completes successfully, the administrative status is automatically set to "up" and there will be a job running to update related configurations.

```
cluster1::> vserver cifs modify -vserver vs1 -cifs-server new_example
-status-admin down

In order to create an Active Directory machine account for the CIFS
server, you
must supply the name and password of a Windows account with sufficient
privileges to add computers to the "ou=example_ou" container within the
"example.com"
domain.

Enter the user name: administrator

Enter the password:

Successfully queued CIFS Server Modify job [id: xx] for CIFS server
"NEW_EXAMPLE". To view the status of the job, use the "job show -id
<jobid>"
command.

cluster1::>
```

vserver cifs nbtstat

Display NetBIOS information over TCP connection

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

The vserver cifs nbtstat command displays information about NetBIOS over TCP (NBT) connections for the cluster. It displays the IP address associated with the interfaces, the IP addresses of the WINS servers in use, and information about the registered NetBIOS names for the cluster. You can use this command to troubleshoot NetBIOS name resolution problems.

NetBIOS name service (NBNS) over IPv6 is not supported.

Parameters

{ [-fields <fieldname>,…]

If you specify the `-fields <fieldname>, …` parameter, the command output also includes the specified field or fields. You can use '-fields ?' to display the fields to specify.

| [-instance] }

If you specify the `-instance` parameter, the command displays detailed information about all fields.

[-node {<nodename>|local}] - Node

If you specify this optional parameter, the command displays the NetBIOS name service information only for the specified node.

[-vserver <vserver name>] - Vserver

If you specify this optional parameter, the command displays the NetBIOS name service information only for the specified Vserver.

[-nbt-name <text>] - NBT Name

If you specify this optional parameter, the command displays the NetBIOS name service information only for the specified NetBIOS name.

[-netbios-suffix <Hex String>] - NetBIOS Suffix

If you specify this optional parameter, the command displays the NetBIOS name service information only for the specified NetBIOS suffix.

[-interface <IP Address>,…] - Interfaces

If you specify this optional parameter, the command displays the NetBIOS name service information only for the specified IP address.

[-wins-servers <IP Address>,…] - Servers

If you specify this optional parameter, the command displays the NetBIOS name service information only for the specified WINS servers.

[-server-state <text>,…] - Server State (active, inactive)

If you specify this optional parameter, the command displays the NetBIOS name service information only for the specified WINS server state. The following are possible values for this parameter:

- active
- inactive

[-nbt-scope <text>] - NBT Scope

If you specify this optional parameter, the command displays the NetBIOS name service information only for the specified NetBIOS name scope.

[-nbt-mode <text>] - NBT Mode

If you specify this optional parameter, the command displays the NetBIOS name service information only for the specified NetBIOS name service mode. The following are possible values for this parameter:

- 'p' - Point to Point
- 'h' - Hybrid
- 'm' - Mixed
- 'b' - Broadcast

[-state <text>] - State

If you specify this optional parameter, the command displays the NetBIOS name service information only for the specified NetBIOS name registration state. The following are possible values for this parameter:

- must_register

- must_unregister
- wins
- broadcast
- name_released
- wins_conflict
- broadcast_conflict

[-time-left <integer>] - Time Left

If you specify this optional parameter, the command displays the NetBIOS name service information only for the specified registration time left in minutes with the WINS server.

[-type <text>] - Type

If you specify this optional parameter, the command displays the NetBIOS name service information only for the specified name registration type. The following are possible values for this parameter:

- registered
- active
- permanent
- group

Examples

The following example displays the NetBIOS name service information.

```
cluster1::> nbtstat
          (vserver cifs nbtstat)

          Vserver: vs1
          Node:    cluster1-01
          Interfaces:
                   10.10.10.32
                   10.10.10.33
         Servers:
                   17.17.1.2  (active  )
         NBT Scope:
                  [ ]
         NBT Mode:
                  [h]
         NBT Name           NetBIOS Suffix   State         Time Left
Type
         ------------------ ---------------  ------------- ---------
-----
         CLUSTER_1          00               wins          57
         CLUSTER_1          20               wins          57
Vserver: vs1
         Node:    cluster1-02
         Interfaces:
                 10.10.10.35
         Servers:
                 17.17.1.2  (active  )
         CLUSTER_1          00               wins          58
         CLUSTER_1          20               wins          58
         4 entries were displayed.
```

vserver cifs prepare-to-downgrade

Restore the CIFS Configurations to Earlier Release of Data ONTAP Version

Availability: This command is available to *cluster* administrators at the *advanced* privilege level.

Description

The `vserver cifs prepare-to-downgrade` command restores the CIFS configurations for Data ONTAP based on the input parameter disable-feature-set.

Parameters

`-disable-feature-set <downgrade version>` - Data ONTAP Version (privilege: advanced)

This parameter specifies the Data ONTAP release for which the CIFS configurations are restored. The value can be one of the following:

- 8.3.1 - Restores the CIFS configurations for Data ONTAP release 8.3.1. These features include:
- FPolicy "close with read" filters from FPolicy events.
- CIFS server options `-guest-unix-user` and `-is-admin-users-mapped-to-root-enabled`.
- CIFS security option `is-smb-encryption-required`.
- Storage-Level Access Guard (SLAG) for qtrees.
- CIFS share property `encrypt-data`.
- 8.3.2 - Restores the CIFS configurations for Data ONTAP release 8.3.2. These features include:
- CIFS server option `-grant-unix-group-perms-to-others`.
- 9.0.0 - Restores the CIFS configurations for Data ONTAP release 9.0.0. These features include:
- Disable CIFS multichannel feature and close all multichannel connections.
- Delete all the name-mapping entries that have a hostname or an address field configured.
- Terminate all SMB 3.1 client connections.
- Terminate all client connections that have large MTU negotiated.
- Remove the symlink property `no-strict-security`.
- Remove all symlink pathmap entries with locality `freelink`.

Examples

```
cluster1::*> vserver cifs prepare-to-downgrade -disable-feature-set 8.3.1
```

```
cluster1::*> vserver cifs prepare-to-downgrade -disable-feature-set 8.3.2
```

```
cluster1::*> vserver cifs prepare-to-downgrade -disable-feature-set 9.0.0
```

vserver cifs remove-netbios-aliases

Remove NetBIOS aliases

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

```
The `vserver cifs remove-netbios-aliases` command deletes NetBIOS aliases
for the CIFS server.
```

Parameters

-vserver <vserver name> - Vserver

This parameter specifies the name of the Vserver from which the list of NetBIOS aliases are deleted.

-netbios-aliases <NetBIOS>,… - List of NetBIOS Aliases

This parameter specifies one or more NetBIOS aliases to be deleted. To delete all the NetBIOS aliases of a Vserver use '-'.

Examples

The following example deletes NetBIOS aliases for the CIFS server CIFS_SERVER on Vserver vs_a.

```
cluster1::> cifs show -display-netbios-aliases

Vserver: vs_a
Server Name: CIFS_SERVER
  NetBIOS Aliases: ALIAS_1, ALIAS_2, ALIAS_3, ALIAS_4,
                   ALIAS_5, ALIAS_6, ALIAS_7

cluster1::> cifs remove-netbios-aliases -netbios-aliases
alias_1,alias_3,alias_5

cluster1::> cifs show -display-netbios-aliases

Vserver: vs_a
Server Name: CIFS_SERVER
  NetBIOS Aliases: ALIAS_2, ALIAS_4, ALIAS_6, ALIAS_7

cluster1::> cifs remove-netbios-aliases -netbios-aliases alias_7

cluster1::> cifs show -display-netbios-aliases

Vserver: vs_a
Server Name: CIFS_SERVER
  NetBIOS Aliases: ALIAS_2, ALIAS_4, ALIAS_6

cluster1::> cifs remove-netbios-aliases -netbios-aliases -

cluster1::> cifs show -display-netbios-aliases

Vserver: vs_a
Server Name: CIFS_SERVER
  NetBIOS Aliases: -
```

vserver cifs repair-modify

Repair a partially-failed Vserver CIFS server modify operation

Availability: This command is available to *cluster* and *Vserver* administrators at the *advanced* privilege level.

Description

Use this `vserver cifs repair-modify -vserver <vserver name>` command when the background job created during a Vserver CIFS server modify operation fails.

Parameters

`-vserver <vserver name>` - Vserver (privilege: advanced)

This parameter specifies a Vserver containing a configured CIFS server that has been modified.

Examples

The following example starts the CIFS server modify job on Vserver vs1 successfully:

```
cluster1::*> vserver cifs repair-modify -vserver vs1

Successfully queued CIFS Server Modify job [id: 10] for CIFS server
"CIFSNAME1".
To view the status of the job, use the "job show -id <jobid>" command.

cluster1::*>
```

The following example fails the command with specific error:

```
cluster1::*> vserver cifs repair-modify -vserver vs2

Error: Job Out of memory. Failed to queue CIFS Server Modify Job for CIFS
server "CIFSNAME2". Retry the operation by running (privilege: advanced)
"vserver cifs repair-modify -vserver vs2".
Error: command failed: unable to save data

cluster1::*>
```

vserver cifs security-encryption-required-dc-connections-prepare-to-downgrade

Disabled encryption-required-for-dc-connections option and capability for downgrade.

Availability: This command is available to *cluster* administrators at the *advanced* privilege level.

Description

The `vserver cifs security-encryption-required-dc-connections-prepare-to-downgrade` prepares the cluster for downgrade by disabling SMB3.encryption.required.dc.connection capability

Examples

```
cluster1::*> vserver cifs security-encryption-required-dc-connections-
prepare-to-downgrade
```

vserver cifs show

Display CIFS servers

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

The `vserver cifs show` command displays information about CIFS servers. The command output depends on the parameter or parameters specified with the command. If you do not specify any parameters, the command displays the following information about all CIFS servers:

- Vserver name
- CIFS server NetBIOS name
- Domain or workgroup name
- Authentication style

You can specify the `-fields` parameter to specify which fields of information to display about CIFS servers. In addition to the fields above, you can display the following fields:

- Default site
- Fully-qualified domain name

You can specify additional parameters to display only information that matches those parameters. For instance, to display information only about CIFS servers that are in the CIFS domain named RUBY, run the command with the `-domain-workgroup RUBY` parameter.

You can specify the ` -instance` parameter to display all information for all CIFS servers in list form.

Parameters

{ [-fields <fieldname>,…]

If you specify the -fields <fieldname>, … parameter, the command only displays the fields that you specify.

| [-display-netbios-aliases]

If you specify this parameter, the command displays information about configured NetBIOS aliases.

| [-instance] }

If you specify the -instance parameter, the command displays detailed information about all entries.

[-vserver <vserver name>] - Vserver

If you specify this parameter, the command displays information only about the CIFS servers for the specified Vserver.

[-cifs-server <NetBIOS>] - CIFS Server NetBIOS Name

If you specify this parameter, the command displays information only for CIFS servers that match the specified CIFS server NetBIOS name.

[-domain-workgroup <CIFS domain>] - NetBIOS Domain/Workgroup Name

If you specify this parameter, the command displays information only for CIFS servers that are in the specified NetBIOS domain or workgroup.

[-domain <TextNoCase>] - Fully Qualified Domain Name

If you specify this parameter, the command displays information only for CIFS servers that are in the specified domain.

[-ou <text>] - Organizational Unit

If you specify this parameter, the command displays information only for CIFS servers that are in the specified organizational unit.

[-default-site <text>] - Default Site Used by LIFs Without Site Membership

If you specify this parameter, the command displays information only for CIFS servers that have the specified default site.

[-workgroup <NetBIOS>] - Workgroup Name

If you specify this parameter, the command displays information only for CIFS servers that are in the specified workgroup.

[-auth-style {domain|workgroup|realm}] - Authentication Style

If you specify this parameter, the command displays information only for CIFS servers that match the specified authentication style.

[-status-admin {down|up}] - CIFS Server Administrative Status

If you specify this parameter, the command displays information only for CIFS servers that match the specified administrative status.

[-comment <text>] - CIFS Server Description

If you specify this parameter, the command displays information only for CIFS servers that match the specified comment field.

[-netbios-aliases <NetBIOS>,…] - List of NetBIOS Aliases

If you specify this parameter, the command displays information only for CIFS servers that have specified NetBIOS alias.

Examples

The following example displays a subset of the information about all CIFS servers:

```
cluster1::> vserver cifs show
Server      Domain/Workgroup
 Vserver        Name        Name             Authentication Style
 -------------- ----------- ---------------- --------------------
 vs1            CIFSSERVER1 EXAMPLE          domain
```

The following example displays all information about all CIFS-enabled Vservers in list form:

```
cluster1::> vserver cifs show -instance
Vserver: vs1
                        CIFS Server NetBIOS Name: CIFSSERVER1
                    NetBIOS Domain/Workgroup Name: EXAMPLE
                      Fully Qualified Domain Name: EXAMPLE.COM
                              Organizational Unit: CN=Computers
Default Site Used by LIFs Without Site Membership:
                                   Workgroup Name: -
                              Authentication Style: domain
                CIFS Server Administrative Status: up
                          CIFS Server Description:
                          List of NetBIOS Aliases: ALIAS_2, ALIAS_4,
ALIAS_6
```

The following example displays the NetBIOS aliases for the CIFS server CIFSSERVER1

```
cluster1::> cifs show -display-netbios-aliases

Vserver: vs1
Server Name: CIFSSERVER1
  NetBIOS Aliases: ALIAS_2, ALIAS_4, ALIAS_6
```

vserver cifs start

Start a CIFS server

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

This command starts the CIFS server on the specified Vserver. The CIFS server must already exist. To create a CIFS server, run vserver cifs create .

Parameters

-vserver <vserver name> - Vserver

This parameter specifies a Vserver containing a configured CIFS server that has been stopped.

Examples

The following example starts the CIFS server on Vserver vs1:

```
cluster1::> cifs start -vserver vs1
```

Related Links

- vserver cifs create

vserver cifs stop

Stop a CIFS server

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

This command stops the CIFS server on the specified Vserver.

Established sessions will be terminated and their open files closed. Workstations with cached data will not be able to save those changes, which could result in data loss.

Parameters

-vserver <vserver name> - Vserver

This parameter specifies a Vserver containing a configured CIFS server that is running.

Examples

The following example stops the CIFS server on Vserver vs1:

```
cluster1::> cifs stop -vserver vs1
```

vserver cifs branchcache create

Create the CIFS BranchCache service

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

The `vserver cifs branchcache create` command creates the configuration for computing and

retrieving BranchCache hash data. Only a single instance of the BranchCache service can be created on a Vserver.

Parameters

`-vserver <vserver name>` - Vserver

This parameter specifies the CIFS-enabled Vserver on which you want to set up the BranchCache service.

`[-versions {v1-enable|v2-enable|enable-all}]` - Supported BranchCache Versions

This optional parameter specifies a list of versions of the BranchCache protocol that the storage system supports. The default is `enable-all` . This list can include one or more of the following:

- v1-enable - This option enables BranchCache Version 1.
- v2-enable - This option enables BranchCache Version 2.
- enable-all - This option enables all supported versions of BranchCache.

`-hash-store-path <text>` - Path to Hash Store

This parameter specifies an existing directory into which the hash data is stored. Read-only paths, such as snapshot directories, are not allowed.

`[-hash-store-max-size {<integer>[KB|MB|GB|TB|PB]}]` - Maximum Size of the Hash Store

This optional parameter specifies the maximum size to use for the hash data. If the size of the hash data exceeds this value, older hashes are deleted to make room for newer hashes. The default is 1 GB.

`[-server-key <text>]` - Encryption Key Used to Secure the Hashes

This optional parameter specifies a server key that the BranchCache service uses to prevent clients from impersonating the BranchCache server.

`[-operating-mode <BranchCache Mode>]` - CIFS BranchCache Operating Modes

This optional parameter specifies the mode in which the BranchCache service operates. The default is `per-share` . Possible values include:

- disable - This option disables the BranchCache service for the Vserver.
- all-shares - This option enables the BranchCache service for all the shares on this Vserver.
- per-share - This option enables the BranchCache service on a per-share basis. You can enable the BranchCache service on an existing share by adding the *`branchcache`* flag in the `-share -properties` parameter of the vserver cifs share modify command.

Examples

The following example creates the BranchCache service on the Vserver named vs1. The path to the hash store is /vs1_hash_store.

```
cluster1::> vserver cifs branchcache create -vserver vs1 -hash-store-path
/vs1_hash_store
```

```
The following example creates the BranchCache service on the Vserver vs1.
The path to the hash store is /vs_hash_store. The service is enabled on
all the shares of the Vserver, supports BranchCache version 2, supports a
maximum of 1 GB of BranchCache hashes, and secures the hashes using the
key "vs1 secret".
```

```
cluster1::> vserver cifs branchcache create -vserver vs1 -hash-store-path
/vs1_hash_store -operating-mode all-shares -versions v2-enable -hash-store
-max-size 1GB -server-key "vs1 secret"
```

Related Links

- vserver cifs share modify

vserver cifs branchcache delete

Stop and remove the CIFS BranchCache service

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

The `vserver cifs branchcache delete` command stops and removes the Vserver BranchCache configuration.

Parameters

`-vserver <vserver name>` - Vserver

This parameter specifies the CIFS-enabled Vserver whose BranchCache configuration you want to remove.

`-flush-hashes {true|false}` - Delete Existing Hashes

This parameter specifies whether to keep or delete all existing hashes after deleting the BranchCache service.

Examples

The following example stops and removes the BranchCache service on the Vserver vs1. It also deletes all existing hashes.

```
cluster1::> vserver cifs branchcache delete -flush-hashes true -vserver
vs1
```

vserver cifs branchcache hash-create

Force CIFS BranchCache hash generation for the specified path or file

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

The `vserver cifs branchcache hash-create` command causes the BranchCache service to compute hashes for a single file, for a directory, or for all the files in a directory structure if you specify the `-recurse` option.

Parameters

`-vserver <vserver name>` - Vserver

This parameter specifies the CIFS-enabled Vserver on which the hash is computed.

`-path <text>` - Path of File or Directory to Hash

This parameter specifies the path of the directory or file for which hashes are to be computed. If a file is specified, the hashes are computed on the whole file. If a directory is specified, hashes are computed on all files within the directory.

`-recurse {true|false}` - Process All Files in the Directory Recursively

If this option is set to true and the `-path` parameter specifies a directory, hashes are computed recursively for all directories in the path.

Examples

The following example creates hashes for the file "report.doc":

```
cluster1::> vserver cifs branchcache hash-create -vserver vs1 -path
/repository/report.doc -recurse false
```

The following example creates hashes for all the files in the directory "repository":

```
cluster1::> vserver cifs branchcache hash-create -vserver vs1 -path
/repository -recurse false
```

The following example recursively creates hashes for all the files and directories inside the directory "documents":

```
cluster1::> vserver cifs branchcache hash-create -vserver vs1 -path
/documents -recurse true
```

vserver cifs branchcache hash-flush

Flush all generated BranchCache hashes

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

The `vserver cifs branchcache hash-flush` command deletes all hash data from the configured hash store.

Parameters

`-vserver <vserver name>` - Vserver

This parameter specifies the CIFS-enabled Vserver whose hash data is to be deleted.

Examples

The following example flushes all the hashes for Vserver vs1:

```
cluster1::> vserver cifs branchcache hash-flush -vserver vs1
```

vserver cifs branchcache modify

Modify the CIFS BranchCache service settings

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

The `vserver cifs branchcache modify` command modifies the configuration for computing and retrieving BranchCache hash data.

Parameters

`-vserver <vserver name>` - Vserver

This parameter specifies the CIFS-enabled Vserver whose BranchCache service is to be modified.

`[-versions {v1-enable|v2-enable|enable-all}]` - Supported BranchCache Versions

This optional parameter specifies a list of versions of the BranchCache protocol that the storage system supports. The default is `enable-all` . This list can include one or more of the following:

- v1-enable - This option enables BranchCache Version 1.
- v2-enable - This option enables BranchCache Version 2.
- enable-all - This option enables all supported versions of BranchCache.

[-operating-mode <BranchCache Mode>] - CIFS BranchCache Operating Modes

This optional parameter specifies the mode in which the BranchCache service operates. The default is `per-share` . Possible values include:

- disable - This option disables the BranchCache service for the Vserver.
- all-shares - This option enables the BranchCache service for all the shares on this Vserver.
- per-share - This option enables the BranchCache service on a per-share basis. You can enable the BranchCache service on an existing share by adding the *branchcache* flag in the `-share -properties` parameter of the vserver cifs share modify command.

[-hash-store-max-size {<integer>[KB|MB|GB|TB|PB]}] - Maximum Size of the Hash Store

This optional parameter specifies the maximum size to use for the hash data. If the size of the hash data exceeds this value, older hashes are deleted to make room for newer hashes. The default is 1 GB.

[-flush-hashes {true|false}] - Delete Existing Hashes

This parameter specifies whether to keep or delete all the existing hashes. This must be set to true when modifying the server key.

[-hash-store-path <text>] - Path to Hash Store

This parameter specifies an existing directory into which the hash data is stored. Read-only paths, such as snapshot directories, are not allowed.

[-server-key <text>] - Encryption Key Used to Secure the Hashes

This optional parameter specifies a server key that the BranchCache service uses to prevent clients from impersonating the BranchCache server. If you specify this parameter, all existing hashes for the Vserver are deleted.

Examples

The following example modifies the BranchCache service on the Vserver named vs1. The path to the hash store is /vs1_hash_store_2, the server key used to secure the hashes is set to "new vserver secret", all existing hashes are removed, the service supports all BranchCache versions, and is enabled on a per-share basis.

```
cluster1::> vserver cifs branchcache modify -vserver vs1 -hash-store-path
/vs1_hash_store_2 -server-key "new vserver secret" -flush-hashes true
-versions enable-all -operating-mode per-share
```

```
The following example modifies the BranchCache service on the Vserver vs1.
The service is enabled on all the shares of the Vserver, supports
BranchCache version 1, and supports a maximum of 1 TB of BranchCache
hashes.
```

```
cluster1::> vserver cifs branchcache modify -vserver vs1 -operating-mode
all-shares -versions v1-enable -hash-store-max-size 1TB
```

Related Links

- vserver cifs share modify

vserver cifs branchcache show

Display the CIFS BranchCache service status and settings

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

The `vserver cifs branchcache show` command displays information about the BranchCache configuration for the Vserver. The command output depends on the parameter or parameters specified with the command. If you do not specify any parameters, the command displays the following information:

- Operating Mode
- Allowed Versions
- Maximum Size
- Path

You can specify additional parameters to display only information that matches those parameters.

Parameters

{ [-fields <fieldname>,…]

If you specify the -fields <fieldname>, … parameter, the command displays only the fields that you specify.

| [-instance] }

If you specify the -instance parameter, the command displays detailed information about all entries.

[-vserver <vserver name>] - Vserver

If you specify this parameter, the command displays information for the specified Vserver.

[-versions {v1-enable|v2-enable|enable-all}] - Supported BranchCache Versions

If you specify this parameter, the command displays information for the Vservers that support the specified BranchCache versions.

[-hash-store-path <text>] - Path to Hash Store

If you specify this parameter, the command displays information for Vservers that store their hashes at the specified location.

[-hash-store-max-size {<integer>[KB|MB|GB|TB|PB]}] - Maximum Size of the Hash Store

If you specify this parameter, the command displays information for Vservers that have a maximum hash store size that is set to the specified value.

[-server-key <text>] - Encryption Key Used to Secure the Hashes

If you specify this parameter, the command displays information for Vservers that have the specified server key.

[-operating-mode <BranchCache Mode>] - CIFS BranchCache Operating Modes

If you specify this parameter, the command displays information for Vservers whose BranchCache configuration operates in the specified mode.

Examples

The following example displays a subset of the information about the BranchCache service in the cluster.

```
cluster1::> vserver cifs branchcache show
                Operating  Allowed     Max
 Vserver        Mode       Versions    Size   Path
 -------------- ---------- ----------- ------ ------------------------
 vs1            per_share  enable_all     1GB /hash_dir/
```

The following example displays all information about all the Vservers with BranchCache configurations.

```
cluster1::> vserver cifs show -instance
Vserver: vs1
         Supported Versions of BranchCache: enable_all
                        Path to Hash Store: /hash_dir/
            Maximum Size of the Hash Store: 1GB
  Encryption Key Used to Secure the Hashes: asdad
          CIFS BranchCache Operating Modes: per_share
```

```
The following example displays information about BranchCache
configurations that store the hash data at the location
/branchcache_hash_store.
```

```
cluster1::> vserver cifs branchcache show -hash-store-path
/branchcache_hash_store
                Operating  Allowed     Max
 Vserver        Mode       Versions    Size   Path
 -------------- ---------- ----------- ------ ------------------------
 vs1            per_share  enable_all     1GB /branchcache_hash_store
```

vserver cifs cache name-to-sid delete-all

Delete all the entries for the vserver

Availability: This command is available to *cluster* and *Vserver* administrators at the *advanced* privilege level.

Description

The `vserver cifs cache name-to-sid delete-all` command removes all of the Windows user cache entries cached by the Windows name for the specified Vserver.

Parameters

`-vserver <vserver name>` - Vserver (privilege: advanced)

Use this parameter to specify the Vserver for which the name-to-sid cache entries need to be deleted.

Examples

The following example shows how to delete all of the cached name-to-sid entries for Vserver vs0:

```
cluster1::> vserver cifs cache name-to-sid delete-all -vserver vs0
```

vserver cifs cache name-to-sid delete

Delete an entry

Availability: This command is available to *cluster* and *Vserver* administrators at the *advanced* privilege level.

Description

The `vserver cifs cache name-to-sid delete` command removes the Windows user cache entries cached by the Windows name. If cache propagation is enabled, the corresponding sid-to-name cache entry will also be removed.

Parameters

`-vserver <vserver name>` - Vserver (privilege: advanced)

Use this parameter to specify the Vserver for which the name-to-sid cache entry needs to be deleted.

`-win-name <text>` - Windows Name (privilege: advanced)

Use this parameter to specify the Windows name for which the cached entry needs to be deleted.

Examples

The following example shows how to delete the name-to-sid cache entry for Vserver vs0 with Windows name user1:

```
cluster1::> vserver cifs cache name-to-sid delete -vserver vs0 -win-name
user1
```

vserver cifs cache name-to-sid show

Display name-to-sid cache entries

Availability: This command is available to *cluster* and *Vserver* administrators at the *advanced* privilege level.

Description

The `vserver cifs cache name-to-sid show` command displays the Windows user information cached by Windows name.

Parameters

{ [-fields <fieldname>,…]

If you specify the `-fields <fieldname>, …` parameter, the command output also includes the specified field or fields. You can use '-fields ?' to display the fields to specify.

| [-instance] }

Use this parameter to display detailed information about the Windows user entries cached by the Windows name.

[-vserver <vserver name>] - Vserver (privilege: advanced)

Use this parameter to specify the Vserver for which the Windows user entries that are cached by the Windows name need to be displayed.

[-win-name <text>] - Windows Name (privilege: advanced)

Use this parameter to specify the Windows name for which the cached entries need to be displayed.

[-sid <text>] - SID (privilege: advanced)

Use this parameter to display information only about the cached Windows user entries that have the specified security identifier (SID).

[-sid-type <integer>] - SID type (privilege: advanced)

Use this parameter to display information only about the cached Windows user entries that have the specified security identifier (SID) type.

[-flags <integer>] - Flags (privilege: advanced)

Use this parameter to display information only about the Windows user entries cached by the Windows name that have the specified flags.

[-domain-name <text>] - Domain Name (privilege: advanced)

Use this parameter to display information only about the Windows user entries cached by the Windows name that have the specified domain name.

[-create-time <MM/DD/YYYY HH:MM:SS>] - Create Time (privilege: advanced)

Use this parameter to display information only about the Windows user entries that were cached at the specified time.

[-source {none|files|dns|nis|ldap|netgrp_byname|dc}] - Source of the Entry (privilege: advanced)

Use this parameter to display information only about the user entries cached by the Windows name that have the specified lookup source.

Examples

The following example shows how to display all of the Windows users which are cached by the Windows name:

```
cluster1::> vserver cifs cache name-to-sid show
```

The following example shows how to display all of the Windows user entries cached by the Windows name for Vserver vs0:

```
cluster1::> vserver cifs cache name-to-sid show -vserver vs0
```

vserver cifs cache settings modify

Modify CIFS Cache Configuration

Availability: This command is available to *cluster* and *Vserver* administrators at the *advanced* privilege level.

Description

The `vserver cifs cache settings modify` command modifies the Windows users cache configuration of the specified Vserver.

Parameters

-vserver <vserver name> - Vserver (privilege: advanced)

Use this parameter to specify the Vserver for which the Windows users cache settings need to be modified.

[-is-enabled {true|false}] - Is Cache Enabled? (privilege: advanced)

Use this parameter to specify if the cache needs to be enabled for the Windows users database. The value *true* means the cache is enabled and the value *false* means the cache is disabled. The default value for this parameter is *false* .

[-is-negative-cache-enabled {true|false}] - Is Negative Cache Enabled? (privilege: advanced)

Use this parameter to specify if the cache needs to be enabled for the negative entries. Negative entries means the entries which are not present in the Windows users database and the look-up fails. The default value for this parameter is *true* . Negative cache is disabled by default if the parameter *is-enabled* is set to *false* .

[-ttl <[<integer>d][<integer>h][<integer>m][<integer>s]>] - Time to Live (privilege: advanced)

Use this parameter to specify the time (in hours, minutes, and seconds) for which the positive entries need

to be cached. The positive entries means the entries which are present in the Windows users database and the look-up succeeds. The default value is 24 hours.

[-negative-ttl <[<integer>d][<integer>h][<integer>m][<integer>s]>] - Negative Time to Live (privilege: advanced)

Use this parameter to specify the time (in hours, minutes, and seconds) for which the negative entries need to be cached. The default value is 5 minutes.

[-is-propagation-enabled {true|false}] - Is Propagation Enabled? (privilege: advanced)

Use this parameter to specify whether the cached user entries need to be propagated to the sid-to-name cache. The default value is *true* . Specify *false* to disable propagation.

Examples

The following example shows how to modify the Windows users cache configuration settings for Vserver vs0:

```
cluster1::> vserver cifs cache settings modify -vserver vs0 -ttl 600
-negative-ttl 300
```

The following example shows how to disable the Windows users cache for Vserver vs0:

```
cluster1::> vserver cifs cache settings modify -vserver vs0 -is-enabled
false
```

vserver cifs cache settings show

Display CIFS Cache Configuration

Availability: This command is available to *cluster* and *Vserver* administrators at the *advanced* privilege level.

Description

The `vserver cifs cache settings show` command displays information about the Windows users cache configuration of the specified Vserver.

Parameters

{ [-fields <fieldname>,…]

If you specify the `-fields <fieldname>, …` parameter, the command output also includes the specified field or fields. You can use '-fields ?' to display the fields to specify.

| [-instance] }

Use this parameter to display detailed information about the Windows users cache configuration settings.

[-vserver <vserver name>] - Vserver (privilege: advanced)

Use this parameter to display information about the Windows users cache configuration settings for the Vserver you specify.

[-is-enabled {true|false}] - Is Cache Enabled? (privilege: advanced)

Use this parameter to display information only about the Windows users cache configuration settings that have the specified cache enabled setting. Value *true* displays only the entries that have cache enabled and value *false* displays only the entries that have cache disabled.

[-is-negative-cache-enabled {true|false}] - Is Negative Cache Enabled? (privilege: advanced)

Use this parameter to display information only about the Windows users cache configuration settings that have the specified negative cache enabled setting. Value *true* displays only the entries that have negative cache enabled and value *false* displays only the entries that have negative cache disabled.

[-ttl <[<integer>d][<integer>h][<integer>m][<integer>s]>] - Time to Live (privilege: advanced)

Use this parameter to display information only about the Windows users cache configuration settings that have the specified Time to Live.

[-negative-ttl <[<integer>d][<integer>h][<integer>m][<integer>s]>] - Negative Time to Live (privilege: advanced)

Use this parameter to display information only about the Windows users cache configuration settings that have the specified negative Time to Live.

[-is-propagation-enabled {true|false}] - Is Propagation Enabled? (privilege: advanced)

Use this parameter to display information only about the Windows users cache configuration settings that have the specified propagation enabled setting. Value *true* displays only the entries that have the propagation of cached entries to sid-to-name cache enabled and value *false* displays only the entries that have the propagation of cached entries to sid-to-name cache disabled.

Examples

The following example shows how to display the Windows users cache configuration settings for all the Vservers:

```
cluster1::> vserver cifs cache settings show
```

The following example shows how to display the Windows users cache configuration settings for Vserver vs0:

```
cluster1::> vserver cifs cache settings show -vserver vs0
```

The following example shows how to display the Windows users cache configuration settings that have cache disabled:

```
cluster1::> vserver cifs cache settings show -is-enabled false
```

vserver cifs cache sid-to-name delete-all

Delete all the entries for the vserver

Availability: This command is available to *cluster* and *Vserver* administrators at the *advanced* privilege level.

Description

The `vserver cifs cache sid-to-name delete-all` command removes all of the Windows user cache entries cached by the security identifier (SID) for the specified Vserver.

Parameters

`-vserver <vserver name>` - Vserver (privilege: advanced)

Use this parameter to specify the Vserver for which the sid-to-name cache entries need to be deleted.

Examples

The following example shows how to delete all the cached sid-to-name entries for Vserver vs0:

```
cluster1::> vserver cifs cache sid-to-name delete-all -vserver vs0
```

vserver cifs cache sid-to-name delete

Delete an entry

Availability: This command is available to *cluster* and *Vserver* administrators at the *advanced* privilege level.

Description

The `vserver cifs cache sid-to-name delete` command removes the Windows user cache entries cached by security identifier (SID). If cache propagation is enabled, the corresponding name-to-sid cache entry will also be removed.

Parameters

`-vserver <vserver name>` - Vserver (privilege: advanced)

Use this parameter to specify the Vserver for which the sid-to-name cache entry needs to be deleted.

`-sid <text>` - SID (privilege: advanced)

Use this parameter to specify the security identifier (SID) for which the cached entry needs to be deleted.

Examples

The following example shows how to delete the sid-to-name cache entry for Vserver vs0 with SID S-1-5-21-1380078113-1824080971-954447143-1152:

```
cluster1::> vserver cifs cache sid-to-name delete -vserver vs0 -sid S-1-5-
21-1380078113-1824080971-954447143-1152
```

vserver cifs cache sid-to-name show

Display sid-to-name cache entries

Availability: This command is available to *cluster* and *Vserver* administrators at the *advanced* privilege level.

Description

The `vserver cifs cache sid-to-name show` command displays the Windows user information cached by security identifier (SID).

Parameters

{ [-fields <fieldname>,…]

If you specify the `-fields <fieldname>, …` parameter, the command output also includes the specified field or fields. You can use '-fields ?' to display the fields to specify.

| [-instance] }

Use this parameter to display detailed information about the Windows user entries cached by the security identifier (SID).

[-vserver <vserver name>] - Vserver (privilege: advanced)

Use this parameter to specify the Vserver for which the Windows user entries that are cached by the security identifier (SID) need to be displayed.

[-sid <text>] - SID (privilege: advanced)

Use this parameter to display information only about the cached Windows user entries that have the specified security identifier (SID).

[-win-name <text>] - Windows Name (privilege: advanced)

Use this parameter to specify the Windows name for which the cached entries need to be displayed.

[-sid-type <integer>] - SID type (privilege: advanced)

Use this parameter to display information only about the cached Windows user entries that have the specified security identifier (SID) type.

[-sid-mode <integer>] - SID mode (privilege: advanced)

Use this parameter to display information only about the cached Windows user entries that have the specified security identifier (SID) mode.

[-flags <integer>] - Flags (privilege: advanced)

Use this parameter to display information only about the Windows user entries cached by the security identifier (SID) that have the specified flags.

[-domain-name <text>] - Domain Name (privilege: advanced)

Use this parameter to display information only about the Windows user entries cached by the security identifier (SID) that have the specified domain name.

[-create-time <MM/DD/YYYY HH:MM:SS>] - Create Time (privilege: advanced)

Use this parameter to display information only about the Windows user entries that were cached at the specified time.

[-source {none|files|dns|nis|ldap|netgrp_byname|dc}] - Source of the Entry (privilege: advanced)

Use this parameter to display information only about the Windows user entries cached by the security identifier (SID) that have the specified lookup source.

Examples

The following example shows how to display all of the Windows users which are cached by the security identifier (SID):

```
cluster1::> vserver cifs cache sid-to-name show
```

The following example shows how to display all of the Windows user entries cached by the security identifier (SID) for Vserver vs0:

```
cluster1::> vserver cifs cache sid-to-name show -vserver vs0
```

vserver cifs character-mapping create

Create character mapping on a volume

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

The `vserver cifs character-mapping create` command creates the CIFS character mapping for the specified volume on a particular Vserver.

Choose target characters in the "Private Use Area" of Unicode in the following range: U+E000…U+F8FF.

The target Unicode characters must not appear in existing file names; otherwise, unwanted character mappings would occur, resulting in clients being unable to access mapped files. For example, if ":" is mapped to "-" but "-" appears in files normally, a Windows client using the mapped share to access a file named "a-b" would have its request mapped to the NFS name "a:b", which is not the desired file.

The `vserver cifs character-mapping create` command is not supported for FlexGroups.

Parameters

-vserver <vserver name> - Vserver

This parameter specifies the Vserver on which a volume is located for which you are creating the character mapping. If only one data Vserver exists, you do not need to specify this parameter.

-volume <volume name> - Volume Name

This parameter specifies the name of the volume for which you are creating the character mapping.

-mapping <text>,… - Character Mapping

This parameter specifies the mapping of the invalid CIFS filename characters to valid CIFS filename characters. The mapping consists of a list of source-target character pairs separated by ":". The characters are Unicode characters entered using hexadecimal digits. For example: 3C:E03C.

The permissible Unicode character set for source mapping is: 0x01-0x19, 0x5C, 0x3A, 0x2A, 0x3F, 0x22, 0x3C, 0x3E, 0x7C, 0xB1.

Examples

The following example creates a character mapping for a volume vol1 on Vserver vs1.

```
cluster1::> vserver cifs character-mapping create -volume vol1 -mapping
3c:e17c, 3e:f17d, 2a:f745
cluster1::> vserver cifs character-mapping show

Vserver         Volume Name  Character Mapping
--------------  -----------  ----------------------------------------
vs1             vol1         3c:e17c, 3e:f17d, 2a:f745
```

vserver cifs character-mapping delete

Delete character mapping on a volume

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

The `vserver cifs character-mapping delete` command deletes the CIFS character mapping for the specified volume on a particular Vserver.

The `vserver cifs character-mapping delete` command is not supported for FlexGroups.

Parameters

-vserver <vserver name> - Vserver

This parameter specifies the Vserver on which a Volume is located for which you are deleting the character mapping. If only one data Vserver exists, you do not need to specify this parameter.

-volume <volume name> - Volume Name

This parameter specifies the name of the volume for which you are deleting the character mapping.

Examples

The following example deletes all character mappings for a volume vol1 on Vserver vs1.

```
cluster1::> vserver cifs character-mapping delete -volume vol1
```

vserver cifs character-mapping modify

Modify character mapping on a volume

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

The `vserver cifs character-mapping modify` command modifies the CIFS character mapping for the specified volume on a particular Vserver.

You can modify a particular volume's character mapping by specifying the following two parameters in the modify command:

- Vserver associated with the volume
- Name of the Volume

Choose target characters in the "Private Use Area" of Unicode in the following range: U+E000… U+F8FF.

The target Unicode characters must not appear in existing file names; otherwise, unwanted character mappings would occur, resulting in clients being unable to access mapped files. For example, if ":" is mapped to "-" but "-" appears in files normally, a Windows client using the mapped share to access a file named "a-b" would have its request mapped to the NFS name "a:b", which is not the desired file.

The `vserver cifs character-mapping modify` command is not supported for FlexGroups.

Parameters

-vserver <vserver name> - Vserver

This parameter specifies the Vserver on which a Volume is located for which you are modifying the character mapping. If only one data Vserver exists, you do not need to specify this parameter.

-volume <volume name> - Volume Name

This parameter specifies the name of the volume for which you are modifying the character mapping.

[-mapping <text>,…] - Character Mapping

This parameter specifies the mapping of the invalid CIFS filename characters to valid CIFS filename characters. The mapping consists of a list of source-target character pairs separated by ":". The characters are Unicode characters entered using hexadecimal digits. For example: 3C:E03C.

The permissible Unicode character set for source mapping is: 0x01-0x19, 0x5C, 0x3A, 0x2A, 0x3F, 0x22, 0x3C, 0x3E, 0x7C, 0xB1.

Examples

The following example modifies a character mapping for a volume vol1 on Vserver vs1.

```
cluster1::> vserver cifs character-mapping modify -volume vol1 -mapping
3c:e17d, 3e:f17e, 2a:f746
cluster1::> vserver cifs character-mapping show

Vserver         Volume Name  Character Mapping
--------------  -----------  ----------------------------------------
vs1             vol1         3c:e17d, 3e:f17e, 2a:f746
```

vserver cifs character-mapping show

Display character mapping on volumes

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

The `vserver cifs character-mapping show` command displays information about character mapping configured for volumes. The command output depends on the parameter or parameters specified with the command. If you do not specify any parameters, the command displays the following information about character mapping configured for volumes:

- Vserver name
- Volume name
- Character mapping

Parameters

{ [-fields <fieldname>,…]

If you specify this parameter, the command displays only the fields that you specify.

| [-instance] }

If you specify the -instance parameter, the command displays detailed information about all entries.

[-vserver <vserver name>] - Vserver

If you specify this parameter, the command displays information about character mapping configured for all

the volumes that belong to the specified Vserver.

[-volume <volume name>] - Volume Name

If you specify this parameter, the command displays information about the character mapping configured for all the volumes that match the specified volume name.

[-mapping <text>,…] - Character Mapping

If you specify this parameter, the command displays information about the character mapping configured for all volumes that match the specified mapping.

Examples

The following example displays information about all character mappings configured for volumes

```
cluster1::> vserver cifs character-mapping show

Vserver         Volume Name  Character Mapping
--------------  -----------  ----------------------------------------
vs1             vol1         3c:e17d, 3e:f17e
```

vserver cifs connection show

Displays established CIFS connections

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

The `vserver cifs connection show` command displays information about established CIFS connections.

Parameters

{ [-fields <fieldname>,…]

Use this parameter to display only the specified fields

| [-instance] }

If you specify the `-instance` parameter, the command displays detailed information about all fields.

[-node {<nodename>|local}] - Node

Use this parameter to display information about CIFS connections on the specified node.

[-vserver <vserver name>] - Vserver

Use this parameter to display information about CIFS connections on the specified CIFS-enabled SVM.

[-connection-id <integer>] - Connection ID

Use this parameter to display information about CIFS connections that match the specified connection ID.

[-session-id <integer>,…] - Session ID

Use this parameter to display information about CIFS connections that match the specified session ID.

[-workstation-ip <IP Address>] - Workstation IP Address

Use this parameter to display information about CIFS connections that are established through the specified data LIF IP address.

[-workstation-port <integer>] - Workstation Port Number

Use this parameter to display information about CIFS connections that are opened from the specified Port number.

[-lif-ip <IP Address>] - Incoming Data LIF IP Address

Use this parameter to display information about CIFS connections that are opened from the specified IP address.

[-network-context-id <integer>] - Network Context ID (privilege: advanced)

Use this parameter to display information about CIFS connections that match the specified network context ID.

Examples

The following example displays information about all CIFS connections:

```
cluster1::> vserver cifs connection show
Node:    node1
Vserver: vs1
Connection Session                          Workstation
ID         IDs                Workstation IP Port        LIF IP
---------- ------------------ -------------- ----------- -----------
127834     1,2                172.17.193.172 15536       10.53.50.42
```

The following example displays information about a CIFS connection at advanced privilege level:

```
cluster1::*> vserver cifs connection show
Node:    node1
Vserver: vs1
Connection Session                          Workstation
Network
ID         IDs                Workstation IP Port        LIF IP
Context ID
---------- ------------------ -------------- ----------- -----------
----------
127834     1,2                172.17.193.172 15536       10.53.50.42 2
```

The following example displays information about a CIFS connection with session-id 1:

```
cluster1::*> vserver cifs connection show -session-id 1 -instance

Vserver: vs1
Node: node1
               Connection ID: 127834
                  Session ID: 1
      Workstation IP Address: 172.17.193.172
     Workstation Port Number: 15536
Incoming Data LIF IP Address: 10.53.50.42
          Network Context ID: 2
```

vserver cifs domain discovered-servers reset-servers

Reset and rediscover servers for a Vserver

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

The `vserver cifs domain discovered-servers reset-servers` command discards information the storage system has stored about domain controllers, LDAP, and NIS servers. After that, it begins the discovery process to reacquire current information about external servers.

Parameters

`-vserver <vserver name>` - Vserver

This parameter specifies the name of the Vserver.

Examples

The following is an example use of this command. It produces no output.

```
cluster1::> vserver cifs domain discovered-servers reset-servers

cluster1::>
```

vserver cifs domain discovered-servers show

Display discovered server information

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

The `vserver cifs domain discovered-servers show` command displays information about the discovered servers for the CIFS domains of one or more Vservers. Server displays are grouped by node and

Vserver, and each group is preceded by the node and Vserver identification. Within each grouping, the server display is limited to those associated with the domain specified by the domain parameter, if it is present.

Parameters

{ [-fields <fieldname>,…]

If you specify the `-fields <fieldname>, …` parameter, the command output also includes the specified field or fields. You can use '-fields ?' to display the fields to specify.

| [-instance] }

If you specify the `-instance` parameter, the command displays detailed information about all fields.

[-node {<nodename>|local}] - Node

If you use this parameter, the command only displays servers for the specified node.

[-vserver <vserver name>] - Vserver

If you use this parameter, the command only displays servers for the specified Vserver.

[-domain <TextNoCase>] - Fully Qualified Domain Name

If you use this parameter, the command only displays servers in the specified domain.

[-type {Unknown|KERBEROS|MS-LDAP|MS-DC|LDAP}] - Server Type

If you use this parameter, the command only displays servers of the specified type.

[-name <text>] - Server Name

If you use this parameter, the command only displays servers the with the specified name. This can result in multiple lines because the same server may provide multiple services.

[-address <InetAddress>] - Server Address

If you use this parameter, the command only displays servers with the specified IP address. This can result in multiple lines because the same server may provide multiple services.

[-preference {unknown|preferred|favored|adequate}] - Preference

If you use this parameter, the command only displays servers of the specified preference level.

[-status {OK|unavailable|slow|expired|undetermined|unreachable}] - Status

If you use this parameter, the command only displays servers of the specified status.

[-dc-functional-level {win2000|unknown|win2003|win2008|win2008r2|win2012|win2012r2|win2016|winthreshold}] - DC Functional Level

If you use this parameter, the command only displays servers with the specified functional level.

[-is-dc-read-only {true|false}] - Is DC Read Only

If this parameter is set to true, the command only displays servers with read only domain controller. If set to false, the command only displays servers with writable domain controller.

Examples

The following example display shows the information provided by this command.

```
cluster1::> vserver cifs domain discovered-servers show

Node: node1
Vserver: vs1

Domain Name     Type     Preference DC-Name          DC-Address      Status
--------------- -------- ---------- --------------- ---------------
---------
""              NIS      preferred  192.168.10.222  192.168.10.222  OK
example.com     MS-LDAP  adequate   DC-1            192.168.192.24  OK
example.com     MS-LDAP  adequate   DC-2            192.168.192.25  OK
example.com     MS-DC    adequate   DC-1            192.168.192.24  OK
example.com     MS-DC    adequate   DC-2            192.168.192.25  OK
5 entries were displayed.
```

vserver cifs domain discovered-servers discovery-mode modify

Modify Server Discovery Mode

Availability: This command is available to *cluster* and *Vserver* administrators at the *advanced* privilege level.

Description

The `vserver cifs domain discovered-servers discovery-mode modify` command modifies the configuration for the server discovery mode of one or more Data Vservers. This option controls the way domain controllers(DCs) are discovered.

Parameters

`-vserver <vserver name>` - Vserver (privilege: advanced)

Use this parameter to specify the Vserver for which you want to modify the server discovery mode.

`[-mode {all|site|none}]` - Server Discovery Mode (privilege: advanced)

Use this parameter to specify the server discovery mode for the Vserver. Following are the possible values for this parameter:

- all - Discover all the DCs in the domain, including the DCs local to the site. If trusted domains are present, then discover all the KDCs in the trusted domain as well, to be used for kerberos communication (default).
- site - Discover the DCs local to the site. If trusted domains are present, then discover KDCs local to the trusted domain site as well, to be used for kerberos communication.
- none - Discover nothing. Depend only on preferred-dc configured.

Examples

The following example disables server discovery for a Vserver.

```
cluster1::> vserver cifs domain discovered-servers discovery-mode modify
-vserver vs1 -mode none
```

vserver cifs domain discovered-servers discovery-mode show

Display Server Discovery Mode

Availability: This command is available to *cluster* and *Vserver* administrators at the *advanced* privilege level.

Description

The `vserver cifs domain discovered-servers discovery-mode show` command displays information about the discovery mode for domain controllers(DCs) of one or more Vservers.

Parameters

{ [-fields <fieldname>,…]

If you specify the `-fields <fieldname>, …` parameter, the command output also includes the specified field or fields. You can use '-fields ?' to display the fields to specify.

| [-instance] }

If you specify the `-instance` parameter, the command displays detailed information about all fields.

[-vserver <vserver name>] - Vserver (privilege: advanced)

If you use this parameter, the command only displays discovery mode for the specified Vserver.

[-mode {all|site|none}] - Server Discovery Mode (privilege: advanced)

If you use this parameter, the command only displays Vservers with the specified mode.

Examples

The following example shows the server discovery mode for all Vservers.

```
cluster1::> vserver cifs domain discovered-servers discovery-mode show
Vserver         Mode
--------------- ----------
vs1             all
vs2             site
vs3             none
3 entries were displayed.
```

vserver cifs domain name-mapping-search add

Add to the list of trusted domains for name-mapping

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

The `vserver cifs domain name-mapping-search add` command adds one or more trusted domains to the list of trusted domains to be used in preference to all others by the specified Vserver for looking up Windows user names when performing Windows user to UNIX user name-mapping. If a list already exists for the specified vserver, the new list is merged with the existing list. This command is not supported for workgroup CIFS servers.

Parameters

`-vserver <vserver name>` - Vserver

This parameter specifies the name of the Vserver for which you want to add trusted domains.

`-trusted-domains <domain name>,…` - Trusted Domains

This parameter specifies a comma-delimited list of fully-qualified domain names of the trusted domains for the home domain.

Examples

The following example adds two trusted domains (cifs1.example.com and cifs2.example.com) to the preferred list used by Vserver vs1:

```
cluster1::> vserver cifs domain name-mapping-search add -vserver vs1
-trusted-domains cifs1.example.com, cifs2.example.com
```

vserver cifs domain name-mapping-search modify

Modify the list of trusted domains for name-mapping search

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

The `vserver cifs domain name-mapping-search modify` command modifies the current list of trusted domains to be used in preference to all others by the specified Vserver to lookup Windows user names when performing Windows user to UNIX user name-mapping. The new list overwrites the existing list. This command is not supported for workgroup CIFS servers.

Parameters

`-vserver <vserver name>` - Vserver

This parameter specifies the name of the Vserver for which you want to modify the trusted domain list.

-trusted-domains <domain name>,… - Trusted Domains

This parameter specifies a comma-delimited list of fully qualified domain names of the trusted domains of the home domain.

Examples

The following example modifies the trusted domain list used by Vserver vs1:

```
cluster1::> vserver cifs domain name-mapping-search modify -vserver vs1
-trusted-domains cifs3.example.com
```

vserver cifs domain name-mapping-search remove

Remove from the list of trusted domains for name-mapping search

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

The `vserver cifs domain name-mapping-search remove` command removes one or more trusted domains from the list used by the specified Vserver to lookup Windows user names when performing Windows user to UNIX user name-mapping. If a list of trusted domains is not provided, the entire trusted domain list for the specified Vserver is removed. This command is not supported for workgroup CIFS servers.

Parameters

-vserver <vserver name> - Vserver

This parameter specifies the name of the Vserver from which you want to remove trusted domains.

[-trusted-domains <domain name>,…] - Trusted Domains

This parameter specifies a comma-delimited list of trusted domains of the home domain.

Examples

The following example removes two trusted domains from the list used by Vserver vs1:

```
cluster1::> vserver cifs domain name-mapping-search remove -trusted
-domains cifs1.example.com, cifs2.example.com
```

vserver cifs domain name-mapping-search show

Display the list of trusted domains for name-mapping searches

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

The `vserver cifs domain name-mapping-search show` command displays information about trusted domains of the home domain by Vserver.

Parameters

{ [-fields <fieldname>,…]

If you specify the `-fields <fieldname>, …` parameter, the command output also includes the specified field or fields. You can use '-fields ?' to display the fields to specify.

| [-instance] }

If you specify the `-instance` parameter, the command displays detailed information about all fields.

[-vserver <vserver name>] - Vserver

This parameter specifies the name of the Vserver for which you want to display information about the trusted domains.

[-trusted-domains <domain name>,…] - Trusted domains

This parameter specifies a comma-delimited list of fully qualified domain names of trusted domains for which you want to display information.

Examples

The following example displays information about all preferred trusted domains:

```
cluster1::> vserver cifs domain name-mapping-search show
Vserver         Trusted Domains
--------------  --------------------------------
vserver_1       CIFS1.EXAMPLE.COM
```

vserver cifs domain password change

Generate a new password for the CIFS server's machine account and change it in the Windows Active Directory domain.

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

The `vserver cifs domain password change` changes the domain account password for a CIFS server. This command is not supported for workgroup CIFS servers.

Parameters

-vserver <vserver name> - Vserver

This parameter specifies the name of the Vserver for whose CIFS server you want to change the domain account password.

Examples

The following example changes the password for the CIFS server on a Vserver named vs1.

```
cluster1::> vserver cifs domain password change -vserver vs1

cluster1::>
```

vserver cifs domain password reset

Reset the CIFS server's machine account password in the Windows Active Directory domain.

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

The `vserver cifs domain password reset` command resets the domain account password for a CIFS server. This may be required if the password stored along with the machine account in the Windows Active Directory domain is changed or reset without the Vserver's knowledge. The operation requires the credentials for a user with permission to reset the password in the organizational unit (OU) that the machine account is a member of. This command is not supported for workgroup CIFS servers.

Parameters

`-vserver <vserver name>` - Vserver

This parameter specifies the name of the Vserver for whose CIFS server you want to reset the domain account password.

Examples

The following example resets the password for the CIFS server on a Vserver named vs1.

```
cluster1::> vserver cifs domain password reset -vserver vs1

Enter your user ID: Administrator
Enter your password:

cluster1::>
```

vserver cifs domain password schedule modify

Modify the domain account password change schedule

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

The `vserver cifs domain password schedule modify` command enables you to modify a domain account password change schedule for a CIFS server. This command is not supported for workgroup CIFS servers.

Parameters

`-vserver <vserver name>` - Vserver

This specifies the name of the Vserver containing the CIFS server for which you want to change the domain account password.

`[-is-schedule-enabled {true|false}]` - Is Password Change Schedule Enabled

This specifies whether the domain account password change schedule is enabled.

`[-schedule-weekly-interval <integer>]` - Interval in Weeks for Password Change Schedule

This specifies the number of weeks after which the scheduled domain account password change must occur.

`[-schedule-randomized-minute <integer>]` - Minutes Within Which Schedule Start Can be Randomized

This specifies the minutes within which the scheduled domain account password change must begin.

`[-schedule-day-of-week <cron_dayofweek>]` - Day of Week for Password Change Schedule

This sets the day of week when the scheduled domain account password change occurs.

`[-schedule-time-of-day <HH:MM:SS>]` - Start Time for Password Change Schedule

This sets the time in HH:MM:SS at which the scheduled domain account password change starts.

Examples

The following example enables the domain account password change schedule and configures it to run at any time between 23:00:00 to 00:59:00 (one hour before midnight to one hour after midnight) on every 4th Sunday.

```
cluster1::> vserver cifs domain password schedule modify -is-schedule
-enabled true -schedule-randomized-minute 120 -schedule-weekly-interval 4
-schedule-time-of-day 23:00:00 -schedule-day-of-week sunday
```

vserver cifs domain password schedule show

Display the domain account password change schedule

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

The `vserver cifs domain password schedule show` command displays the domain account password change schedule configuration. It displays the following fields:

- Vserver: Vserver for which the schedule is configured
- Schedule Enabled: Whether the schedule is enabled or disabled for this Vserver
- Schedule Interval: Weeks after which the password change schedule occurs again for this Vserver
- Schedule Randomized Within: Minutes within which the schedule must begin for this Vserver
- Schedule: Password change schedule currently set on this Vserver
- Last Successful Password Change/Reset Time: Time at which the last password change or reset happened successfully on this Vserver
- Warning: Warning message, applicable only when the change password job is deleted with the feature still enabled on this Vserver

Parameters

{ [-fields <fieldname>,…]

If you specify the `-fields <fieldname>, …` parameter, the command output also includes the specified field or fields. You can use '-fields ?' to display the fields to specify.

| [-instance] }

If you specify the `-instance` parameter, the command displays detailed information about all fields.

[-vserver <vserver name>] - Vserver

If you specify this parameter, the command displays information for the specified Vserver.

[-is-schedule-enabled {true|false}] - Is Password Change Schedule Enabled

If you specify this parameter, the command displays information for all the Vservers on which the is-schedule-enabled value applies.

[-schedule-weekly-interval <integer>] - Interval in Weeks for Password Change Schedule

If you specify this parameter, the command displays information for all the Vservers on which the schedule-weekly-interval value applies.

[-schedule-randomized-minute <integer>] - Minutes Within Which Schedule Start Can be Randomized

If you specify this parameter, the command displays information for all the Vservers on which the schedule-randomized-minute value applies.

[-schedule-last-changed <text>] - Last Successful Password Change/Reset Time

If you specify this parameter, the command displays information for all the Vservers on which the schedule-last-changed value applies.

[-schedule-description <text>] - Schedule Description

If you specify this parameter, the command displays information for all the Vservers on which the schedule-description value applies.

[-schedule-warn-msg <text>] - Warning Message in Case Job Is Deleted

If you specify this parameter, the command displays information for all the Vservers on which the schedule-warn-msg value applies.

Examples

The following example shows the domain account password change schedule configuration when the password change feature is enabled for Vserver vs1.

```
cluster1::> vserver cifs domain password schedule show
Vserver: vs1
Schedule Enabled: true
            Schedule Interval: 4   week
   Schedule Randomized Within: 120 min
                     Schedule: Fri@23:00
               Last Changed At: Thu Apr  4 02:35:23 2013
```

The following example shows the domain account password change schedule configuration when the password change job has been accidently deleted.

```
cluster1::> vserver cifs domain password schedule show
Vserver: vs1
Schedule Enabled: true
            Schedule Interval: 4   week
   Schedule Randomized Within: 120 min
                     Schedule: Fri@23:00
               Last Changed At: Thu Apr  4 02:35:23 2013
                      Warning: Password change job was deleted. Re-enable
the password change schedule.
```

vserver cifs domain preferred-dc add

Add to a list of preferred domain controllers

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

The `vserver cifs domain preferred-dc add` command adds one or more domain controllers to be used in preference to all others by the specified Vserver for interactions with the specified domain. If a list already exists for the specified domain, the new list is merged with the existing list. This command is not supported for workgroup CIFS servers.

Each Vserver discovers domain controllers and attempts to sort them internally based on real-world performance. Therefore it should not be necessary to create a preferred list of domain controllers under most circumstances.

Parameters

-vserver <vserver name> - Vserver

This parameter specifies the name of the Vserver for which you want to add preferred domain controllers.

-domain <TextNoCase> - Fully Qualified Domain Name

This parameter specifies the fully-qualified name of the domain that the domain controllers belong to.

-preferred-dc <InetAddress>,… - Preferred Domain Controllers

This parameter specifies a comma-delimited list of IP addresses for domain controllers that belong to the domain specified in the `-domain` parameter.

[-skip-config-validation <true>] - Skip Configuration Validation

Use this parameter to skip the Preferred-DC configuration validation.

The hosts specified with the `-DC-servers` parameter are validated to verify that each of the DC servers are reachable, and is providing NETLOGON services.

The validation fails if there is no valid Preferred-DC server.

Examples

The following example adds two domain controllers (192.168.0.100 and 192.168.0.101) to the preferred list used by Vserver vs1 when connecting to the example.com domain:

```
cluster1::> vserver cifs domain preferred-dc add -vserver vs1 -domain
example.com -preferred-dc 192.168.0.100,192.168.0.101
```

vserver cifs domain preferred-dc check

Display validation status of the Preferred-DC configuration

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

Use the `vserver cifs domain preferred-dc check` command to check the status of configured preferred DC on a particular vserver.

Parameters

{ [-fields <fieldname>,…]

If you specify the `-fields <fieldname>, …` parameter, the command output also includes the specified field or fields. You can use '-fields ?' to display the fields to specify.

| [-instance] }

If you specify the `-instance` parameter, the command displays detailed information about all fields.

-vserver <vserver> - Vserver

Use this parameter to specify the Vserver whose preferred DC needs to be validated.

[-server-ip <text>,…] - DC Address

Use this parameter to display IP-address of the configured CIFS Preferred-DC servers.

[-domain <TextNoCase>,…] - Domain Name

Use this parameter to display Domain name of the configured CIFS Preferred-DCs.

[-status {down|up}] - DC Status

Use this parameter to display information only about CIFS Preferred-DC servers with a status that matches the value you specify.

[-status-details <text>,…] - Status Details

Use this parameter to display information only about CIFS Preferred-DC servers with status details that match the value you specify.

Examples

The following example checks the connectivity of preferred DC on vserver vs0.

```
cluster1::> vserver cifs domain preferred-dc check -vserver vs0

Vserver : vs0

Domain Name             DC Address          Status       Status Details
-----------             -----------         ------       --------------
example.com             1.1.1.1              up         Response time
(msec): 426
example.com             1.1.1.2              up         Response time
(msec): 425
example1.com            2.2.2.2              up         Response time
(msec): 423
example2.com            3.3.3.3              up         Response time
(msec): 422
```

vserver cifs domain preferred-dc remove

Remove from a list of preferred domain controllers

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

The `vserver cifs domain preferred-dc remove` command removes one or more domain controllers from the list used by the specified Vserver for interactions with the specified domain. If a list of preferred domain controllers is not provided, the entire list for the specified domain is removed. This command is not supported for workgroup CIFS servers.

Parameters

-vserver <vserver name> - Vserver

This parameter specifies the name of the Vserver from which you want to remove preferred domain controllers.

-domain <TextNoCase> - Fully Qualified Domain Name

This parameter specifies the fully-qualified name of the domain that the domain controllers belong to.

[-preferred-dc <InetAddress>,…] - Preferred Domain Controllers

This parameter specifies a comma-delimited list of IP addresses for domain controllers that belong to the domain specified in the `-domain` parameter.

Examples

The following example removes one domain controller (192.168.0.101) from the preferred list used by Vserver vs1 when connecting to the example.com domain:

```
cluster1::> vserver cifs domain preferred-dc remove -vserver vs1 -domain
example.com -preferred-dc 192.168.0.101
```

vserver cifs domain preferred-dc show

Display a list of preferred domain controllers

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

The `vserver cifs domain preferred-dc show` command displays lists of preferred domain controllers by Vserver and domain.

Parameters

{ [-fields <fieldname>,…]

If you specify the `-fields <fieldname>, …` parameter, the command output also includes the specified field or fields. You can use '-fields ?' to display the fields to specify.

| [-instance] }

If you specify the `-instance` parameter, the command displays detailed information about all fields.

[-vserver <vserver name>] - Vserver

This parameter specifies the name of the Vserver for which you want to display preferred domain controllers.

[-domain <TextNoCase>] - Fully Qualified Domain Name

This parameter specifies the fully-qualified name of the domain of the domain controllers to display.

[-preferred-dc <InetAddress>,…] - Preferred Domain Controllers

This parameter specifies a comma-delimited list of IP addresses for domain controllers to display.

Examples

The following example displays all preferred domain controllers for all Vservers:

```
cluster1::> vserver cifs domain preferred-dc show
Vserver        Domain Name                  Preferred Domain Controllers
-------------- ---------------------------
-----------------------------------
vs1            example.com                  192.168.0.100, 192.168.0.101
```

vserver cifs domain trusts rediscover

Reset and rediscover trusted domains for a Vserver

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

The `vserver cifs domain trusts rediscover` command discards information the Vserver has stored about trusted domains. After that, it begins the discovery process to reacquire current information about trusted domains. This command is not supported for workgroup CIFS servers.

Parameters

-vserver <vserver name> - Vserver

This parameter specifies the name of the Vserver.

Examples

The following example rediscovers trusted domains. It produces no output.

```
cluster1::> vserver cifs domain trusts rediscover
```

vserver cifs domain trusts show

Display discovered trusted domain information

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

The `vserver cifs domain trusts show` command displays information about the trusted domains for the CIFS home domain of one or more Vservers. The displayed trusted domain information is grouped by node

and Vserver, and each group is preceded by the node and Vserver identification. This command is not supported for workgroup CIFS servers.

Parameters

{ [-fields <fieldname>,…]

If you specify the `-fields <fieldname>, …` parameter, the command output also includes the specified field or fields. You can use '-fields ?' to display the fields to specify.

| [-instance] }

If you specify the `-instance` parameter, the command displays detailed information about all fields.

[-node {<nodename>|local}] - Node

If you use this parameter, the command displays information only about trusted domains of the home domains for the specified node.

[-vserver <vserver name>] - Vserver

If you use this parameter, the command displays information only about trusted domains of the home domain for the specified Vserver.

[-home-domain <domain name>] - Home Domain Name

If you use this parameter, the command displays information only about trusted domains of the home domain with the specified name.

[-trusted-domain <domain name>,…] - Trusted Domain Name

If you use this parameter, the command displays information only about trusted domains with the specified name.

Examples

The following example displays information about all the bidirectional trusted domains for node-01 and vserver_1.

```
cluster1::> vserver cifs domain trusts show -node node-01 -vserver
vserver_1
Node: node-01
Vserver: vserver_1

Home Domain            Trusted Domain
---------------------  ----------------------------------
EXAMPLE.COM            CIFS1.EXAMPLE.COM,
                       CIFS2.EXAMPLE.COM
```

vserver cifs group-policy modify

Change group policy configuration

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

The `vserver cifs group-policy modify` command modifies the group policy configuration of a CIFS server. This command is not supported for workgroup CIFS servers.

Parameters

`-vserver <vserver name>` - Vserver

This parameter specifies the Vserver whose group policy configuration you want to modify.

`[-status {enabled|disabled}]` - Group Policy Status

This parameter specifies whether the CIFS-enabled Vserver's group policy is enabled or disabled.

Examples

The following example enables the group policy for CIFS-enabled Vserver vs1.

```
cluster1::> vserver cifs group-policy modify -vserver vs1 -status enabled
```

vserver cifs group-policy show-applied

Show currently applied group policy setting

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Parameters

`{ [-fields <fieldname>,…]`

If you specify the -fields <fieldname>, … parameter, the command only displays the fields that you specify.

`| [-instance ] }`

If you specify the -instance parameter, the command displays detailed information about all entries.

`[-vserver <vserver name>]` - Vserver

If you specify this parameter, the command displays only group policy information that has been applied to the Vserver you specify.

`[-gpo-index <integer>]` - GPO Index

If you specify this parameter, the command displays only group policy information at gpo-index.

Examples

The following example displays all group policy information about all group policies that have been applied to a Vserver:

```
cluster1::> vserver cifs group-policy show-applied
```

```
Vserver: vs1
-----------------------------
    GPO Name: Default Domain Policy
       Level: Domain
      Status: enabled
  Advanced Audit Settings:
      Object Access:
          Central Access Policy Staging: failure
  Registry Settings:
      Refresh Time Interval: 22
      Refresh Random Offset: 8
      Hash Publication Mode for BranchCache: per-share
      Hash Version Support for BranchCache: all-versions
  Security Settings:
      Event Audit and Event Log:
          Audit Logon Events: none
          Audit Object Access: success
          Log Retention Method: overwrite-as-needed
          Max Log Size: 16384
      File Security:
          /vol1/home
          /vol1/dir1
      Kerberos:
          Max Clock Skew: 5
          Max Ticket Age: 10
          Max Renew Age:  7
      Privilege Rights:
          Take Ownership: usr1, usr2
          Security Privilege: usr1, usr2
          Change Notify: usr1, usr2
      Registry Values:
          Signing Required: false
      Restrict Anonymous:
          No enumeration of SAM accounts: true
          No enumeration of SAM accounts and shares: false
          Restrict anonymous access to shares and named pipes: true
          Combined restriction for anonymous user: no-access
      Restricted Groups:
          gpr1
          gpr2
  Central Access Policy Settings:
      Policies: cap1
                cap2
GPO Name: Resultant Set of Policy
       Level: RSOP
  Advanced Audit Settings:
```

```
      Object Access:
          Central Access Policy Staging: failure
  Registry Settings:
      Refresh Time Interval: 22
      Refresh Random Offset: 8
      Hash Publication Mode for BranchCache: per-share
      Hash Version Support for BranchCache: all-versions
  Security Settings:
      Event Audit and Event Log:
          Audit Logon Events: none
          Audit Object Access: success
          Log Retention Method: overwrite-as-needed
          Max Log Size: 16384
      File Security:
          /vol1/home
          /vol1/dir1
      Kerberos:
          Max Clock Skew: 5
          Max Ticket Age: 10
          Max Renew Age:  7
      Privilege Rights:
          Take Ownership: usr1, usr2
          Security Privilege: usr1, usr2
          Change Notify: usr1, usr2
      Registry Values:
          Signing Required: false
      Restrict Anonymous:
          No enumeration of SAM accounts: true
          No enumeration of SAM accounts and shares: false
          Restrict anonymous access to shares and named pipes: true
          Combined restriction for anonymous user: no-access
      Restricted Groups:
          gpr1
          gpr2
  Central Access Policy Settings:
      Policies: cap1
                cap2
2 entries were displayed.
```

vserver cifs group-policy show-defined

Show applicable group policy settings defined in Active Directory

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Parameters

{ [-fields <fieldname>,…]

If you specify the -fields <fieldname>, … parameter, the command only displays the fields that you specify.

| [-instance] }

If you specify the -instance parameter, the command displays detailed information about all entries.

[-vserver <vserver name>] - Vserver

If you specify this parameter, the command displays only group policy information that has been defined in Active Directory for the Vserver that you specify.

[-gpo-index <integer>] - GPO Index

If you specify this parameter, the command displays only group policy information at gpo-index.

Examples

The following example displays all group policy information for all group policies that have been defined in Active Directory:

```
cluster1::> vserver cifs group-policy show-defined

Vserver: vs1
----------------------------
    GPO Name: Default Domain Policy
       Level: Domain
      Status: enabled
  Advanced Audit Settings:
      Object Access:
          Central Access Policy Staging: failure
  Registry Settings:
      Refresh Time Interval: 22
      Refresh Random Offset: 8
      Hash Publication Mode for BranchCache: per-share
      Hash Version Support for BranchCache : version1
  Security Settings:
      Event Audit and Event Log:
          Audit Logon Events: none
          Audit Object Access: success
          Log Retention Method: overwrite-as-needed
          Max Log Size: 16384
      File Security:
          /vol1/home
          /vol1/dir1
      Kerberos:
          Max Clock Skew: 5
          Max Ticket Age: 10
```

```
          Max Renew Age:  7
      Privilege Rights:
          Take Ownership: usr1, usr2
          Security Privilege: usr1, usr2
          Change Notify: usr1, usr2
      Registry Values:
          Signing Required: false
      Restrict Anonymous:
          No enumeration of SAM accounts: true
          No enumeration of SAM accounts and shares: false
          Restrict anonymous access to shares and named pipes: true
          Combined restriction for anonymous user: no-access
      Restricted Groups:
          gpr1
          gpr2
  Central Access Policy Settings:
      Policies: cap1
                cap2
GPO Name: Resultant Set of Policy
      Status: enabled
  Advanced Audit Settings:
      Object Access:
          Central Access Policy Staging: failure
  Registry Settings:
      Refresh Time Interval: 22
      Refresh Random Offset: 8
      Hash Publication for Mode BranchCache: per-share
      Hash Version Support for BranchCache: version1
  Security Settings:
      Event Audit and Event Log:
          Audit Logon Events: none
          Audit Object Access: success
          Log Retention Method: overwrite-as-needed
          Max Log Size: 16384
      File Security:
          /vol1/home
          /vol1/dir1
      Kerberos:
          Max Clock Skew: 5
          Max Ticket Age: 10
          Max Renew Age:  7
      Privilege Rights:
          Take Ownership: usr1, usr2
          Security Privilege: usr1, usr2
          Change Notify: usr1, usr2
      Registry Values:
```

```
          Signing Required: false
      Restrict Anonymous:
          No enumeration of SAM accounts: true
          No enumeration of SAM accounts and shares: false
          Restrict anonymous access to shares and named pipes: true
          Combined restriction for anonymous user: no-access
      Restricted Groups:
          gpr1
          gpr2
  Central Access Policy Settings:
      Policies: cap1
                cap2
```

vserver cifs group-policy show

Show group policy configuration

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

The `vserver cifs group-policy show` command displays information about group policy configuration for CIFS-enabled Vserver. It displays all or a subset of the group policy configuration matching the criteria that you specify.

Parameters

{ [-fields <fieldname>,…]

If you specify the `-fields <fieldname>, …` parameter, the command output also includes the specified field or fields. You can use '-fields ?' to display the fields to specify.

| [-instance] }

If you specify the `-instance` parameter, the command displays detailed information about all fields.

[-vserver <vserver name>] - Vserver

If you specify this parameter, the command displays group policy configuration only for the Vserver that you specify.

[-status {enabled|disabled}] - Group Policy Status

If you specify this parameter, the command displays group policy configuration only for the Vservers that match the status you specify.

Examples

The following example displays group policy configuration for all Vservers:

```
cluster1::> vserver cifs group-policy show

Vserver         GPO Status
--------------   ----------
vs1              disabled
```

vserver cifs group-policy update

Apply group policy settings defined in Active Directory

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

The `vserver cifs group-policy update` command applies the group-policy settings defined in Active Directory for the given Vserver. This command is not supported for workgroup CIFS servers.

Parameters

`-vserver <vserver name>` - Vserver Name

This parameter specifies the CIFS-enabled Vserver to which the group-policy settings be applied.

`[-force-reapply-all-settings {true|false}]` - Force Re-apply All Settings

This parameter specifies whether to ignore all processing optimizations and re-apply all settings. The default is false.

Examples

The following example applies the group-policy settings defined in Active Directory for Vserver vs1.

```
cluster1::> vserver cifs group-policy update -vserver vs1 -force-reapply
-all-settings true
```

vserver cifs group-policy central-access-policy show-applied

Show currently applied central access policies

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

The `vserver cifs group-policy central-access-policy show-applied` command displays information about the central access policies assigned to Vservers. The command output depends on the parameter or parameters specified with the command. If you do not specify any parameters, the command displays the following information about all CIFS servers:

- Vserver name
- Name of the central access policy
- SID
- Description
- Creation time
- Modification time
- Member rules

Parameters

{ [-fields <fieldname>,…]

If you specify the -fields <fieldname>, … parameter, the command only displays the fields that you specify.

| [-instance] }

If you specify the -instance parameter, the command displays detailed information about all entries.

[-vserver <vserver name>] - Vserver

If you specify this parameter, the command displays information only for central access policies for the specified Vserver.

[-name <TextNoCase>] - Name

If you specify this parameter, the command displays information only for central access policies that match the specified name.

[-sid <windows sid>] - Identifier

If you specify this parameter, the command displays information only for central access policies that match the specified SID.

[-description <text>] - Description

If you specify this parameter, the command displays information only for central access policies that match the specified description.

[-ctime <Date>] - Creation Time

If you specify this parameter, the command displays information only for central access policies that match the specified creation time.

[-mtime <Date>] - Modification Time

If you specify this parameter, the command displays information only for central access policies that match the specified modification time.

[-rules <TextNoCase>,…] - Central Access Rules

If you specify this parameter, the command displays information only for central access policies that match the specified member rules.

Examples

The following example displays information for all central access policies:

```
cluster1::> vserver cifs group-policy central-access-policy show-applied

Vserver    Name                 SID
---------- --------------------
-----------------------------------------------
vs1        p1                   S-1-17-3386172923-1132988875-3044489393-
3993546205
        Description: policy #1
      Creation Time: Tue Oct 22 09:34:13 2013
  Modification Time: Wed Oct 23 08:59:15 2013
       Member Rules: r1

vs1        p2                   S-1-17-1885229282-1100162114-134354072-
822349040
        Description: policy #2
      Creation Time: Tue Oct 22 10:28:20 2013
  Modification Time: Thu Oct 31 10:25:32 2013
       Member Rules: r1
                     r2

2 entries were displayed.
```

vserver cifs group-policy central-access-policy show-defined

Show applicable central access policies defined in the Active Directory

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

The `vserver cifs group-policy central-access-policy show-defined` command displays information about the central access policies that are defined in the Active Directory. The command output depends on the parameter or parameters specified with the command. If you do not specify any parameters, the command displays the following information about all CIFS servers:

- Vserver name
- Name of the central access policy
- SID
- Description
- Creation time
- Modification time
- Member rules

Parameters

{ [-fields <fieldname>,…]

If you specify the -fields <fieldname>, … parameter, the command only displays the fields that you specify.

| [-instance] }

If you specify the -instance parameter, the command displays detailed information about all entries.

[-vserver <vserver name>] - Vserver

If you specify this parameter, the command displays information only for central access policies for the specified Vserver.

[-name <TextNoCase>] - Name

If you specify this parameter, the command displays information only for central access policies that match the specified name.

[-sid <windows sid>] - Identifier

If you specify this parameter, the command displays information only for central access policies that match the specified SID.

[-description <text>] - Description

If you specify this parameter, the command displays information only for central access policies that match the specified description.

[-ctime <Date>] - Creation Time

If you specify this parameter, the command displays information only for central access policies that match the specified creation time.

[-mtime <Date>] - Modification Time

If you specify this parameter, the command displays information only for central access policies that match the specified modification time.

[-rules <TextNoCase>,…] - Central Access Rules

If you specify this parameter, the command displays information only for central access policies that match the specified member rules.

Examples

The following example displays information for all central access policies:

```
cluster1::> vserver cifs group-policy central-access-policy show-defined

Vserver    Name                 SID
---------- --------------------
-----------------------------------------------
vs1        p1                   S-1-17-3386172923-1132988875-3044489393-
3993546205
        Description: policy #1
      Creation Time: Tue Oct 22 09:34:13 2013
  Modification Time: Wed Oct 23 08:59:15 2013
       Member Rules: r1

vs1        p2                   S-1-17-1885229282-1100162114-134354072-
822349040
        Description: policy #2
      Creation Time: Tue Oct 22 10:28:20 2013
  Modification Time: Thu Oct 31 10:25:32 2013
       Member Rules: r1
                     r2

2 entries were displayed.
```

vserver cifs group-policy central-access-rule show-applied

Show currently applied central access rules

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

The `vserver cifs group-policy central-access-rule show-applied` command displays information about the central access rules assigned to Vservers. The command output depends on the parameter or parameters specified with the command. If you do not specify any parameters, the command displays the following information about all CIFS servers:

- Vserver name
- Name of the central access rule
- Description
- Creation time
- Modification time
- Current permissions
- Proposed permissions
- Target resources

Parameters

{ [-fields <fieldname>,…]

If you specify the -fields <fieldname>, … parameter, the command only displays the fields that you specify.

| [-instance] }

If you specify the -instance parameter, the command displays detailed information about all entries.

[-vserver <vserver name>] - Vserver

If you specify this parameter, the command displays information only for central access rules for the specified Vserver.

[-name <TextNoCase>] - Name

If you specify this parameter, the command displays information only for central access rules that match the specified name.

[-description <text>] - Description

If you specify this parameter, the command displays information only for central access rules that match the specified description.

[-ctime <Date>] - Creation Time

If you specify this parameter, the command displays information only for central access rules that match the specified creation time.

[-mtime <Date>] - Modification Time

If you specify this parameter, the command displays information only for central access rules that match the specified modification time.

[-effective <text>] - Effective Security Policy

If you specify this parameter, the command displays information only for central access rules that match the specified effective security policy.

[-proposed <text>] - Proposed Security Policy

If you specify this parameter, the command displays information only for central access rules that match the specified proposed security policy.

[-resource <text>] - Resource Condition

If you specify this parameter, the command displays information only for central access rules that match the specified resource condition.

Examples

The following example displays information for all central access rules:

```
cluster1::> vserver cifs group-policy central-access-rule show-applied

Vserver    Name
---------- --------------------
vs1        r1
           Description: rule #1
         Creation Time: Tue Oct 22 09:33:48 2013
     Modification Time: Tue Oct 22 09:33:48 2013
   Current Permissions: O:SYG:SYD:AR(A;;FA;;;WD)
  Proposed Permissions: O:SYG:SYD:(A;;FA;;;OW)(A;;FA;;;BA)(A;;FA;;;SY)

vs1        r2
           Description: rule #2
         Creation Time: Tue Oct 22 10:27:57 2013
     Modification Time: Tue Oct 22 10:27:57 2013
   Current Permissions: O:SYG:SYD:AR(A;;FA;;;WD)
  Proposed Permissions: O:SYG:SYD:(A;;FA;;;OW)(A;;FA;;;BA)(A;;FA;;;SY)

2 entries were displayed.
```

vserver cifs group-policy central-access-rule show-defined

Show applicable central access rules defined in the Active Directory

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

The `vserver cifs group-policy central-access-rule show-defined` command displays information about the central access rules that are defined in the Active Directory. The command output depends on the parameter or parameters specified with the command. If you do not specify any parameters, the command displays the following information about all CIFS servers:

- Vserver name
- Name of the central access rule
- Description
- Creation time
- Modification time
- Current permissions
- Proposed permissions
- Target resources

Parameters

{ [-fields <fieldname>,…]

If you specify the -fields <fieldname>, … parameter, the command only displays the fields that you specify.

| [-instance] }

If you specify the -instance parameter, the command displays detailed information about all entries.

[-vserver <vserver name>] - Vserver

If you specify this parameter, the command displays information only for central access rules for the specified Vserver.

[-name <TextNoCase>] - Name

If you specify this parameter, the command displays information only for central access rules that match the specified name.

[-description <text>] - Description

If you specify this parameter, the command displays information only for central access rules that match the specified description.

[-ctime <Date>] - Creation Time

If you specify this parameter, the command displays information only for central access rules that match the specified creation time.

[-mtime <Date>] - Modification Time

If you specify this parameter, the command displays information only for central access rules that match the specified modification time.

[-effective <text>] - Effective Security Policy

If you specify this parameter, the command displays information only for central access rules that match the specified effective security policy.

[-proposed <text>] - Proposed Security Policy

If you specify this parameter, the command displays information only for central access rules that match the specified proposed security policy.

[-resource <text>] - Resource Condition

If you specify this parameter, the command displays information only for central access rules that match the specified resource condition.

Examples

The following example displays information for all central access rules:

```
cluster1::> vserver cifs group-policy central-access-rule show-defined

Vserver    Name
---------- --------------------
vs1        r1
           Description: rule #1
         Creation Time: Tue Oct 22 09:33:48 2013
     Modification Time: Tue Oct 22 09:33:48 2013
   Current Permissions: O:SYG:SYD:AR(A;;FA;;;WD)
  Proposed Permissions: O:SYG:SYD:(A;;FA;;;OW)(A;;FA;;;BA)(A;;FA;;;SY)

vs1        r2
           Description: rule #2
         Creation Time: Tue Oct 22 10:27:57 2013
     Modification Time: Tue Oct 22 10:27:57 2013
   Current Permissions: O:SYG:SYD:AR(A;;FA;;;WD)
  Proposed Permissions: O:SYG:SYD:(A;;FA;;;OW)(A;;FA;;;BA)(A;;FA;;;SY)

2 entries were displayed.
```

vserver cifs group-policy restricted-group show-applied

Show the applied restricted-group settings.

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

The `vserver cifs group-policy restricted-group show-applied` command displays settings of all the restricted groups applied to a Vserver.

If you do not specify any parameters, the command displays the following information about all the restricted groups applied to all the Vservers in the cluster.

- Group Policy Name: Specifies the name of the group policy.
- Version: Specifies the version of the group policy.
- Link: Specifies the level in which the group policy is configured. Possible values are:
- Local: Group policy is configured in Data ONTAP.
- Site: Group policy is configured at the site level in the Domain Controller.
- Domain: Group policy is configured at the domain level in the Domain Controller.
- OrganizationalUnit: Group policy is configured at the OU level in the Domain controller.
- RSOP: Resultant set of policies derived from all the group policies defined at various levels.
- Group Name: Specifies the name of a restricted group.
- Members: Specifies users and groups who belong to and who do not belong to the restricted group.

- MemberOf: Specifies list of groups to which the restricted group is added. A group can be a member of groups other than the groups listed here.

Parameters

{ [-fields <fieldname>,…]

If you specify the `-fields <fieldname>, …` parameter, the command output also includes the specified field or fields. You can use '-fields ?' to display the fields to specify.

| [-instance] }

If you specify the `-instance` parameter, the command displays detailed information about all fields.

[-vserver <vserver name>] - Vserver

If this parameter is specified, the command displays the restricted-group information that has been applied to the specified Vserver.

[-index <integer>] - Index

If this parameter is specified, the command displays the specified index for the group policy in the restricted group. The restricted-group information for the group policy at the specified index.

[-group-name <text>] - Group Name

If this parameter is specified, the command displays the restricted-group information for the specified group name.

[-group-policy-name <text>] - Group Policy Name

If this parameter is specified, the command displays the restricted-group information for the specified group policy name.

[-uuid <UUID>] - UUID

If this parameter is specified, the command displays the restricted-group information for the specified UUID of the group policy.

[-version <integer>] - Version

If this parameter is specified, the command displays the restricted-group information for the specified version of the group policy.

[-link <gpo-link>] - Link Type

If this parameter is specified, the command displays the restricted-group information for the specified link for the group policy.

[-members <gpoUserGroup>,…] - Members, List of Users/groups

If this parameter is specified, the command displays the restricted-group information for the specified members of users and groups.

[-member-of <gpoUserGroup>,…] - MemberOf, List of Groups

If this parameter is specified, the command displays the restricted-group information for the specified member of the group.

Examples

The following example displays information about all restricted groups that have been applied to a Vserver.

```
cluster1::> vserver cifs group-policy restricted-group show-applied

Vserver: vs_1
-------------

     Group Policy Name: gpo1
               Version: 16
                  Link: OrganizationalUnit
            Group Name: grp1
               Members: usr1
              MemberOf: GPO\g9
Group Policy Name: Resultant Set of Policy
               Version: 0
                  Link: RSOP
            Group Name: grp1
               Members: usr1
              MemberOf: GPO\g9
```

vserver cifs group-policy restricted-group show-defined

Show the defined restricted-group settings.

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

The `vserver cifs group-policy restricted-group show-defined` command displays settings of all the restricted groups defined in Domain Controller for a Vserver.

If you do not specify any parameters, the command displays the following information about all the restricted groups defined in Domain Controller for all the Vservers in the cluster.

- Group Policy Name: Specifies the name of the group policy.
- Version: Specifies the version of the group policy.
- Link: Specifies the level in which the group policy is configured. Possible values are:
- Local: Group policy is configured in Data ONTAP.
- Site: Group policy is configured at the site level in the Domain Controller.
- Domain: Group policy is configured at the domain level in the Domain Controller.
- OrganizationalUnit: Group policy is configured at the OU level in the Domain Controller.
- RSOP: Resultant set of policies derived from all the group policies defined at various levels.
- Group Name: Specifies the name of a restricted group.

- Members: Specifies users and groups who belong to and who do not belong to the restricted group.
- MemberOf: Specifies list of groups to which the restricted group is added. A group can be a member of groups other than the groups listed here.

Parameters

{ [-fields <fieldname>,…]

If you specify the `-fields <fieldname>, …` parameter, the command output also includes the specified field or fields. You can use '-fields ?' to display the fields to specify.

| [-instance] }

If you specify the `-instance` parameter, the command displays detailed information about all fields.

[-vserver <vserver name>] - Vserver

If this parameter is specified, the command displays the restricted-group information that is defeined in Domain Controller for the specified Vserver.

[-index <integer>] - Index

If this parameter is specified, the command displays the specified index for the group policy in the restricted group. The restricted-group information for the group policy at the specified index.

[-group-name <text>] - Group Name

If this parameter is specified, the command displays the restricted-group information for the specified group name.

[-group-policy-name <text>] - Group Policy Name

If this parameter is specified, the command displays the restricted-group information for the specified group policy name.

[-uuid <UUID>] - UUID

If this parameter is specified, the command displays the restricted-group information for the specified UUID of the group policy.

[-version <integer>] - Version

If this parameter is specified, the command displays the restricted-group information for the specified version of the group policy.

[-link <gpo-link>] - Link Type

If this parameter is specified, the command displays the restricted-group information for the specified link for the group policy.

[-members <gpoUserGroup>,…] - Members, List of Users/groups

If this parameter is specified, the command displays the restricted-group information for the specified members of users and groups.

[-member-of <gpoUserGroup>,…] - MemberOf, List of Groups

If this parameter is specified, the command displays the restricted-group information for the specified member of the group.

Examples

The following example displays information about all restricted groups that are defined in Domain Controller for a Vserver.

```
cluster1::> vserver cifs group-policy restricted-group show-defined

Vserver: vs_1
-------------

     Group Policy Name: gpo1
               Version: 16
                  Link: OrganizationalUnit
            Group Name: grp1
               Members: usr1
              MemberOf: GPO\g9
Group Policy Name: Resultant Set of Policy
               Version: 0
                  Link: RSOP
            Group Name: grp1
               Members: usr1
              MemberOf: GPO\g9
```

vserver cifs home-directory modify

Modify attributes of CIFS home directories

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

The `vserver cifs home-directory modify` command modifies the CIFS home directory configuration for a CIFS server. To use the home directory option s (-is-home-dirs-access-for-admin-enabled or/and -is-home -dirs-access-for-public-enabled), a home directory share must be configured with a dynamic share pattern preceded by a tilde(~). Valid dynamic share patterns are ~%w and ~%d%w. The pattern %u is not supported with the se option s .

Parameters

`-vserver <vserver>` - Vserver

This parameter specifies the name of the CIFS server for which you want to modify the CIFS home directory configuration.

`[-is-home-dirs-access-for-admin-enabled {true|false}]` - Is Home Directory Access for Admin Enabled

This optional parameter specifies whether a user with Windows administrative privileges can connect to another user's home directory. The default value for this parameter is *`true`* .

[-is-home-dirs-access-for-public-enabled {true|false}] - Is Home Directory Access for Public Enabled (privilege: advanced)

This optional parameter specifies whether any user can connect to another user's home directory. The default value for this parameter is *false* .

Examples

The following example modifies the CIFS home directory configuration for the Vserver "vs1". It enables users with Windows administrative privileges to connect to another user's home directory , and enables any user to connect to another user's home directory .

```
cluster1::> vserver cifs home-directory modify -vserver vs1 -is-home-dirs
-access-for-admin-enabled true
 -is-home-dirs-access-for-public-enabled true
```

The following example shows the usage of the share creation pattern %d%w.

```
cluster1::> vserver cifs share create -vserver vs1 -share-name ~%d~%w
-path %d/%w -share-properties homedirectory
```

The following example shows the usage of the share creation pattern ~%w.

```
cluster1::> vserver cifs share create -vserver vs1 -share-name ~%w -path
%d/%w -share-properties homedirectory
```

vserver cifs home-directory show-user

Display the Home Directory Path for a User

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

The `vserver cifs home-directory show-user` command prints the path of a user's CIFS home directory. Use this command if multiple CIFS home directory paths exist and you want to see which path holds the user's CIFS home directory.

Parameters

{ [-fields <fieldname>,…]

If you specify this parameter, the command displays only the fields that you specify.

| [-instance] }

If you specify the -instance parameter, the command displays detailed information about all entries.

-vserver <vserver> - Vserver

Use this required parameter to specify the Vserver that contains the home directory of the user specified with the required `-username` parameter.

-username <text> - User Name

Use this required parameter to locate the home directory of the specified user. You must enter this parameter in the following format: user, domain/user or cifs_server_name/user.

[-path <text>] - Path

If you specify this parameter, the command displays information about the user's home directory with the specified path.

[-share-name <text>] - Share Name

If you specify this parameter, the command displays information about the user's home directory with the specified home-directory share.

Examples

The following command displays information about the home directory of user gpo\rpuser1 belonging to Vserver vs1.

```
cluster1::> vserver cifs home-directory show-user -vserver vs1 -username
gpo\rpuser1
Vserver  : vs1
    Username : GPO/rpuser1
ShareName                                Home Dir Path
    -------------------------------------
---------------------------------
    root                                     /home/rpuser1
    rpuser1                                  /home/rpuser1
    ~GPO~rpuser1                             /home/GPO/rpuser1
```

The following command displays information about the home directory of user gpo\rpuser1 belonging to Vserver vs1 at share path /home/rpuser1.

```
cluster1::> vserver cifs home-directory show-user -vserver vs1 -username
gpo\rpuser1 -path /home/rpuser1
Vserver  : vs1
    Username : GPO/rpuser1
ShareName                                Home Directory Path
    -------------------------------------
---------------------------------
    root                                     /home/rpuser1
    rpuser1                                  /home/rpuser1
    2 entries were displayed.
```

The following command displays information about the home directory of user gpo\rpuser1 belonging to Vserver vs1 at share ~GPO~rpuser1.

```
cluster1::> vserver cifs home-directory show-user -vserver vs1 -username
gpo\rpuser1 -share-name  ~GPO~rpuser1
Vserver  : vs1
    Username : GPO/rpuser1
ShareName                                Home Directory Path
    ------------------------------------
---------------------------------
    ~GPO~rpuser1                             /home/GPO/rpuser1
```

vserver cifs home-directory show

Display home directory configurations

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

The `vserver cifs home-directory show` command displays the CIFS home directory configuration for one or more Vservers.

Parameters

{ [-fields <fieldname>,…]

If you specify the `-fields <fieldname>, …` parameter, the command output also includes the specified field or fields. You can use '-fields ?' to display the fields to specify.

| [-instance] }

If you specify the `-instance` parameter, the command displays detailed information about all fields.

[-vserver <vserver>] - Vserver

If you specify this parameter, the command displays CIFS home directory configuration for the specified Vserver.

[-is-home-dirs-access-for-admin-enabled {true|false}] - Is Home Directory Access for Admin Enabled

If you specify this parameter, the command displays home directory configuration for CIFS servers that have the specified setting.

[-is-home-dirs-access-for-public-enabled {true|false}] - Is Home Directory Access for Public Enabled (privilege: advanced)

If you specify this parameter, the command displays home directory configuration for CIFS servers that have the specified setting.

Examples

The following example lists the CIFS home directory configuration for a Vserver on the cluster.

```
cluster1::> vserver cifs home-directory show -vserver vs1
Vserver: vs1
Is Home Directory Access for Admin Enabled: true
```

At the advanced privilege level or above, the output displays the information below:

```
cluster1::*> vserver cifs options show
Vserver: vs1
 Is Home Directory Access for Admin Enabled: true
Is Home Directory Access for Public Enabled: false
```

vserver cifs home-directory search-path add

Add a home directory search path

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

The `vserver cifs home-directory search-path add` command adds a search path to a CIFS home directory configuration.

Parameters

`-vserver <vserver name>` - Vserver

This parameter specifies the CIFS-enabled Vserver containing the CIFS home directory configuration to which you want to add the search path.

`-path <text>` - Path

This parameter specifies the search path you want to add.

Examples

The following example adds the path /home1 to the CIFS home directory configuration on Vserver vs1.

```
cluster1::> vserver cifs home-directory search-path add -vserver vs1 -path
/home1
```

vserver cifs home-directory search-path remove

Remove a home directory search path

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

The `vserver cifs home-directory search-path remove` command removes a search path from a CIFS home directory configuration.

Parameters

`-vserver <vserver name>` - Vserver

This parameter specifies the CIFS-enabled Vserver containing the CIFS home directory configuration from which you want to remove the search path.

`-path <text>` - Path

This parameter specifies the search path you want to remove.

Examples

The following example removes the path /home1 from the CIFS home directory configuration on Vserver vs1.

```
cluster1::> vserver cifs home-directory search-path remove -vserver vs1
-path /home1
```

vserver cifs home-directory search-path reorder

Change the search path order used to find a match

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

The `vserver cifs home-directory search-path reorder` command moves a search path to a new position in the search path order in the CIFS home directory configuration for the CIFS-enabled Vserver.

Parameters

`-vserver <vserver name>` - Vserver

This parameter specifies the CIFS enabled Vserver for which you want to reorder searches.

`-path <text>` - Path

This parameter specifies the search path you want to move.

`-to-position <integer>` - Target Position

This parameter specifies the new position of the search path in the search path order.

Examples

The following example moves the search path /home1 to position 1 in the search path order for the CIFS home

directory configuration on Vserver vs1.

```
cluster1::> vserver cifs home-directory search-path reorder -vserver vs1
-path /home1 -to-position 1
```

vserver cifs home-directory search-path show

Display home directory search paths

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

The `vserver cifs home-directory search-path show` command displays information about the search paths that are in the home directory configuration for the CIFS-enabled Vservers.

Parameters

{ [-fields <fieldname>,…]

If you specify this parameter, the command only displays the fields that you specify.

| [-instance] }

If you specify the -instance parameter, the command displays detailed information about all entries.

[-vserver <vserver name>] - Vserver

If you specify this parameter, the command displays home directory configuration for the CIFS-enabled Vserver that you specify.

[-path <text>] - Path

If you specify this parameter, the command displays information only for the search path that you specify.

Examples

The following example displays information about search paths for all CIFS home directories on all CIFS-enabled Vservers:

```
cluster1::> vserver cifs home-directory search-path show
Vserver     Position Path
----------- -------- -----------------
vs1         1        /home1
vs2         2        /home2
```

vserver cifs options modify

Modify CIFS options

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

The `vserver cifs options modify` command modifies CIFS options for a CIFS server.

Parameters

`-vserver <vserver name>` - Vserver

This parameter specifies the name of the CIFS server for which you want to modify CIFS options.

`[-default-unix-user <text>]` - Default UNIX User

This optional parameter specifies the name of the default UNIX user for the CIFS server.

`[-read-grants-exec {enabled|disabled}]` - Read Grants Exec for Mode Bits

This optional parameter specifies whether the CIFS server does read grant execution for mode bits.

`[-wins-servers <InetAddress>,…]` - Windows Internet Name Service (WINS) Addresses

This optional parameter specifies a list of Windows Internet Name Server (WINS) addresses for the CIFS server. You must specify the WINS servers using an IP address. You can enter multiple WINS addresses as a comma-delimited list.

Use an IPv4 address because WINS over IPv6 is not supported.

`[-smb1-enabled {true|false}]` - (DEPRECATED)-Enable SMB1 Protocol (privilege: advanced)

This optional parameter specifies whether the CIFS server negotiates the SMB 1.0 version of the CIFS protocol. The default value for this parameter is false.

This parameter is deprecated because the SMB1 protocol is obsolete and considered insecure. It might be removed in a future release.

`[-smb2-enabled {true|false}]` - Enable all SMB2 Protocols (privilege: advanced)

This optional parameter specifies whether the CIFS server negotiates the SMB 2 version of the CIFS protocol. The default value for this parameter is true.

`[-smb3-enabled {true|false}]` - Enable SMB3 Protocol (privilege: advanced)

This optional parameter specifies whether the CIFS server negotiates the SMB 3 version of the CIFS protocol. The default value for this parameter is true.

`[-smb31-enabled {true|false}]` - Enable SMB3.1 Protocol (privilege: advanced)

This optional parameter specifies whether the CIFS server negotiates the SMB 3.1 version of the CIFS protocol. The default value for this parameter is true.

`[-max-mpx <integer>]` - Maximum Simultaneous Operations per TCP Connection (privilege: advanced)

This optional parameter specifies the maximum number of simultaneous operations the CIFS server reports it can process per TCP connection.

[-shadowcopy-dir-depth <integer>] - Maximum Depth of Directories to Shadow Copy (privilege: advanced)

This optional parameter specifies the maximum depth of directories on which to create shadow copies in the CIFS server. The default for this parameter is 5. The value 0 indicates that all sub-directories should be shadow copied. This parameter is not supported for workgroup CIFS servers. Directories and files within a FlexGroup will not be shadow copied because FlexGroups do not support shadow copy.

[-copy-offload-enabled {true|false}] - Enable Copy Offload Feature (privilege: advanced)

This optional parameter enables the Copy Offload feature in the CIFS server. If set to false, the Copy Offload feature is disabled. The default for this parameter is true.

[-is-copy-offload-direct-copy-enabled {true|false}] - Is Direct-copy Copy Offload Mechanism Enabled (privilege: advanced)

This optional parameter enables the direct-copy mechanism for ODX copy offload in the CIFS server. If set to false, the direct-copy mechanism is disabled. The default for this parameter is true. + The direct-copy mechanism increases the performance of the copy offload operation when Windows clients try to open the source file of a copy in a mode that prevents the file being changed while the copy is in progress. If turned off, regular copy offloading takes place.

[-default-unix-group <text>] - Default UNIX Group

This optional parameter specifies the name of the default UNIX group for the CIFS server. If you do not specify a default UNIX group, the CIFS ACL to NFSv4 ACL translation may result in incomplete NFSv4 ACL information. This parameter is not supported by Vservers with FlexVol volumes.

[-shadowcopy-enabled {true|false}] - Enable Shadow Copy Feature (VSS) (privilege: advanced)

This optional parameter enables the Shadow Copy (VSS) feature in the CIFS server when set to true. The VSS feature is disabled when set to false. The default for this parameter is true. This parameter is not supported for workgroup CIFS servers. Directories and files within a FlexGroup will not be shadow copied because FlexGroups do not support shadow copy.

[-is-referral-enabled {true|false}] - Refer Clients to More Optimal LIFs (privilege: advanced)

This optional parameter specifies whether the CIFS server automatically refers clients to a data LIF local to the node which hosts the root of the requested share. The default value for this parameter is false.

[-is-local-auth-enabled {true|false}] - Is Local User Authentication Enabled (privilege: advanced)

This optional parameter specifies whether local user authentication is enabled for the CIFS server.

[-is-local-users-and-groups-enabled {true|false}] - Is Local Users and Groups Enabled (privilege: advanced)

This optional parameter specifies whether the local users and groups feature is enabled for the CIFS server.

[-is-use-junctions-as-reparse-points-enabled {true|false}] - Is Reparse Point Support Enabled (privilege: advanced)

This optional parameter specifies whether the CIFS server exposes junction points to Windows clients as reparse points. The default value for this parameter is true. This parameter is only active if the client has negotiated use of the SMB 2 or SMB 3 protocol.

[-is-exportpolicy-enabled {true|false}] - Is Export Policies for CIFS Enabled (privilege: advanced)

This optional parameter specifies whether the CIFS server uses export policies to control client access. The default value for this parameter is false.

[-is-unix-nt-acl-enabled {true|false}] - Is NT ACLs on UNIX Security-style Volumes Enabled (privilege: advanced)

This optional parameter specifies whether the CIFS server has the NT ACLs enabled on UNIX security-style volumes. The default value for this parameter is true.

[-is-trusted-domain-enum-search-enabled {true|false}] - Is Enumeration of Trusted Domain and Search Capability Enabled (privilege: advanced)

This optional parameter specifies whether the CIFS server supports enumeration of bidirectional trusted domains. It also supports the search in all the bidirectional trusted domains when performing Windows user lookups for UNIX user to Windows user name mapping. The default value is true. This parameter is not supported for workgroup CIFS servers.

[-client-session-timeout <integer>] - Idle Timeout Before CIFS Session Disconnect (secs)

This optional parameter specifies the amount of idle time (in seconds) before a CIFS session is disconnected. The default value for this parameter is 900 seconds.

[-is-dac-enabled {true|false}] - Is Dynamic Access Control (DAC) Enabled (privilege: advanced)

This optional parameter enables the Dynamic Access Control (DAC) feature in the CIFS server when set to true. The DAC feature is disabled when set to false. The default for this parameter is false. This parameter is not supported for workgroup CIFS servers.

[-restrict-anonymous {no-restriction|no-enumeration|no-access}] - Restrictions for Anonymous User (privilege: advanced)

This optional parameter controls the access restrictions of non-authenticated sessions and applies the restrictions for the anonymous user based on the permitted values. The default value for this parameter is no-restriction. Permitted values for this option are:

- no-restriction - This option specifies no access restriction for anonymous users (default).
- no-enumeration - This option specifies that only enumeration is restricted.
- no-access - This option specifies that access is restricted for anonymous users.

[-is-read-only-delete-enabled {enabled|disabled}] - Is Deletion of Read-Only Files Enabled

This optional parameter controls deletion of read-only files and directories. NTFS delete semantics forbid deletion of a file or directory when the read-only attribute is set. UNIX delete semantics ignore it, focusing instead on parent directory permissions, which some applications require. This option is used to select the desired behavior. By default this option is disabled, yielding NTFS behavior.

[-file-system-sector-size {512|4096 (in bytes)}] - Size of File System Sector Reported to SMB Clients (bytes) (privilege: advanced)

This optional parameter specifies the size of file system sector reported to SMB clients (in bytes). The default value for this parameter is 4096. Valid values are 512 and 4096.

[-is-fake-open-enabled {true|false}] - Is Fake Open Support Enabled (privilege: advanced)

This optional parameter specifies whether the CIFS server supports fake open requests. This parameter allows you to optimize the open and close requests coming from SMB 2 clients. The default value for this parameter is true.

[-is-unix-extensions-enabled {true|false}] - Is UNIX Extensions Enabled (privilege: advanced)

When set to true, this optional parameter enables the UNIX Extensions feature in the CIFS server. If set to

false, the UNIX Extensions feature is disabled. The default for this parameter is false. UNIX Extensions allows POSIX/UNIX style security to be displayed through the CIFS protocol.

[-is-search-short-names-enabled {true|false}] - Is Search Short Names Support Enabled (privilege: advanced)

This optional parameter specifies whether the CIFS server supports searching short names. A search query with this option enabled will try to match 8.3 file names along with long file names. The default value for this parameter is false.

[-is-advanced-sparse-file-support-enabled {true|false}] - Is Advanced Sparse File Support Enabled (privilege: advanced)

This optional parameter specifies whether the CIFS server supports the advanced sparse file capabilities. This allows CIFS clients to query the allocated ranges of a file and to write zeroes or free data blocks for ranges of a file.

[-is-fsctl-file-level-trim-enabled {true|false}] - Is Fsctl File Level Trim Enabled (privilege: advanced)

This optional parameter specifies whether trim requests (FSCTL_FILE_LEVEL_TRIM) are supported on the CIFS server.

[-guest-unix-user <text>] - Map the Guest User to Valid UNIX User (privilege: advanced)

This optional parameter specifies that an unauthenticated user coming from any untrusted domain can be mapped to a specified UNIX user for the CIFS server. If the CIFS server cannot authenticate the user against a domain controller for the home domain or a trusted domain or the local database, and this option is enabled, the CIFS server considers the user as a guest user and maps the user to the specified UNIX user. The UNIX user must be a valid user.

[-smb1-max-buffer-size <integer>] - Maximum Buffer Size Used for SMB1 Message (privilege: advanced)

This optional parameter specifies the maximum buffer size used for an SMB 1.0 message that the CIFS server can receive. If the LARGE_READ or LARGE_WRITE capability is negotiated during session setup, then 'Read' or 'Write' SMB 1.0 operations are allowed to exceed the configured 'smb1-max-buffer-size' value. This parameter does not have any effect on SMB 2 or SMB 3 buffer size. The default value for this parameter is 65535. The supported range for this parameter is 4356 through 65535.

[-max-same-user-sessions-per-connection <integer>] - Maximum Same User Sessions per TCP Connection (privilege: advanced)

This optional parameter specifies the maximum number of CIFS sessions that can be set up by the same user per TCP connection. The default value of this parameter is 2500. The maximum value of this parameter is 4294967295.

[-max-same-tree-connect-per-session <integer>] - Maximum Same Tree Connect per Session (privilege: advanced)

This optional parameter specifies the maximum number of CIFS tree connects to the same share per CIFS session. The default value of this parameter is 5000. The maximum value of this parameter is 4294967295.

[-max-opens-same-file-per-tree <integer>] - Maximum Opens on Same File per Tree (privilege: advanced)

This optional parameter specifies the maximum number of existing opens on the same file per CIFS tree. The default value of this parameter is 1000. The maximum value of this parameter is 4294967295.

[-max-watches-set-per-tree <integer>] - Maximum Watches Set per Tree (privilege: advanced)

This optional parameter specifies the maximum number of watches, also known as change notifies, that can be set per CIFS tree. Tree here refers to a share connect from a single client. The default value of this parameter is 500. The maximum value of this parameter is 4294967295.

[-is-admin-users-mapped-to-root-enabled {true|false}] - Map Administrators to UNIX User 'root' (privilege: advanced)

If this optional parameter is set to true, Windows users who are members of the "BUILTIN\Administrators" group are mapped to UNIX user 'root' unless a user who is a member of this group is explicitly mapped to a UNIX user. If a Windows user is a member of the "BUILTIN\Administrators" group and an explicit user mapping exists for that user, the explicit name mapping takes precedence. If this parameter is set to false, users that are members of the "BUILTIN\Administrators" group are not mapped to UNIX 'root'. The default value for this parameter is true.

[-is-advertise-dfs-enabled {true|false}] - (DEPRECATED)-Enable DFS Referral Advertisement (privilege: advanced)

This optional parameter specifies whether to advertise DFS referral of the CIFS protocol. The default value for this parameter is false. This option is not applicable to SMB 1.0.

This parameter is deprecated and may be removed in a future release of Data ONTAP. The functionality provided by this parameter is now controlled by the `-symlink-properties` parameter instead.

[-is-path-component-cache-enabled {true|false}] - Is Path Component Cache Enabled (privilege: advanced)

This optional parameter specifies whether the path component cache is enabled. The default value for this parameter is true.

[-win-name-for-null-user <TextNoCase>] - Map Null User to Windows User or Group (privilege: advanced)

This optional parameter specifies a valid Windows user or group name that will be added to the CIFS credentials for a NULL user Session.

[-is-hide-dotfiles-enabled {true|false}] - Is Hide Dot Files Enabled (privilege: advanced)

This optional parameter specifies whether the CIFS server supports hiding dot files. Directory enumeration with this option enabled hides files and directories that begin with a dot ("."). The default value for this parameter is false.

[-is-client-version-reporting-enabled {true|false}] - Is Client Version Reporting Enabled (privilege: advanced)

If this parameter is set to true, CIFS client version tracking information is collected by AutoSupport. The default value of this parameter is true.

[-is-client-dup-detection-enabled {true|false}] - Is Client Duplicate Session Detection Enabled (privilege: advanced)

This optional parameter specifies whether the CIFS server supports duplicate session detection. Duplicate sessions that come from the same client with VcNumber of zero with this option enabled will be closed, and is only applicable for SMB 1.0 clients. The default value for this parameter is true.

[-grant-unix-group-perms-to-others {true|false}] - Grant UNIX Group Permissions to Others (privilege: advanced)

This optional parameter specifies whether the incoming CIFS user who is not the owner of the file, can be granted the group permission. If the CIFS incoming user is not the owner of UNIX security-style file and this option is set to true, then at all times the file's "group" permissions are granted. If the CIFS incoming user is not the owner of UNIX security-style file and this option is set to false, then the normal UNIX rules are applicable to grant the permissions. The default value of this parameter is false.

[-is-multichannel-enabled {true|false}] - Is Multichannel Enabled (privilege: advanced)

This optional parameter specifies whether the CIFS server supports Multichannel or not. The default value for this parameter is false.

[-max-connections-per-session <integer>] - Maximum Connections Allowed Per Multichannel Session (privilege: advanced)

This optional parameter specifies the maximum number of connections allowed per Multichannel session. The default value for this parameter is 32.

[-max-lifs-per-session <integer>] - Maximum LIFs Advertised Per Multichannel Session (privilege: advanced)

This optional parameter specifies the maximum number of network interfaces advertised per Multichannel session. The default value for this parameter is 256.

[-is-large-mtu-enabled {true|false}] - Is Large MTU Enabled (privilege: advanced)

This optional parameter specifies whether the CIFS server supports the SMB 2.1 "large MTU" feature. The default value for this parameter is true.

[-is-netbios-over-tcp-enabled {true|false}] - Is NetBIOS over TCP (port 139) Enabled (privilege: advanced)

This optional parameter specifies whether the CIFS server supports the NetBIOS over TCP (port 139) feature. The default value for this parameter is true.

[-is-nbns-enabled {true|false}] - Is NBNS over UDP (port 137) Enabled (privilege: advanced)

This optional parameter specifies whether the CIFS server supports the NBNS protocol. The default value for this parameter is *false* .

[-widelink-as-reparse-point-versions <CIFS Dialects>,…] - Protocol Versions for Which Widelink Will Be Reported as Reparse Point (privilege: advanced)

This optional parameter specifies the CIFS protocol versions for which the widelink is reported as reparse point. The default value for this parameter is *SMB1* .

Any values entered for this parameter is replaced with the existing values.

[-max-credits <integer>] - Maximum Credits to Grant (privilege: advanced)

This optional parameter specifies the maximum number of outstanding requests on a CIFS connection. The default value for this parameter is 128.

[-is-inherit-modebits-with-nfsv4acl-enabled {true|false}] - Enable Modebits on CIFS File Inheriting NFSv4 ACLs (privilege: advanced)

This optional parameter specifies whether to set mode bits on the files created by the cifs user that inherit NFSv4 acls. This parameter is not supported for SMB1 clients.

[-is-share-enum-permission-check-enabled {true|false}] - Check Share Permission for NetShareEnumAll Request (privilege: advanced)

If this parameter is set to *true* , the NetShareEnum call will only respond with the shares the user has access to. The default value is *false* which means it will respond with all shares.

Examples

The following example modifies CIFS options for the Vserver "vs1". It changes the default UNIX user, disables read grants exec, disables SMB2.x, changes maximum multiplex count to 1124, changes the file system sector size reported to SMB clients to 512, disables the direct-copy offload mechanism for ODX copy offload, enables the UNIX Extensions feature, disables fake open requests changes WINS servers to 192.168.11.112 and changes the client session timeout to 6000.

```
cluster1::> vserver cifs options modify -vserver vs1
-default-unix-user pcuser -read-grants-exec disabled
-smb2-enabled false -max-mpx 1124 -file-system-sector-size
512 -is-copy-offload-direct-copy-enabled false
-is-unix-extensions-enabled true -is-fake-open-enabled false
-wins-servers 192.168.11.112 -client-session-timeout 6000
```

The following example modifies CIFS options for the Vserver "vs1". It enables the advanced sparse file support .

```
cluster1::> vserver cifs options modify -vserver vs1
-is-advanced-sparse-file-support-enabled true
```

The following example modifies CIFS options for the Vserver "vs1". It modifies limits for maximum opens on the same file, max sessions by the same user, max tree connects per session, and max watches set.

```
cluster1::> vserver cifs options modify -vserver vs1
-max-same-user-sessions-per-connection 100
-max-same-tree-connect-per-session 100 -max-opens-same-file-per-tree 150
-max-watches-set-per-tree 200
```

The following example modifies CIFS options for the Vserver "vs1". It modifies the option to disable the path component cache. .

```
cluster1::> vserver cifs options modify -vserver vs1
-is-path-component-cache-enabled false
```

The following example modifies CIFS options for the Vserver "vs1". It modifies the option to disable CIFS client version tracking.

```
cluster1::> vserver cifs options modify -vserver vs1
-is-client-version-reporting-enabled false
```

The following example modifies CIFS option for the Vserver "vs1". It modifies the option to enable granting of UNIX group permissions to others.

```
cluster1::> vserver cifs options modify -vserver vs1
-grant-unix-group-perms-to-others true
```

vserver cifs options show

Display CIFS options

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

The `vserver cifs options show` command displays the CIFS configuration options for one or more Vservers.

Parameters

{ [-fields <fieldname>,…]

If you specify the `-fields <fieldname>, …` parameter, the command output also includes the specified field or fields. You can use '-fields ?' to display the fields to specify.

| [-instance] }

If you specify the `-instance` parameter, the command displays detailed information about all fields.

[-vserver <vserver name>] - Vserver

If you specify this parameter, the command only displays CIFS options for the specified Vserver.

[-default-unix-user <text>] - Default UNIX User

If you specify this parameter, the command displays options for CIFS server with the specified UNIX user.

[-read-grants-exec {enabled|disabled}] - Read Grants Exec for Mode Bits

If this parameter is set to enabled, the command displays options for CIFS servers that grant execution access when granting read access using mode bits. If set to disabled, the command displays options for CIFS servers that do not grant execution access when granting read access using mode bits.

[-wins-servers <InetAddress>,…] - Windows Internet Name Service (WINS) Addresses

If you specify this parameter, the command displays CIFS options only for CIFS servers that use the specified Windows Internet Name Server (WINS) addresses.

[-smb1-enabled {true|false}] - (DEPRECATED)-Enable SMB1 Protocol (privilege: advanced)

If this parameter is set to true, the command displays options for CIFS servers where SMB 1.0 version of

the CIFS protocol is negotiated. If set to false, the command displays options for CIFS servers where SMB 1.0 version of the CIFS protocol is not negotiated.

> This parameter is deprecated because the SMB1 protocol is obsolete and considered insecure. It might be removed in a future release.

[-smb2-enabled {true|false}] - Enable all SMB2 Protocols (privilege: advanced)

If this parameter is set to true, the command displays options for CIFS servers where SMB 2 version of the CIFS protocol is negotiated. If set to false, the command displays options for CIFS servers where SMB 2 version of the CIFS protocol is not negotiated.

[-smb3-enabled {true|false}] - Enable SMB3 Protocol (privilege: advanced)

If this parameter is set to true, the command displays options for CIFS servers where SMB 3 version of the CIFS protocol is negotiated. If set to false, the command displays options for CIFS servers where SMB 3 version of the CIFS protocol is not negotiated.

[-smb31-enabled {true|false}] - Enable SMB3.1 Protocol (privilege: advanced)

If this parameter is set to true, the command displays options for CIFS servers where SMB 3.1 version of the CIFS protocol is negotiated. If set to false, the command displays options for CIFS servers where SMB 3.1 version of the CIFS protocol is not negotiated.

[-max-mpx <integer>] - Maximum Simultaneous Operations per TCP Connection (privilege: advanced)

If you specify this parameter, the command displays options for CIFS server with the specified maximum number of simultaneous operations the CIFS server can process per TCP connection.

[-shadowcopy-dir-depth <integer>] - Maximum Depth of Directories to Shadow Copy (privilege: advanced)

If you specify this parameter, the command displays options only for CIFS servers that are configured with the specified depth of directories on which to create shadow copies.

[-copy-offload-enabled {true|false}] - Enable Copy Offload Feature (privilege: advanced)

If set to true, this command displays options only for CIFS servers where the Copy Offload feature is enabled. If set to false, options are displayed for CIFS servers where the Copy Offload feature is disabled.

[-is-copy-offload-direct-copy-enabled {true|false}] - Is Direct-copy Copy Offload Mechanism Enabled (privilege: advanced)

If set to true, this command displays options only for CIFS servers where the direct-copy mechanism for ODX Copy Offload is enabled. If set to false, options are displayed for CIFS servers where the direct- copy offload mechanism is disabled. + The direct-copy mechanism increases the performance of the copy offload operation when Windows clients try to open the source file of a copy in a mode that prevents the file being changed while the copy is in progress. If turned off, regular copy offloading takes place.

[-default-unix-group <text>] - Default UNIX Group

If you specify this parameter, the command displays options for CIFS server with the specified default UNIX group.

[-shadowcopy-enabled {true|false}] - Enable Shadow Copy Feature (VSS) (privilege: advanced)

If set to true, this command displays options only for CIFS servers where the Shadow Copy (VSS) feature is enabled. If set to false, options are displayed for CIFS servers where the Shadow Copy (VSS) feature is disabled.

[-is-referral-enabled {true|false}] - Refer Clients to More Optimal LIFs (privilege: advanced)

If set to true, the command displays options for the CIFS server where the CIFS server automatically refers clients to a data LIF local to the node which hosts the root of the requested share. If set to false, the command displays options for the CIFS server where the mechanism, to automatically refer the clients to data LIF local to the node which hosts the root of the requested share, is disabled.

[-is-local-auth-enabled {true|false}] - Is Local User Authentication Enabled (privilege: advanced)

If this parameter is set to true, the command displays CIFS options only for CIFS servers where local user authentication is enabled. If set to false, the command displays options for CIFS servers where local user authentication is disabled.

[-is-local-users-and-groups-enabled {true|false}] - Is Local Users and Groups Enabled (privilege: advanced)

If this parameter is set to true, the command displays CIFS options only for CIFS servers where the local users and groups feature is enabled. If set to false, the command displays options for CIFS servers where the local users and groups feature is disabled.

[-is-use-junctions-as-reparse-points-enabled {true|false}] - Is Reparse Point Support Enabled (privilege: advanced)

If you specify this parameter, the command only displays CIFS options for Vservers which have the specified reparse point setting.

[-is-exportpolicy-enabled {true|false}] - Is Export Policies for CIFS Enabled (privilege: advanced)

If you specify this parameter, the command only displays CIFS options for Vservers which have the specified export policy setting.

[-is-unix-nt-acl-enabled {true|false}] - Is NT ACLs on UNIX Security-style Volumes Enabled (privilege: advanced)

If this parameter is set to true, the command only displays CIFS options for Vservers that have the NT ACLs on UNIX security-style volumes enabled. If set to false, the command displays CIFS options for Vservers that have the NT ACLS on UNIX security-style volumes disabled.

[-is-trusted-domain-enum-search-enabled {true|false}] - Is Enumeration of Trusted Domain and Search Capability Enabled (privilege: advanced)

If this parameter is set to true, the command displays CIFS options only for CIFS servers that support enumeration of bidirectional trusted domains and that support searching in all bidirectional trusted domains when performing Windows user lookups for UNIX user to Windows user name mapping. If set to false, the command displays options for CIFS servers that do not support enumeration of bidirectional trusted domains.

[-client-session-timeout <integer>] - Idle Timeout Before CIFS Session Disconnect (secs)

If you specify this parameter, the command displays options only for CIFS servers that are configured with the specified client session timeout value (in seconds).

[-is-dac-enabled {true|false}] - Is Dynamic Access Control (DAC) Enabled (privilege: advanced)

If set to true, this command displays options only for CIFS servers where the Dynamic Access Control (DAC) feature is enabled. If set to false, options are displayed for CIFS servers where the Dynamic Access Control (DAC) feature is disabled.

[-restrict-anonymous {no-restriction|no-enumeration|no-access}] - Restrictions for Anonymous User (privilege: advanced)

If you specify this parameter, the command displays CIFS options only for CIFS servers that have the specified permitted value for the anonymous user. Permitted values for this option are:

- no-restriction - There is no access restriction for anonymous users.
- no-enumeration - Only enumeration is restricted.
- no-access - Access is restricted for anonymous users.

[-is-read-only-delete-enabled {enabled|disabled}] - Is Deletion of Read-Only Files Enabled

If you specify this parameter, the command displays options only for CIFS servers that have the specified is-read-only-delete-enabled setting.

[-file-system-sector-size {512|4096 (in bytes)}] - Size of File System Sector Reported to SMB Clients (bytes) (privilege: advanced)

If you specify this parameter, the command displays options only for CIFS servers that are configured with the specified file system sector size (in bytes).

[-is-fake-open-enabled {true|false}] - Is Fake Open Support Enabled (privilege: advanced)

If you set this parameter to true, the command displays options for CIFS servers where fake open is enabled. If set to false, the command displays options for CIFS servers where fake open is disabled.

[-is-unix-extensions-enabled {true|false}] - Is UNIX Extensions Enabled (privilege: advanced)

If set to true, this command displays options only for CIFS servers where the UNIX Extensions feature is enabled. If set to false, options are displayed for CIFS servers where the UNIX Extensions feature is disabled. UNIX Extensions allows POSIX/UNIX style security to be displayed through the CIFS protocol.

[-is-search-short-names-enabled {true|false}] - Is Search Short Names Support Enabled (privilege: advanced)

If you set this parameter to true, the command displays options for CIFS servers where search short names is enabled. If set to false, the command displays options for CIFS servers where search short names is disabled.

[-is-advanced-sparse-file-support-enabled {true|false}] - Is Advanced Sparse File Support Enabled (privilege: advanced)

If set to true, the command displays options for CIFS servers where the advanced sparse file capabilities for CIFS are enabled. If set to false, options are displayed for CIFS servers where the advanced sparse file capabilities for CIFS are disabled.

[-is-fsctl-file-level-trim-enabled {true|false}] - Is Fsctl File Level Trim Enabled (privilege: advanced)

If set to true, the command displays options for all the CIFS servers where trim requests (FSCTL_FILE_LEVEL_TRIM) are supported. If set to false, options are displayed for all the CIFS servers where trim requests (FSCTL_FILE_LEVEL_TRIM) are not supported.

[-guest-unix-user <text>] - Map the Guest User to Valid UNIX User (privilege: advanced)

If you specify this parameter, the command displays options for CIFS server with the specified guest UNIX user.

[-smb1-max-buffer-size <integer>] - Maximum Buffer Size Used for SMB1 Message (privilege: advanced)

If you specify this parameter, the command displays options only for CIFS servers that are configured with the specified maximum buffer size value.

[-max-same-user-sessions-per-connection <integer>] - Maximum Same User Sessions per TCP Connection (privilege: advanced)

If you specify this parameter, the command displays options only for CIFS server that are configured with the specified maximum same user session per connection.

[-max-same-tree-connect-per-session <integer>] - Maximum Same Tree Connect per Session (privilege: advanced)

If you specify this parameter, the command displays options only for CIFS server that are configured with the specified maximum same tree connects per session.

[-max-opens-same-file-per-tree <integer>] - Maximum Opens on Same File per Tree (privilege: advanced)

If you specify this parameter, the command displays options only for CIFS server that are configured with the specified maximum opens on same file per tree.

[-max-watches-set-per-tree <integer>] - Maximum Watches Set per Tree (privilege: advanced)

If you specify this parameter, the command displays options only for CIFS server that are configured with the specified maximum watches set per tree. Tree here refers to a share connect from a single client.

[-is-admin-users-mapped-to-root-enabled {true|false}] - Map Administrators to UNIX User 'root' (privilege: advanced)

If you set this parameter to true, the command displays options for CIFS servers where members of "BUILTIN\Adminstrators" group are mapped to UNIX user 'root'. If set to false, the command displays options for CIFS servers where members of the "BUILTIN\Adminstrators" group are not mapped to UNIX user 'root'.

[-is-advertise-dfs-enabled {true|false}] - (DEPRECATED)-Enable DFS Referral Advertisement (privilege: advanced)

If this parameter is set to true, the command displays CIFS options only for CIFS servers where DFS referral advertisement is enabled. If set to false, the command displays options for CIFS servers where DFS referral advertisement is disabled. This option is not applicable to SMB 1.0.

This parameter is deprecated and may be removed in a future release of Data ONTAP. The functionality provided by this parameter is now controlled by the `-symlink-properties` parameter instead.

[-is-path-component-cache-enabled {true|false}] - Is Path Component Cache Enabled (privilege: advanced)

If this parameter is set to true, the command displays options for CIFS servers where the path component cache is enabled. If set to false, the command displays options for CIFS servers where the path component cache is disabled.

[-win-name-for-null-user <TextNoCase>] - Map Null User to Windows User or Group (privilege: advanced)

If you specify this parameter, the command displays options only for CIFS servers that are configured to add the specified windows user or group into CIFS credentials for null sessions.

[-is-hide-dotfiles-enabled {true|false}] - Is Hide Dot Files Enabled (privilege: advanced)

When set to true, this optional parameter enables the Hide Dot Files feature in the CIFS server. If set to false, the Hide Dot Files feature is disabled. The default value for this parameter is false.

[-is-client-version-reporting-enabled {true|false}] - Is Client Version Reporting Enabled (privilege: advanced)

If this parameter is set to true, the command displays options for CIFS servers where CIFS client version tracking is enabled. If set to false, the command displays options for CIFS servers where CIFS client version tracking is disabled.

[-is-client-dup-detection-enabled {true|false}] - Is Client Duplicate Session Detection Enabled (privilege: advanced)

If this parameter is set to true, the command displays options for CIFS servers where client duplicate session detection is enabled. If set to false, the command displays options for CIFS servers where client duplicate session detection is not enabled.

[-grant-unix-group-perms-to-others {true|false}] - Grant UNIX Group Permissions to Others (privilege: advanced)

If this parameter is set to true, the command displays CIFS options only for CIFS servers where grant unix group permissions to others feature is enabled. If set to false, the command displays options for CIFS servers where grant unix group permissions to others feature is disabled.

[-is-multichannel-enabled {true|false}] - Is Multichannel Enabled (privilege: advanced)

If this parameter is set to true, the command displays options for CIFS servers where the multichannel is enabled. If set to false, the command displays options for CIFS servers where the multichannel is disabled.

[-max-connections-per-session <integer>] - Maximum Connections Allowed Per Multichannel Session (privilege: advanced)

If you specify this parameter, the command displays options only for CIFS server that are configured with the specified maximum connections allowed per multichannel session.

[-max-lifs-per-session <integer>] - Maximum LIFs Advertised Per Multichannel Session (privilege: advanced)

If you specify this parameter, the command displays options only for CIFS server that are configured with the specified maximum network interfaces advertised per multichannel session.

[-is-large-mtu-enabled {true|false}] - Is Large MTU Enabled (privilege: advanced)

If you specify this parameter, the command displays options only for CIFS servers that are configured to support the SMB 2.1 "Large MTU" feature.

[-is-netbios-over-tcp-enabled {true|false}] - Is NetBIOS over TCP (port 139) Enabled (privilege: advanced)

If you specify this parameter, the command displays options only for CIFS servers that are configured to support the NetBIOS over TCP (port 139) feature.

[-is-nbns-enabled {true|false}] - Is NBNS over UDP (port 137) Enabled (privilege: advanced)

If you specify this parameter, the command displays CIFS options only for CIFS servers that use the specified setting for the NBNS protocol.

[-widelink-as-reparse-point-versions <CIFS Dialects>,…] - Protocol Versions for Which Widelink Will Be Reported as Reparse Point (privilege: advanced)

If you specify this parameter, the command displays CIFS options only for the CIFS servers that matches the specified CIFS protocol versions for which widelinks are reported as reparse points. If a list is entered, entries are returned that matches all the specified versions.

[-max-credits <integer>] - Maximum Credits to Grant (privilege: advanced)

If you specify this parameter, the command displays options only for CIFS servers that are configured with the specified maximum credits.

[-is-inherit-modebits-with-nfsv4acl-enabled {true|false}] - Enable Modebits on CIFS File Inheriting NFSv4 ACLs (privilege: advanced)

If you specify this parameter, mode bits are set on the files created by the cifs user that inherit nfsv4 acls.

[-is-share-enum-permission-check-enabled {true|false}] - Check Share Permission for NetShareEnumAll Request (privilege: advanced)

If this parameter is set to true, the command only displays CIFS options for Vservers that enabled share permission check for NetShareEnumAll request. If set to false, options are displayed for CIFS servers that disabled share permission check for NetShareEnumAll request.

Examples

The following example lists CIFS options for a Vserver on the cluster.

```
cluster1::> vserver cifs options show

Vserver: vs1
                           Client Session Timeout: 900
                               Default Unix Group: -
                                Default Unix User: pcuser
                                  Guest Unix User: guestusers
                                 Read Grants Exec: disabled
                                     WINS Servers: -
```

At the advanced level, the output displays the information below.

```
cluster1::*> vserver cifs options show

Vserver: vs1
Client Session Timeout: 900
                                Copy Offload Enabled: true
                                  Default Unix Group: -
                                   Default Unix User: pcuser
                                     Guest Unix User: -
               Are Administrators mapped to 'root': true
           Is Advanced Sparse File Support Enabled: true
                  Direct-Copy Copy Offload Enabled: true
                           Export Policies Enabled: false
            Grant Unix Group Permissions to Others: true
```

```
                          Is Advertise DFS Enabled: true
    Is Client Duplicate Session Detection Enabled: true
              Is Client Version Reporting Enabled: true
                                   Is DAC Enabled: false
                       Is Fake Open Support Enabled: true
                 Is Hide Dot Files Support Enabled: false
                               Is Large MTU Enabled: true
                             Is Local Auth Enabled: true
                 Is Local Users and Groups Enabled: true
                              Is Multichannel Enabled: false
           Is NetBIOS over TCP (port 139) Enabled: true
                             Is Referral Enabled: false
            Is Search Short Names Support Enabled: false
  Is Trusted Domain Enumeration And Search Enabled: true
                         Is UNIX Extensions Enabled: false
          Is Use Junction as Reparse Point Enabled: true
                             Max Multiplex Count: 255
          Max Connections per Multichannel Session: 32
                 Max LIFs per Multichannel Session: 256
              Max Same User Session Per Connection: 2500
                 Max Same Tree Connect Per Session: 5000
                      Max Opens Same File Per Tree: 1000
                          Max Watches Set Per Tree: 500
                                 NBNS Interfaces  : -
                   Is Path Component Cache Enabled: true
    NT ACLs on UNIX Security Style Volumes Enabled: true
                                Read Grants Exec: disabled
                                Read Only Delete: disabled
                  Reported File System Sector Size: 4096
                               Restrict Anonymous: no-restriction
                             Shadowcopy Dir Depth: 5
                               Shadowcopy Enabled: true
                                     SMB1 Enabled: true
                  Max Buffer Size for SMB1 Message: 65535
                                     SMB2 Enabled: true
                                     SMB3 Enabled: true
                                   SMB3.1 Enabled: true
           Map Null User to Windows User or Group: cifsGroup
                                   WINS Servers: -
        Report Widelink as Reparse Point Versions: SMB1
```

vserver cifs security modify

Modify CIFS security settings

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

The `vserver cifs security modify` command modifies CIFS server security settings.

Parameters

`-vserver <vserver name>` - Vserver

This parameter specifies the name of the Vserver whose CIFS security settings you want to modify.

`[-kerberos-clock-skew <integer>]` - Maximum Allowed Kerberos Clock Skew

This parameter specifies the maximum allowed Kerberos ticket clock skew in minutes. The default setting is 5 minutes.

`[-kerberos-ticket-age <integer>]` - Kerberos Ticket Lifetime

This parameter specifies the Kerberos ticket lifetime in hours. The default setting is 10 hours.

`[-kerberos-renew-age <integer>]` - Maximum Kerberos Ticket Renewal Days

This parameter specifies the maximum Kerberos ticket renewal lifetime in days. The default setting is 7 days.

`[-kerberos-kdc-timeout <integer>]` - Timeout for Kerberos KDC Connections (Secs)

This parameter specifies the timeout for sockets on KDCs after which all KDCs are marked as unreachable. The default setting is 3 seconds.

`[-is-signing-required {true|false}]` - Require Signing for Incoming CIFS Traffic

This parameter specifies whether signing is required for incoming CIFS traffic. The default setting is *`false`* .

`[-is-password-complexity-required {true|false}]` - Require Password Complexity for Local User Accounts

This parameter specifies whether password complexity is required for CIFS local users. If this parameter is set to *`true`* , password complexity is required. If the value is set to *`false`* , password complexity is not required. The default setting is *`true`* for CIFS servers.

`[-use-start-tls-for-ad-ldap {true|false}]` - Use start_tls for AD LDAP Connections

This parameter specifies whether to use Start TLS over AD LDAP connections. When enabled, the communication between the Data ONTAP LDAP Client and the LDAP Server will be encrypted using Start TLS. Start TLS is a mechanism to provide secure communication by using the TLS/SSL protocols. The default setting is *`false`* .

Ensure right certificates are installed for CIFS home domain and trusted domains.

`[-is-aes-encryption-enabled {true|false}]` - (DEPRECATED)-Is AES-128 and AES-256 Encryption for Kerberos Enabled

This parameter specifies whether to use Kerberos AES-128 and AES-256 encryption types for authentication. When enabled, and depending on negotiation with the KDC service, it is possible for authentication operations to utilize these encryption types. The default setting is *`true`* .

This parameter is deprecated and might be removed from a future release.

[-lm-compatibility-level {lm-ntlm-ntlmv2-krb|ntlm-ntlmv2-krb|ntlmv2-krb|krb}] - LM Compatibility Level

This parameter specifies the LM compatibility level. The default setting is *lm-ntlm-ntlmv2-krb* (LM, NTLM, NTLMv2 and Kerberos).

[-is-smb-encryption-required {true|false}] - Require SMB Encryption for Incoming CIFS Traffic

This parameter specifies whether SMB encryption is required when accessing shares in the Vserver. When enabled and depending on negotiation during session setup, it is possible that data transfers between the client and the server are made secure by encrypting the SMB traffic. The default setting is *false* .

[-session-security-for-ad-ldap {none|sign|seal}] - Client Session Security

This parameter specifies the level of security to be used for LDAP communications. The default setting is *none* .

LDAP Client Session Security can be one of the following:

- none - No Signing or Sealing.
- sign - Sign LDAP traffic.
- seal - Seal and Sign LDAP traffic.

[-smb1-enabled-for-dc-connections {false|true|system-default}] - (DEPRECATED)-SMB1 Enabled for DC Connections

This parameter specifies whether SMB1 is enabled for use with connections to domain controllers. The default setting is *system-default* .

SMB1 Enabled For DC Connections can be one of the following:

- false - SMB1 is not enabled.
- true - SMB1 is enabled.
- system-default - This sets the option to whatever is the default for the release of Data ONTAP that is running. For this release it is: SMB1 is enabled.

This parameter is deprecated because the SMB1 protocol is obsolete and considered insecure. It might be removed in a future release.

[-smb2-enabled-for-dc-connections {false|true|system-default}] - SMB2 Enabled for DC Connections

This parameter specifies whether SMB2 is enabled for use with connections to domain controllers. The default setting is *system-default* .

SMB2 Enabled For DC Connections can be one of the following:

- false - SMB2 is not enabled.
- true - SMB2 is enabled.
- system-default - This sets the option to whatever is the default for the release of Data ONTAP that is running. For this release it is: SMB2 is enabled.

[-referral-enabled-for-ad-ldap {true|false}] - LDAP Referral Chasing Enabled For AD LDAP Connections

This parameter specifies whether LDAP referral is enabled for AD LDAP connections. The default setting is *false* .

[-use-ldaps-for-ad-ldap {true|false}] - Use LDAPS for Secure Active Directory LDAP Connections

This parameter specifies whether to use LDAPS over AD LDAP connections. When enabled, the communication between the Data ONTAP LDAP Client and the LDAP Server will be encrypted using LDAPS and port 636 will be used. LDAPS is a mechanism to provide secure communication by using the TLS/SSL protocols and port 636. The default setting is *false* .

Ensure right certificates are installed for CIFS home domain and trusted domains.

[-encryption-required-for-dc-connections {true|false}] - Encryption is required for DC Connection

This parameter specifies whether encryption is required for use with connections to domain controllers. The default setting is *false* .

Encryption required For DC Connections can be one of the following:

- false - Encryption is not required.
- true - Encryption is required.

[-aes-enabled-for-netlogon-channel {true|false}] - AES session key enabled for NetLogon channel

This parameter specifies whether AES session key will be negotiated as part of the NetLogon secure channel establishment. The default setting is *true* .

[-try-channel-binding-for-ad-ldap {true|false}] - Try Channel Binding For AD LDAP Connections

This parameter specifies whether channel binding will be tried for AD LDAP connections. The default setting is *true* . Channel binding will be tried only if `-use-start-tls-for-ad-ldap` or `-use-ldaps-for-ad-ldap` is enabled along with `-session-security-for-ad-ldap` set to either *sign* or *seal* .

[-advertised-enc-types <CIFS Kerberos Encryption Type>,…] - Encryption Types Advertised to Kerberos

Encryption types advertised to Kerberos.The default setting is ` aes-256` ,` aes-128` ,` rc4` ,`des` .

Examples

The following example makes the following changes: the Kerberos clock skew is set to 3 minutes, the Kerberos ticket lifetime to 8 hours and it makes signing required for Vserver "vs1".

```
cluster1::> vserver cifs security modify -vserver vs1 -kerberos-clock-skew
3 -kerberos-ticket-age 8 -is-signing-required true
cluster1::> vserver cifs security show
Vserver: vs1
Kerberos Clock Skew:               3 minutes
                                  Kerberos Ticket Age:               8
hours
                                 Kerberos Renewal Age:               7
days
                                 Kerberos KDC Timeout:               3
seconds
                                   Is Signing Required:            true
                       Is Password Complexity Required:            true
                  Use start_tls For AD LDAP connection:           false
                               Is AES Encryption Enabled:           true
                                  LM Compatibility Level:            krb
                              Is SMB Encryption Required:           false
                                 Client Session Security:            none
                        SMB1 Enabled For DC Connections:  system-default
                        SMB2 Enabled For DC Connections:  system-default
LDAP Referral Chasing Enabled For AD LDAP Connections:           false
                     Use LDAPS for AD LDAP Connections:            true
                Encryption required For DC Connections:           false
                      AES enabled for Netlogon channel:           false
           Try Channel Binding For AD LDAP Connections:            true
               Encryption Types Advertised to Kerberos:  aes-256, aes-128,
des, rc4
```

vserver cifs security show

Display CIFS security settings

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

The `vserver cifs security show` command displays information about CIFS server security settings.

Parameters

{ [-fields <fieldname>,…]

If you specify the -fields parameter, the command only displays the fields that you specify.

| [-instance] }

If you specify the `-instance` parameter, the command displays detailed information about all fields.

[-vserver <vserver name>] - Vserver

This parameter specifies the name of the Vserver whose CIFS security settings you want to display.

[-kerberos-clock-skew <integer>] - Maximum Allowed Kerberos Clock Skew

If this parameter is specified, the command displays information only about the security settings that match the specified Kerberos ticket clock skew.

[-kerberos-ticket-age <integer>] - Kerberos Ticket Lifetime

If this parameter is specified, the command displays information only about the security settings that match the specified Kerberos ticket age.

[-kerberos-renew-age <integer>] - Maximum Kerberos Ticket Renewal Days

If this parameter is specified, the command displays information only about the security settings that match the specified Kerberos renewal age.

[-kerberos-kdc-timeout <integer>] - Timeout for Kerberos KDC Connections (Secs)

If this parameter is specified, the command displays information only about the security settings that match the specified Kerberos KDC timeout.

[-realm <text>] - Kerberos Realm

If this parameter is specified, the command displays information only about the security settings that match the specified Kerberos realm.

[-kdc-ip <text>,…] - KDC IP Address

If this parameter is specified, the command displays information only about the security settings that match the specified KDC IP address.

[-kdc-name <text>,…] - KDC Name

If this parameter is specified, the command displays information only about the security settings that match the specified KDC name.

[-site <text>,…] - KDC Site

If this parameter is specified, the command displays information only about the security settings that match the specified Windows site.

[-is-signing-required {true|false}] - Require Signing for Incoming CIFS Traffic

This parameter specifies whether signing is required for incoming CIFS traffic. If this parameter is specified, the command displays information only about the security settings that match the specified value for is-signing-required.

[-is-password-complexity-required {true|false}] - Require Password Complexity for Local User Accounts

If this parameter is set to *true* , the command displays CIFS security configuration information only for CIFS servers where password complexity for local user accounts is required. If set to *false* , the command displays security configuration information for CIFS servers where password complexity for local user accounts is not required.

[-use-start-tls-for-ad-ldap {true|false}] - Use start_tls for AD LDAP Connections

If this parameter is set to *true* , the command displays CIFS security configuration information only for CIFS servers where Start TLS is used for communication with the AD LDAP Server. If set to *false* , the

command displays CIFS security configuration information only for CIFS servers where Start TLS is not used for communication with the AD LDAP Server.

[-is-aes-encryption-enabled {true|false}] - (DEPRECATED)-Is AES-128 and AES-256 Encryption for Kerberos Enabled

If this parameter is set to *true* , the command displays CIFS security configuration information only for CIFS servers where AES-128 and AES-256 encryption types for Kerberos are enabled. If set to *false* , the command displays security configuration information for CIFS servers where AES-128 and AES-256 encryption types for Kerberos are disabled.

This parameter is deprecated and may be removed from a future release.

[-lm-compatibility-level {lm-ntlm-ntlmv2-krb|ntlm-ntlmv2-krb|ntlmv2-krb|krb}] - LM Compatibility Level

If this parameter is specified, the command displays information only about the security settings that match the specified LM compatibility level.

[-is-smb-encryption-required {true|false}] - Require SMB Encryption for Incoming CIFS Traffic

If this parameter is set to *true* , the command displays CIFS security configuration information only for CIFS servers where SMB encryption is required. If set to *false* , the command displays security configuration information for CIFS servers where SMB encryption is not required.

[-session-security-for-ad-ldap {none|sign|seal}] - Client Session Security

If this parameter is set to *seal* , the command displays CIFS security configuration information only for CIFS servers where both signing and sealing are required for LDAP communications. If set to *sign* , the command displays security configuration information for CIFS servers where only signing is required for LDAP communications. If set to *none* , the command displays security configuration information for CIFS servers where no security is required for LDAP communications.

[-smb1-enabled-for-dc-connections {false|true|system-default}] - (DEPRECATED)-SMB1 Enabled for DC Connections

If this parameter is set to *true* , the command displays CIFS security configuration information only for CIFS servers where SMB1 is enabled for use with connections to domain controllers. If set to *false* , the command displays security configuration information for CIFS servers where SMB1 is not enabled for use with connections to domain controllers. If set to *system-default* , the command displays security configuration information for CIFS servers where the system-default setting (SMB1 enabled) is used for connections to domain controllers.

This parameter is deprecated because the SMB1 protocol is obsolete and considered insecure. It might be removed in a future release.

[-smb2-enabled-for-dc-connections {false|true|system-default}] - SMB2 Enabled for DC Connections

If this parameter is set to *true* , the command displays CIFS security configuration information only for CIFS servers where SMB2 is enabled for use with connections to domain controllers. If set to *false* , the command displays security configuration information for CIFS servers where SMB2 is not enabled for use with connections to domain controllers. If set to *system-default* , the command displays security configuration information for CIFS servers where the system-default setting (SMB2 enabled) is used for connections to domain controllers.

[-referral-enabled-for-ad-ldap {true|false}] - LDAP Referral Chasing Enabled For AD LDAP Connections

If this parameter is set to *true* , the command displays CIFS security configuration information only for CIFS servers where LDAP referral is enabled for AD LDAP connections. If set to *false* , the command displays security configuration information for CIFS servers where LDAP referral is not enabled for AD LDAP connections.

[-use-ldaps-for-ad-ldap {true|false}] - Use LDAPS for Secure Active Directory LDAP Connections

If this parameter is set to *true* , the command displays CIFS security configuration information only for CIFS servers where LDAPS is used for communication with the AD LDAP Server. If set to *false* , the command displays CIFS security configuration information only for CIFS servers where LDAPS is not used for communication with the AD LDAP Server.

[-encryption-required-for-dc-connections {true|false}] - Encryption is required for DC Connection

If this parameter is set to *true* , the command displays CIFS security configuration information only for CIFS servers where encryption is required for use with connections to domain controllers. If set to *false* , the command displays security configuration information for CIFS servers where encryption is not required for use with connections to domain controllers.

[-aes-enabled-for-netlogon-channel {true|false}] - AES session key enabled for NetLogon channel

If this parameter is set to *true* , the command displays CIFS security configuration information only for CIFS servers where AES session key is used for Netlogon secure channel. If set to *false* , the command displays CIFS security configuration information only for CIFS servers where AES session key is not used for Netlogon secure channel.

[-try-channel-binding-for-ad-ldap {true|false}] - Try Channel Binding For AD LDAP Connections

If this parameter is set to *true* , the command displays CIFS security configuration information only for CIFS servers where channel binding is tried for AD LDAP connections. If set to *false* , the command displays CIFS security configuration information only for CIFS servers where channel binding is not tried for AD LDAP connections.

[-advertised-enc-types <CIFS Kerberos Encryption Type>,…] - Encryption Types Advertised to Kerberos

If this parameter is specified, the command displays information only about the security settings that match the specified advertised encryption types.

Examples

The following example displays CIFS server security settings.

```
cluster1::> vserver cifs security show
Vserver: vs1
Kerberos Clock Skew:                3 minutes
                                   Kerberos Ticket Age:                8
hours
                                  Kerberos Renewal Age:                7
days
                                  Kerberos KDC Timeout:                3
seconds
                                    Is Signing Required:             true
                         Is Password Complexity Required:             true
                    Use start_tls For AD LDAP connection:            false
                                Is AES Encryption Enabled:            false
                                   LM Compatibility Level:              krb
                               Is SMB Encryption Required:            false
                                  Client Session Security:             none
                         SMB1 Enabled For DC Connections:  system-default
                         SMB2 Enabled For DC Connections:  system-default
LDAP Referral Chasing Enabled For AD LDAP Connections:            false
                       Use LDAPS for AD LDAP Connections:             true
                  Encryption required For DC Connections:            false
           AES session key enabled for NetLogon channel:            false
            Try Channel Binding For AD LDAP Connections:             true
                Encryption Types Advertised to Kerberos:            des, rc4
```

The following example displays the Kerberos clock skew for all Vservers.

```
cluster1::> vserver cifs security show -fields kerberos-clock-skew
vserver kerberos-clock-skew
            ------- ------------------
            vs1     5
```

vserver cifs session close

Close an open CIFS session

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

The `vserver cifs session close` command closes the specified CIFS sessions.

Parameters

-node {<nodename>|local} - Node

If you specify this parameter, the command will close all the opened CIFS sessions on the specified node.

-vserver <vserver name> - Vserver

If you specify this parameter, the command will close all the opened CIFS sessions on the specified CIFS-enabled Vserver.

-session-id <integer> - Session ID

If you specify this parameter, the command will close the open CIFS session that matches the specified session ID.

[-connection-id <integer>] - Connection ID

If you specify this parameter, the command will close all the opened CIFS sessions that match the specified connection ID.

[-lif-address <IP Address>] - Incoming Data LIF IP Address

If you specify this parameter, the command will close all the opened CIFS sessions that are established through the specified data LIF IP address.

[-address <IP Address>] - Workstation IP address

If you specify this parameter, the command will close all the opened CIFS sessions that are opened from the specified IP address.

[-auth-mechanism <Authentication Mechanism>] - Authentication Mechanism

If you specify this parameter, the command will close all the opened CIFS sessions that used the specified authentication mechanism. The authentication mechanism can include one of the following:

- NTLMv1 - NTLMv1 authentication mechanism
- NTLMv2 - NTLMv2 authentication mechanism
- Kerberos - Kerberos authentication mechanism
- Anonymous - Anonymous authentication mechanism

[-windows-user <TextNoCase>] - Windows User

If you specify this parameter, the command will close all the opened CIFS sessions that are established for the specified CIFS user. The acceptable format for CIFS user is [domain]\user.

[-unix-user <text>] - UNIX User

If you specify this parameter, the command will close all the opened CIFS sessions that are established for the specified UNIX user.

[-protocol-version <CIFS Dialects>] - Protocol Version

If you specify this parameter, the command will close all the opened CIFS sessions that are established over the specified version of CIFS protocol. The protocol version can include one of the following:

- SMB1 - SMB 1.0
- SMB2 - SMB 2.0
- SMB2_1 - SMB 2.1

- SMB3 - SMB 3.0
- SMB3_1 - SMB 3.1

[-continuously-available <CIFS Open File Protection>] - Continuously Available

If you specify this parameter, the command will close all the opened CIFS sessions with open files that have the specified level of continuously available protection. The open files are "continuously available" if they are opened from an SMB 3 client through a share with the "continuously_available" property set. These open files are capable of non-disruptively recovering from takeover and giveback as well as general aggregate relocation between partners in a high-availability relationship. This is in addition to the traditional SMB 2 capability allowing clients to recover from LIF migration and other brief network interruptions.

The CA protection levels depict the continuous availability at the connection level so it might not be accurate for a session if the connection has multiple sessions. Streams opened through a continuously available share are permitted, but are not currently made continuously available. Directories may be opened through a continuously available share, but, by design, will not appear continuously available as clients do not open them that way. These protection levels are applicable to the sessions on read/write volumes residing on storage failover aggregates.

The continuously available status can be one of the following:

- No - The session contains one or more open file but none of them are continuously available.
- Yes - The session contains one or more open files and all of them are continuously available.
- Partial - The session contains at least one continuously available open file but other open files that are not.

[-is-session-signed {true|false}] - Is Session Signed

If you specify this parameter, the command will close all the opened CIFS sessions that are established with the specified SMB signing option.

[-smb-encryption-status {unencrypted|encrypted|partially-encrypted}] - SMB Encryption Status

If you specify this parameter, the command will close all the opened CIFS sessions that are established over the specified SMB encryption status.

The SMB encryption status can be one of the following:

- unencrypted - The CIFS session is not encrypted.
- encrypted - The CIFS session is fully encrypted. Vserver level encryption is enabled and encryption happens for the entire session.
- partially-encrypted - The CIFS session is partially encrypted. Share level encryption is enabled and encryption is initiated when the tree-connect occurs.

Examples

The following example closes all open CIFS sessions on all the nodes with protocol-version SMB2:

```
cluster1::> cifs session close -node * -protocol-version SMB2
2 entries were acted on.
```

The following example closes all open CIFS sessions for all Vservers on node node1:

```
cluster1::> cifs session close -node node1 -vserver *
3 entries were acted on.
```

vserver cifs session show

Display established CIFS sessions

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

The `vserver cifs session show` command displays information about established CIFS sessions. The command output depends on the parameter or parameters specified with the command. If you do not specify any parameters, the command displays the following information about all CIFS sessions:

- Node name
- Vserver name
- CIFS connection ID
- CIFS session ID
- Workstation IP address
- CIFS user name
- CIFS open files
- Session idle time

```
You can specify additional parameters to display only information that
matches those parameters. For example, to display information only about
CIFS sessions established on connection ID 2012, run the command with
the `-connection-id parameter set to ` 2012.
```

Parameters

{ [-fields <fieldname>,…]

If you specify this parameter, the command only displays the fields that you specify.

| [-active-volumes]

If you specify this parameter, the command displays the list of Volumes that session has been connected.

| [-show-win-unix-creds]

If you specify this parameter along with a valid session-id, the command displays Windows and UNIX credentials along with the detailed information about matching CIFS sessions.

| [-instance] }

If you specify this parameter, the command displays detailed information about matching CIFS sessions.

[-node {<nodename>|local}] - Node

If you specify this parameter, the command displays information about the CIFS sessions on the specified node.

[-vserver <vserver name>] - Vserver

If you specify this parameter, the command displays information about CIFS sessions on the specified CIFS-enabled Vserver.

[-session-id <integer>] - Session ID

If you specify this parameter, the command displays information about the CIFS session that match the specified session ID.

[-connection-id <integer>] - Connection ID

If you specify this parameter, the command displays information about CIFS sessions that match the specified connection ID.

[-lif-address <IP Address>] - Incoming Data LIF IP Address

If you specify this parameter, the command displays information about CIFS sessions that are established through the specified data LIF IP address.

[-address <IP Address>] - Workstation IP address

If you specify this parameter, the command displays information about CIFS sessions that are opened from the specified IP address.

[-auth-mechanism <Authentication Mechanism>] - Authentication Mechanism

If you specify this parameter, the command displays information about CIFS sessions that used the specified authentication mechanism. The authentication mechanism can include one of the following:

- None - Could not authenticate
- NTLMv1 - NTLMv1 authentication mechanism
- NTLMv2 - NTLMv2 authentication mechanism
- Kerberos - Kerberos authentication mechanism
- Anonymous - Anonymous authentication mechanism

[-windows-user <TextNoCase>] - Windows User

If you specify this parameter, the command displays information about CIFS sessions that are established for the specified CIFS user. The acceptable format for CIFS user is [domain]\user.

[-unix-user <text>] - UNIX User

If you specify this parameter, the command displays information about CIFS sessions that are established for the specified UNIX user.

[-shares <integer>] - Open Shares

If you specify this parameter, the command displays information about CIFS sessions that have the specified number of CIFS shares opened.

[-files <integer>] - Open Files

If you specify this parameter, the command displays information about CIFS sessions that have the specified number of regular CIFS files opened.

[-other <integer>] - Open Other

If you specify this parameter, the command displays information about CIFS sessions that have the specified number of special CIFS files opened such as streams or directories.

[-connected-time <[<integer>d][<integer>h][<integer>m][<integer>s]>] - Connected Time

If you specify this parameter, the command displays information about CIFS sessions that are established for the specified time duration.

[-idle-time <[<integer>d][<integer>h][<integer>m][<integer>s]>] - Idle Time

If you specify this parameter, the command displays information about CIFS sessions on which there is no activity for the specified time duration.

[-protocol-version <CIFS Dialects>] - Protocol Version

If you specify this parameter, the command displays information about CIFS sessions that are established over the specified version of CIFS protocol. The protocol version can include one of the following:

- SMB1 - SMB 1.0
- SMB2 - SMB 2.0
- SMB2_1 - SMB 2.1
- SMB3 - SMB 3.0
- SMB3_1 - SMB 3.1

[-continuously-available <CIFS Open File Protection>] - Continuously Available

If you specify this parameter, the command displays information about CIFS sessions with open files that have the specified level of continuously available protection. The open files are "continuously available" if they are opened from an SMB 3 client through a share with the "continuously_available" property set. These open files are capable of non-disruptively recovering from takeover and giveback as well as general aggregate relocation between partners in a high-availability relationship. This is in addition to the traditional SMB 2 capability allowing clients to recover from LIF migration and other brief network interruptions.

The CA protection levels depict the continuous availability at the connection level so it might not be accurate for a session if the connection has multiple sessions. Streams opened through a continuously available share are permitted, but are not currently made continuously available. Directories may be opened through a continuously available share, but, by design, will not appear continuously available as clients do not open them that way. These protection levels are applicable to the sessions on read/write volumes residing on storage failover aggregates.

The continuously available status can be one of the following:

- No - The session contains one or more open file but none of them are continuously available.
- Yes - The session contains one or more open files and all of them are continuously available.
- Partial - The session contains at least one continuously available open file but other open files that are not.

[-is-session-signed {true|false}] - Is Session Signed

If you specify this parameter, the command displays information about CIFS sessions that are established with the specified SMB signing option.

[-user-type {local-user|domain-user|guest-user|anonymous-user}] - User Authenticated as

If you specify this parameter, the command displays information about CIFS sessions that are established for the specified user type. The user type can include one of the following:

- local-user - Authenticated as a local CIFS user
- domain-user - Authenticated as a domain user
- guest-user - Authenticated as a guest user
- anonymous-user - Authenticated as an anonymous or null user

[-netbios-name <text>] - NetBIOS Name

If you specify this parameter, the command displays information about CIFS sessions that are established with the specified NetBIOS Name.

[-smb-encryption-status {unencrypted|encrypted|partially-encrypted}] - SMB Encryption Status

If you specify this parameter, the command displays information about CIFS sessions that are established with the specified SMB encryption status.

The SMB encryption status can be one of the following:

- unencrypted - The CIFS session is not encrypted.
- encrypted - The CIFS session is fully encrypted. Vserver level encryption is enabled and encryption happens for the entire session.
- partially-encrypted - The CIFS session is partially encrypted. Share level encryption is enabled and encryption is initiated when the tree-connect occurs.

[-connection-count <integer>] - Connection Count

If you specify this parameter, the command displays information about CIFS sessions that have the specified number of CIFS connections.

[-is-large-mtu-enabled {true|false}] - Is Large MTU Enabled

If you specify this parameter, the command displays information about CIFS sessions that are established with the specified Large MTU option.

[-vol-names <volume name>,…] - Volumes List

If you specify this parameter, the command displays information about CIFS sessions that are established with the specified volume names.

[-share-names <Share>,…] - Open Shares Lists

If you specify this parameter, the command displays information about CIFS sessions that are established including the specified share names.

Examples

The following example displays information about all CIFS sessions:

```
cluster1::> vserver cifs session show
Node:    node1
Vserver: vs1
Connection Session                                          Open
Idle        Connection
ID         ID      Workstation      Windows User         Files
Time             Count
---------- ------- ---------------- ---------------- ---------
-------------- -----------------
127834     1       172.17.193.172   CIFSQA\                  2
22s                 4
                                    Administrator
```

The following example displays information about a CIFS session with session-id 1.

```
cluster1::> vserver cifs session show -session-id 1 -instance
Node: node1
                     Vserver: vs1
                  Session ID: 1
               Connection ID: 127834
Incoming Data LIF IP Address: 10.53.13.224
                 Workstation: 172.17.193.172
    Authentication Mechanism: NTLMv2
                Windows User: CIFSQA\Administrator
                   UNIX User: root
                Open Shares: 2
                 Open Files: 2
                 Open Other: 0
              Connected Time: 2d 17h 58m 5s
                   Idle Time: 22s
           Protocol Version: SMB3
      Continuously Available: No
           Is Session Signed: true
       User Authenticated as: domain-user
                NetBIOS Name: ALIAS1
       SMB Encryption Status: encrypted
            Connection Count: 4
    Windows Unix Credentials: -
              Active Volumes: vol1,fg
```

vserver cifs session file close

Close an open CIFS file

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

The `vserver cifs session file close` command closes the specified open CIFS file.

Parameters

`-node {<nodename>|local}` - Node

If you specify this parameter, the command will close all the opened CIFS files on the specified node.

`-vserver <vserver name>` - Vserver

If you specify this parameter, the command will close all the opened CIFS files on the specified CIFS-enabled Vserver.

`-file-id <integer>` - File ID

If you specify this parameter, the command will close the opened CIFS file that matches the specified file ID.

`[-connection-id <integer>]` - Connection ID

If you specify this parameter, the command will close all the opened CIFS files connected on the specified connection ID.

`[-session-id <integer>]` - Session ID

If you specify this parameter, the command will close all the opened CIFS files connected on the specified session ID.

Examples

The following example closes all the opened CIFS files that are connected to the data LIFs of Vserver vs1 on the node node1 with the connection-id 1:

```
cluster1::> vserver cifs session file close -node node1 -vserver vs1
-connection-id 1
5 entries were acted on.
```

The following example closes all the opened CIFS files on the node node1 with the file-id 1, connection-id 1 and the session-id 1:

```
cluster1::> vserver cifs session file close -node node1 -file-id 1
-connection-id 1 -session-id 1
2 entries were acted on.
```

vserver cifs session file show

Display opened CIFS files

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

The `vserver cifs session file show` command displays information about all open CIFS files. The command output depends on the parameter or parameters specified with the command. If you do not specify any parameters, the command displays the following information about all open CIFS files:

- Node name
- Vserver name
- CIFS connection ID
- CIFS session ID
- CIFS file ID
- CIFS file type
- CIFS file open mode
- CIFS file hosting volume
- CIFS share name
- CIFS file path
- Continuously available protection level

```
You can specify additional parameters to display only information that
matches those parameters. For example, to display information only about
CIFS files opened on connection ID 2012, run the command with the `-
connection-id parameter set to ` 2012.
```

Parameters

{ [-fields <fieldname>,…]

If you specify this parameter, the command only displays the fields that you specify.

| [-instance] }

If you specify this parameter, the command displays detailed information about matching open CIFS files.

[-node {<nodename>|local}] - Node

If you specify this parameter, the command displays information about the open CIFS files on the specified node.

[-vserver <vserver name>] - Vserver

If you specify this parameter, the command displays information about open CIFS files on the specified CIFS-enabled Vserver.

[-file-id <integer>] - File ID

If you specify this parameter, the command displays information about the open CIFS file that match the specified file ID.

[-connection-id <integer>] - Connection ID

If you specify this parameter, the command displays information about open CIFS files that are opened on the specified connection ID.

[-session-id <integer>] - Session ID

If you specify this parameter, the command displays information about the CIFS file that are opened on the specified session ID.

[-connection-count <integer>] - Connection Count

If you specify this parameter, the command displays information about CIFS files opened through a session that have the specified number of CIFS connections.

[-file-type <CIFS File Type>] - File Type

If you specify this parameter, the command displays information about opened CIFS files that are of the specified file type. The file type can be any of these: Regular, Symlink, Stream, or Directory.

[-open-mode <CIFS Open Mode>] - Open Mode

If you specify this parameter, the command displays information about CIFS files that are opened with the specified mode. The open mode can include one or more of the following:

- R - This property specifies that the file is opened for read.
- W - This property specifies that the file is opened for write.
- D - This property specifies that the file is opened for delete.

The open mode can have multiple values specified as a list with no commas.

[-hosting-aggregate <aggregate name>] - Aggregate Hosting File

If you specify this parameter, the command displays information about open CIFS files that reside on the specified aggregate.

[-hosting-volume <volume name>] - Volume Hosting File

If you specify this parameter, the command displays information about open CIFS files that reside on the specified volume.

[-share <Share>] - CIFS Share

If you specify this parameter, the command displays information about CIFS files that are opened over the specified CIFS share.

[-path <text>] - Path from CIFS Share

If you specify this parameter, the command displays information about open CIFS files that match the specified CIFS file path.

[-share-mode <CIFS Open Mode>] - Share Mode

If you specify this parameter, the command displays information about open CIFS files that are opened with the specified share mode. The share mode can include one or more of the following:

- R - This property specifies that the file is shared for read.
- W - This property specifies that the file is shared for write.
- D - This property specifies that the file is shared for delete.

The share mode can have multiple values specified as a list with no commas.

[-range-locks <integer>] - Range Locks

If you specify this parameter, the command displays information about open CIFS files that have the specified number of range locks.

[-continuously-available <CIFS Open File Protection>] - Continuously Available

If you specify this parameter, the command displays information about open CIFS files with or without continuously available protection. The open files are "continuously available" if they are opened from an SMB 3 client through a share with the "continuously_available" property set. These open files are capable of non-disruptively recovering from takeover and giveback as well as general aggregate relocation between partners in a high-availability relationship. Streams opened through a continuously available share are permitted, but are not currently made continuously available. Directories may be opened through a continuously available share, but, by design, will not appear continuously available as clients do not open them that way. These protection levels are applicable to the files on read/write volumes residing on storage failover aggregates.

The continuously available status can be one of the following:

- No - The open file is not continuously available.
- Yes - The open file is continuously available.

[-reconnected <text>] - Reconnected

If you specify this parameter, the command displays information about open CIFS files that have the specified reconnected state. The reconnected state can be one of the following:

- No - The open file is not reconnected.
- Yes - The open file is reconnected.

[-flexgroup-msid <integer>] - FlexGroup MSID

If you specify this parameter, the command displays information about open CIFS files that reside on the volume within the FlexGroup with the specified MSID..

Examples

The following example displays information about all open CIFS files:

```
cluster1::> vserver cifs session file show

Node:       node1
Vserver:    vs1
Connection: 2192
Session:    1
Connection Count: 4
File    File      Open Hosting                                  Continuously
ID      Type      Mode Volume          Share                    Available
------- --------- ---- --------------- ---------------------- ------------
7       Regular   rw   rootvs1         rootca                 Yes
Path: \win8b8.txt
```

The following example displays information about a CIFS file with file-id 7.

```
cluster1::> vserver cifs session file show -file-id 7 -instance
Node: node1
               Vserver: vs1
               File ID: 7
         Connection ID: 2192
            Session ID: 1
      Connection count: 4
             File Type: Regular
             Open Mode: rw
Aggregate Hosting File: aggr1
   Volume Hosting File: rootvs1
           CIFS Share: rootca
  Path from CIFS Share: \win8b8.txt
           Share Mode: rd
          Range Locks: 0
Continuously Available: Yes
          Reconnected: No
```

vserver cifs share create

Create a CIFS share

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

The `vserver cifs share create` command creates a CIFS share.

Parameters

-vserver <vserver name> - Vserver

This parameter specifies the CIFS-enabled Vserver on which you want to create a CIFS share.

-share-name <Share> - Share

This parameter specifies the name of the CIFS share that you want to create. A share name can be up to 80 characters long. If this is a home directory share (designated as such by specifying the *homedirectory* on the `-share-properties` parameter), you can include %w (Windows user name), %u (UNIX user name) and %d (Windows domain name) variables in any combination with this parameter to generate shares dynamically, with the resultant share names based on the authenticating user's Windows user name, UNIX user name, and/or Windows domain name. If the share is used by administrators to connect to other users' home directory (the option is-home-dirs-access-for-admin-enabled is set to true) or by a user to connect to other users' home directory (the option is-home-dirs-access-for-public-enabled is set to true) , the dynamic share pattern must be preceded by a tilde (~).

-path <text> - Path

This parameter specifies the path to the CIFS share. This path must exist in a volume. A directory path name can be up to 256 characters long. If there is a space in the path name, you must enclose the entire string in quotation marks (for example, "/new volume/mount here"). If this is a home directory share as specified by value of home directory on the `-share-properties` parameter, you can make the path name dynamic by specifying the %w (Windows user name), %u (UNIX user name), or %d (domain name) variables or any of their combination as a part of the value of this parameter.

[-share-properties <share properties>,…] - Share Properties

This optional parameter specifies a list of properties for the share. The list can include one or more of the following:

- homedirectory - This property specifies that the share and path names are dynamic. Specify this value for a home directory share. In a home directory share, Data ONTAP can dynamically generate the share's name and path by substituting %w, %u, and %d variables with the corresponding Windows user name, UNIX user name, and domain, respectively, specified as the value of the `-share-name` and `-path` parameters. For instance, if a dynamic share is defined with a name of *%d%w_* , a user logged on as barbara from a domain named *FIN* sees the share as *FIN_barbara* . Using the *homedirectory* value specifies that the share and path names are dynamically expanded. This property cannot be added or removed after share creation.
- oplocks - This property specifies that the share uses opportunistic locks, also known as client-side caching. Oplocks are enabled on shares by default; however, some applications do not work well when oplocks are enabled. In particular, database applications such as Microsoft Access are vulnerable to corruption when oplocks are enabled. An advantage of shares is that a single path can be shared multiple times, with each share having different properties. For instance, if a path named /dept/finance contains both a database and other types of files, you can create two shares to it, one with oplocks disabled for safe database access and one with oplocks enabled for client-side caching.
- browsable - This property allows Windows clients to browse the share. This is the default initial property for all shares.
- showsnapshot - This property specifies that Snapshot copies can be viewed and traversed by clients.
- changenotify - This property specifies that the share supports ChangeNotify requests. This is a default initial property for all shares.
- attributecache - This property enables the file attribute caching on the CIFS share in order to provide faster access of attributes over SMB 1.0.

For certain workloads, stale file attribute data could be delivered to a client.

- continuously-available - This property permits SMB clients that support it to open files in a persistent manner. Files opened this way are protected from disruptive events, such as failover and giveback. This option is not supported for FlexGroups or workgroup CIFS servers.
- branchcache - This property specifies that the share allows clients to request BranchCache hashes on the files within this share. This option is useful only if you specify *per-share* as the operating mode in the CIFS BranchCache configuration, and also specify the *"oplocks"* share property.
- access-based-enumeration - This property specifies that Access Based Enumeration is enabled on this share. ABE-filtered shared folders are visible to a user based on that individual user's access rights, preventing the display of folders or other shared resources that the user does not have rights to access.
- namespace-caching - This property specifies that the SMB clients connecting to this share can cache the directory enumeration results returned by the CIFS servers.
- encrypt-data - This property specifies that SMB encryption must be used when accessing this share. Clients that do not support encryption will not be able to access this share.
- show-previous-versions - This property specifies that the previous version can be viewed and restored from the client. This property is enabled by default.

[-symlink-properties {enable|hide|read-only|symlinks|symlinks-and-widelinks|disable|no-strict-security}] - Symlink Properties

This optional parameter specifies how the storage system presents UNIX symbolic links (symlinks) to CIFS clients. The default value for this parameter is "symlinks". The list can include one or more of the following:

- enable (DEPRECATED*) - This property enables both local symlinks and wide links for read-write access. DFS advertisements are generated for both local symlinks and wide links even if the CIFS option `-is-advertise-dfs-enabled` is set to false.
- hide (DEPRECATED*) - This property hides symlinks. DFS advertisements are generated if the CIFS option `-is-advertise-dfs-enabled` is set to true.
- read-only (DEPRECATED*) - This property enables symlinks for read-only access.
- symlinks - This property enables local symlinks for read-write access. DFS advertisements are not generated even if the CIFS option `-is-advertise-dfs-enabled` is set to true.
- symlinks-and-widelinks – This property enables both local symlinks and wide links for read-write access. DFS advertisements are generated for both local symlinks and wide links even if the CIFS option `-is-advertise-dfs-enabled` is set to false.
- disable - This property disables symlinks and wide links. DFS advertisements are not generated even if the CIFS option `-is-advertise-dfs-enabled` is set to true.
- no-strict-security - This property enables clients to follow symlinks outside share boundaries.

* The *enable* , *hide* , and *read-only* parameters are deprecated and may be removed in a future release of Data ONTAP.

The no_strict_security setting does not apply to wide links.

[-file-umask <Octal Integer>] - File Mode Creation Mask

This optional parameter specifies the default UNIX umask for new files created on the share.

[-dir-umask <Octal Integer>] - Directory Mode Creation Mask

This optional parameter specifies the default UNIX umask for new directories created on the share.

[-comment <text>] - Share Comment

This optional parameter specifies a text comment for the share that is made available to Windows clients. The comment can be up to 256 characters long. If there is a space in the descriptive remark or the path, you must enclose the entire string in quotation marks (for example, "This is engineering's share.").

[-attribute-cache-ttl <[<integer>d][<integer>h][<integer>m][<integer>s]>] - File Attribute Cache Lifetime

This optional parameter specifies the lifetime for the attribute cache share property, which you specify as the value of the -share-properties parameter.

This value is useful only if you specify attributecache as a share property.

[-offline-files {none|manual|documents|programs}] - Offline Files

This optional parameter allows Windows clients to cache data on this share. The actual caching behavior depends upon the Windows client. The value can be one of the following:

- none - Disallows Windows clients from caching any files on this share.
- manual - Allows users on Windows clients to manually select files to be cached.
- documents - Allows Windows clients to cache user documents that are used by the user for offline access.
- programs - Allows Windows clients to cache programs that are used by the user for offline access and may use those files in an offline mode even if the share is available.

[-vscan-fileop-profile {no-scan|standard|strict|writes-only}] - Vscan File-Operations Profile

This optional parameter controls which operations trigger virus scans. The value can be one of the following:

- no-scan: Virus scans are never triggered for this share.
- standard: Virus scans can be triggered by open, close, and rename operations. This is the default profile.
- strict: Virus scans can be triggered by open, read, close, and rename operations.
- writes-only: Virus scans can be triggered only when a file that has been modified is closed.

[-max-connections-per-share <integer>] - Maximum Tree Connections on Share

This optional parameter specifies the maximum number of simultaneous connections on the new share. This limit is at the node level, not the Vserver or cluster level. The default for this parameter is 4294967295. The value 4294967295 indicates no limit. The allowed range for this parameter is (1 through 4294967295).

[-force-group-for-create <text>] - UNIX Group for File Create

This optional parameter specifies that all files that CIFS users create in a specific share belong to the same group (also called the "force-group"). The "force-group" must be a predefined group in the UNIX group database. This setting has no effect unless the security style of the volume is UNIX or mixed security style. If "force-group" has been specified for a share, the following becomes true for the share:

- Primary GID of the CIFS users who access this share is temporarily changed to the GID of the "force-

group".

- All files in this share that CIFS users create belong to the same "force-group", regardless of the primary GID of the file owner.

Examples

The following example creates a CIFS share named SALES_SHARE on a Vserver named vs1. The path to the share is /sales.

```
cluster1::> vserver cifs share create -vserver vs1 -share-name SALES_SHARE
-path /sales -symlink-properties enable
```

```
The following example creates a CIFS share named SALES_SHARE on a Vserver
named vs1. The path to the share is /sales and the share uses
opportunistic locks (client-side caching), the share can be browsed by
Windows clients, and a notification is generated when a change occurs.
```

```
cluster1::> vserver cifs share create -vserver vs1 -share-name SALE -share
-properties browsable,changenotify,oplocks, show-previous-versions
```

```
The following example creates a CIFS share named DOCUMENTS on a Vserver
named vs1. The path to the share is /documents and the share uses
opportunistic locks (client-side caching), a notification is generated
when a change occurs, and the share allows clients to ask for BranchCache
hashes for files in the share.
```

```
cluster1::> vserver cifs share create -vserver vs1 -share-name DOCUMENTS
path /documents -share-properties branchcache,changenotify,oplocks
```

```
The following example creates a CIFS share named DOCUMENTS on a Vserver
named vs1. The path to the share is /documents and the share uses
opportunistic locks (client-side caching), a notification is generated
when a change occurs, and the share allows clients to cache (client-side
caching) user documents on this share.
```

```
cluster1::> vserver cifs share create -vserver vs1 -share-name DOCUMENTS
-path /documents -share-properties changenotify,oplocks -offline-files
documents
```

The following example creates a home directory share on a Vserver named vs1. The path to the share has a %d and %w combination.

```
cluster1::> vserver cifs share create -share-name %d%w -path %d/%w -share
-properties homedirectory -vserver vs1
```

The following example creates a home directory share on a Vserver vs1 to be used with the home directory option s is-home-dirs-access-for-admin-enabled and/or is-home-dirs-access-for-public-enabled . The path to the share has a %d and %w combination.

```
cluster1::> vserver cifs share create -share-name ~%d~%w -path %d/%w
-share-properties homedirectory -vserver vs1
```

vserver cifs share delete

Delete a CIFS share

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

The `vserver cifs share delete` command deletes a CIFS share.

Parameters

`-vserver <vserver name>` - Vserver

This parameter specifies the Vserver from which you want to delete a CIFS share.

`-share-name <Share>` - Share

This parameter specifies the name of the CIFS share you want to delete.

Examples

The following example deletes a CIFS share named share1 from a Vserver named vs1.

```
cluster1::> vserver cifs share delete -vserver vs1  -share-name share1
```

vserver cifs share modify

Modify a CIFS share

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

The `vserver cifs share modify` command modifies a CIFS share.

Parameters

`-vserver <vserver name>` - Vserver

This parameter specifies the CIFS-enabled Vserver containing the CIFS share you want to modify.

`-share-name <Share>` - Share

This parameter specifies the name of the CIFS share that you want to create. A share name can be up to 80 characters long. If this is a home directory share (designated as such by specifying the *`homedirectory`* on the `-share-properties` parameter), you can include %w (Windows user name), %u (UNIX user name) and %d (Windows domain name) variables in any combination with this parameter to generate shares dynamically, with the resultant share names based on the authenticating user.s Windows user name, UNIX user name, and/or Windows domain name.

`[-path <text>]` - Path

This parameter specifies the path to the CIFS share. This path must exist in a volume. A directory path name can be up to 256 characters long. If there is a space in the path name, you must enclose the entire string in quotation marks (for example, "/new volume/mount here"). If this is a *`homedirectory`* share as specified by value of home directory on the `-share-properties` parameter, a dynamic path name must be specified using %w (Windows user name), %u (UNIX user name), or %d (domain name) variables or any of their combination as a part of the value of this parameter. If this is a *`continuously-available`* share as specified by value of continuously-available on the `-share-properties` parameter, the path must not be within a FlexGroup because this property is not supported for FlexGroups.

`[-symlink-properties {enable|hide|read-only|symlinks|symlinks-and-widelinks|disable|no-strict-security}]` - Symlink Properties

This optional parameter specifies how the storage system presents UNIX symbolic links (symlinks) to CIFS clients. The list can include one or more of the following:

- enable (DEPRECATED*) - This property enables both local symlinks and wide links for read-write access. DFS advertisements are generated for both local symlinks and wide links even if the CIFS option `-is-advertise-dfs-enabled` is set to false.
- hide (DEPRECATED*) - This property hides symlinks. DFS advertisements are generated if the CIFS option `-is-advertise-dfs-enabled` is set to true.
- read-only (DEPRECATED*) - This property enables symlinks for read-only access.
- symlinks - This property enables local symlinks for read-write access. DFS advertisements are not generated even if the CIFS option `-is-advertise-dfs-enabled` is set to true.
- symlinks-and-widelinks – This property enables both local symlinks and wide links for read-write access. DFS advertisements are generated for both local symlinks and wide links even if the CIFS option `-is-advertise-dfs-enabled` is set to false.
- disable - This property disables symlinks and wide links. DFS advertisements are not generated even if the CIFS option `-is-advertise-dfs-enabled` is set to true.
- no-strict-security - This property enables clients to follow symlinks outside share boundaries.

The read_only setting does not apply to wide links.

* The *enable* , *hide* , and *read-only* parameters are deprecated and may be removed in a future release of Data ONTAP.

The no_strict_security setting does not apply to wide links.

[-file-umask <Octal Integer>] - File Mode Creation Mask

This optional parameter specifies the default UNIX umask for new files created on the share.

[-dir-umask <Octal Integer>] - Directory Mode Creation Mask

This optional parameter specifies the default UNIX umask for new directories created on the share.

[-comment <text>] - Share Comment

This optional parameter specifies a text comment for the share that is made available to Windows clients. The comment can be up to 256 characters long. If there is a space in the descriptive remark or the path, you must enclose the entire string in quotation marks (for example, "This is engineering's share.").

[-attribute-cache-ttl <[<integer>d][<integer>h][<integer>m][<integer>s]>] - File Attribute Cache Lifetime

This optional parameter specifies the lifetime for the attribute cache share property, which you specify as the value of the -share-properties parameter.

This value is useful only if you specify attributecache as a share property.

[-offline-files {none|manual|documents|programs}] - Offline Files

This optional parameter allows Windows clients to cache data on this share.The actual caching behavior depends upon the Windows client. The value can be one of the following:

- none - Disallows Windows clients from caching any files on this share.
- manual - Allows users on Windows clients to manually select files to be cached.
- documents - Allows Windows clients to cache user documents that are used by the user for offline access.
- programs - Allows Windows clients to cache programs that are used by the user for offline access and may use those files in an offline mode even if the share is available.

[-vscan-fileop-profile {no-scan|standard|strict|writes-only}] - Vscan File-Operations Profile

This optional parameter controls which operations trigger virus scans. The value can be one of the following:

- no-scan: Virus scans are never triggered for this share.
- standard: Virus scans can be triggered by open, close, and rename operations. This is the default profile.
- strict: Virus scans can be triggered by open, read, close, and rename operations.
- writes-only: Virus scans can be triggered only when a file that has been modified is closed.

[-max-connections-per-share <integer>] - Maximum Tree Connections on Share

This optional parameter specifies a maximum number of simultaneous connections to the share. This limit is at the node level, not the Vserver or cluster level. The default for this parameter is 4294967295. The

value 4294967295 indicates no limit. The allowed range for this parameter is (1 through 4294967295).

[-force-group-for-create <text>] - UNIX Group for File Create

This optional parameter specifies that all files that CIFS users create in a specific share belong to the same group (also called the "force-group"). The "force-group" must be a predefined group in the UNIX group database. This setting has no effect unless the security style of the volume is UNIX or mixed security style. You can disable this option by passing a null string "".

Examples

The following example modifies a CIFS share named SALES_SHARE on a Vserver named vs1. The share uses opportunistic locks. The file mask is set to 644 and the directory mask to 777.

```
cluster1::> vserver cifs share modify -vserver vs1 -share-name SALES_SHARE
-symlink-properties hide -file-umask 644 -dir-umask 777
```

The following example modifies a CIFS share named DOCUMENTS on a Vserver named vs1. This triggers a virus scan on write-only files in the share.

```
cluster1::> vserver cifs share modify -vserver vs1 -share-name DOCUMENTS
-vscan-fileop-profile writes-only
```

The following example modifies a CIFS share named DOCUMENTS on a Vserver vs1. The share allows client to cache (client-side caching) user documents on this share.

```
cluster1::> vserver cifs share modify -vserver vs1 -share-name DOCUMENTS
-offline-files documents
```

The following example modifies a CIFS share named DOCUMENTS on a Vserver named vs1. The optional parameter "force-group-for-create" can be disabled by passing the null string as parameter to "force-group-for-create" option.

```
cluster1::> cifs share modify -vserver vs1 -share-name DOCUMENTS -force
-group-for-create ""
```

The following example modifies the symlink property of all the shares on all the Vserver to "enable".

```
cluster1::> vserver cifs share modify -vserver * -share-name * -symlink
-properties enable
```

vserver cifs share show

Display CIFS shares

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

The `vserver cifs share show` command displays information about CIFS shares. The command output depends on the parameter or parameters specified with the command. If you do not specify any parameters, the command displays the following information about all CIFS shares:

- Vserver name
- CIFS share name
- Path
- Share properties
- Comment

```
You can specify additional parameters to display only information that
matches those parameters. For example, to display information only about
CIFS shares that use dynamic shares, run the command with the `-share-
properties dynamicshare` parameter.
```

Parameters

{ [-fields <fieldname>,…]

If you specify this parameter, the command only displays the fields that you specify.

| [-shadowcopy]

If you specify this parameter, the command displays information only about CIFS shadow copy shares.

| [-umask]

If you specify this parameter, the command displays file and directory masks for CIFS shares.

| [-instance] }

If you specify this parameter, the command displays detailed information about all CIFS shares.

[-vserver <vserver name>] - Vserver

If you specify this parameter, the command displays information only about CIFS shares on the specified CIFS-enabled Vserver.

[-share-name <Share>] - Share

If you specify this parameter, the command displays information only about the CIFS share or shares that match the specified name.

[-cifs-server <NetBIOS>] - CIFS Server NetBIOS Name

If you specify this parameter, the command displays information only about the CIFS share or shares that use the CIFS-enabled Vserver with the specified CIFS server name.

[-path <text>] - Path

If you specify this parameter, the command displays information only about the CIFS share or shares that have the specified path.

[-share-properties <share properties>,…] - Share Properties

If you specify this parameter, the command displays information only about the CIFS share or shares that have the specified share properties.

[-symlink-properties {enable|hide|read-only|symlinks|symlinks-and-widelinks|disable|no-strict-security}] - Symlink Properties

If you specify this parameter, the command displays information only about the CIFS share or shares that have the specified symbolic link properties.

[-file-umask <Octal Integer>] - File Mode Creation Mask

If you specify this parameter, the command displays information only about the CIFS share or shares that use the specified file mask.

[-dir-umask <Octal Integer>] - Directory Mode Creation Mask

If you specify this parameter, the command displays information only about the CIFS share or shares that use the specified directory mask.

[-comment <text>] - Share Comment

If you specify this parameter, the command displays information only about the CIFS share or shares that have the specified comment.

[-acl <text>,…] - Share ACL

If you specify this parameter, the command displays information only about the CIFS share or shares that have the specified ACL.

[-attribute-cache-ttl <[<integer>d][<integer>h][<integer>m][<integer>s]>] - File Attribute Cache Lifetime

If you specify this parameter, the command displays information only about the CIFS share or shares that have the specified attribute-cache-ttl for attribute cache.

[-volume <volume name>] - Volume Name

If you specify this parameter, the command displays information only about the CIFS shares that are present in this volume.

[-offline-files {none|manual|documents|programs}] - Offline Files

If you specify this parameter, the command displays information only about the CIFS shares that have the specified Offline Files properties.

[-vscan-fileop-profile {no-scan|standard|strict|writes-only}] - Vscan File-Operations Profile

If you specify this parameter, the command displays information only about the CIFS shares that have the specified Vscan fileop profile.

[-max-connections-per-share <integer>] - Maximum Tree Connections on Share

If you specify this parameter, the command displays information only about the CIFS shares that have the specified maximum connections per share configured.

[-force-group-for-create <text>] - UNIX Group for File Create

This optional parameter displays information about the CIFS shares that have the specified "force-group" parameter configured.

Examples

The following example displays information about all CIFS shares:

```
cluster1::> vserver cifs share show
Vserver        Share         Path               Properties Comment  ACL
-------------- ------------- ------------------ ---------- -------- -
-----------
vs1            ROOTSHARE     /                  oplocks    Share    CNC \
                                                 browsable  mapped
Everyone /
                                                 changenoti to top   Full
                                                 fy         of       Control
                                                            Vserver
                                                            global
                                                            namespac
                                                            e
vs1            admin$        /                  browsable  -        -
vs1            c$            /                  oplocks    -
BUILTIN\Admi
                                                 browsable
nistrators /
                                                 changenoti          Full
                                                 fy                  Control
vs1            ipc$          /                  browsable  -        -
4 entries were displayed.
```

The following example displays information about a CIFS share named SALES_SHARE on a Vserver named vs1.

```
cluster1::> vserver cifs share show -vserver vs1 -share-name SALES_SHARE
                            Vserver: vs1
                              Share: SALES_SHARE
          CIFS Server NetBIOS Name: WINDATA
                               Path: /sales
                  Share Properties: oplocks
                                    browsable
                Symlink Properties: enable
           File Mode Creation Mask: -
      Directory Mode Creation Mask: -
                     Share Comment: -
                         Share ACL: Everyone / Full Control
     File Attribute Cache Lifetime: -
                     Offline Files: manual
     Vscan File-Operations Profile: standard
```

vserver cifs share access-control create

Create an access control list

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

The `vserver cifs share access-control create` command adds a user or group to a CIFS share's ACL.

Parameters

`-vserver <vserver name>` - Vserver

This parameter specifies the name of the Vserver containing the CIFS share.

`-share <Share>` - Share Name

This parameter specifies the name of the CIFS share.

`-user-or-group <TextNoCase>` - User/Group Name

This parameter specifies the user or group to add to the CIFS share's access control list. If you specify the user name, you must include the user's domain using the format "domain\username". The user-or-group parameter is case-insensitive text.

`[-user-group-type {windows|unix-user|unix-group}]` - User or Group Type

This parameter specifies the type of the user or group to add to the CIFS share's access control list. The default type is windows. The user-group-type can be one of the following:

- windows
- unix-user

- unix-group

-permission <access rights> - Access Type

This parameter specifies the permissions for the user or group. The permissions can be one of the following:

- No_access
- Read
- Change
- Full_Control

Examples

The following example adds the windows group "Everyone" with "Full_Control" permission to the access control list of the share "vol3".

```
vs1::> vserver cifs share access-control create -share vol3 -user-or-group
Everyone -user-group-type windows -permission Full_Control
```

The following example adds the unix-user "pcuser" and unix-group "daemon" with "read" permission to the access control list of the share "vol3".

```
vs1::> vserver cifs share access-control create -share vol3 -user-or-group
pcuser -user-group-type unix-user -permission read
        vs1::> vserver cifs share access-control create -share vol3 -user
-or-group daemon -user-group-type unix-group -permission read
```

vserver cifs share access-control delete

Delete an access control list

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

The `vserver cifs share access-control delete` command deletes a user or group from a CIFS share's ACL.

Parameters

-vserver <vserver name> - Vserver

This parameter specifies the name of the Vserver containing the CIFS share.

-share <Share> - Share Name

This parameter specifies the name of the CIFS share.

-user-or-group <TextNoCase> - User/Group Name

This parameter specifies the user or group to delete from the CIFS share's access control list. If you specify a user name, you must include the user's domain using the format "domain\username". The user-or-group parameter is case-insensitive text.

[-user-group-type {windows|unix-user|unix-group}] - User or Group Type

This parameter specifies the type of the user or group to delete from the CIFS share's access control list. The default type is windows. The user-group-type can be one of the following:

- windows
- unix-user
- unix-group

Examples

The following example deletes the group "Everyone" for the access control list of share "vol3".

```
vs1::> vserver cifs share access-control delete -share vol3 -user-or-group
Everyone
```

vserver cifs share access-control modify

Modify an access control list

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

The `vserver cifs share access-control modify` command modifies the permissions of a user or group in a CIFS share's ACL.

Parameters

-vserver <vserver name> - Vserver

This parameter specifies the name of the Vserver containing the CIFS share whose ACL you want to modify.

-share <Share> - Share Name

This parameter specifies the name of the CIFS share whose ACL you want to modify.

-user-or-group <TextNoCase> - User/Group Name

This parameter specifies the user or group to modify. If you specify the user name, you must include the user's domain using the format "domain\username". The user-or-group parameter is case-insensitive text.

[-user-group-type {windows|unix-user|unix-group}] - User or Group Type

This parameter specifies the type of the user or group to modify. The default type is windows. The user-group-type can be one of the following:

- windows
- unix-user
- unix-group

[-permission <access rights>] - Access Type

This parameter specifies the permissions for the user or group. The permissions can be one of the following:

- No_access
- Read
- Change
- Full_Control

Examples

The following example modifies the access control list for a share named "vol3". It changes the permission for the windows group "Everyone" to "Full_Control".

```
vs1::*> vserver cifs share access-control modify -share vol3 -user-or
-group Everyone -user-group-type windows -permission Full_Control
```

The following example modifies the access control list for a share named "vol3". It changes the permission for the unix-user "pcuser" and unix-group "daemon" to "change".

```
vs1::> vserver cifs share access-control modify -share vol3 -user-or-group
pcuser -user-group-type unix-user -permission change
        vs1::> vserver cifs share access-control modify -share vol3 -user
-or-group daemon -user-group-type unix-group -permission change
```

vserver cifs share access-control show

Display access control lists on CIFS shares

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

The `vserver cifs share access-control show` command displays the ACLs of CIFS shares.

Parameters

{ [-fields <fieldname>,…]

If you specify the `-fields <fieldname>, …` parameter, the command output also includes the specified field or fields. You can use '-fields ?' to display the fields to specify.

| [-instance] }

If you specify the `-instance` parameter, the command displays detailed information about all fields.

[-vserver <vserver name>] - Vserver

This optional parameter specifies the name of the Vserver containing the share for which you want to display the access control list.

[-share <Share>] - Share Name

This optional parameter specifies the name of the CIFS share for which you want to display the access control list.

[-user-or-group <TextNoCase>] - User/Group Name

If you specify this optional parameter, the command displays only access control lists for the CIFS shares that have ACLs matching the specified user or group.

[-user-group-type {windows|unix-user|unix-group}] - User or Group Type

If you specify this optional parameter, the command displays only access control lists for the CIFS shares that have ACLs matching the specified user-group-type. The user-group-type can be one of the following:

- windows
- unix-user
- unix-group

[-permission <access rights>] - Access Type

If you specify this optional parameter, the command displays only access control lists for the CIFS shares that have ACLs matching the specified permission. The permissions can be one of the following:

- No_access
- Read
- Change
- Full_Control

[-winsid <windows sid>] - Windows SID

If you specify this optional parameter, the command displays only access control lists for the CIFS shares that have ACLs matching the specified Windows SID.

[-access-mask <Hex Integer>] - Access mask

If you specify this optional parameter, the command displays only access control lists for the CIFS shares that have ACLs matching the specified access rights.

Examples

The following example displays all the ACLs for shares in Vserver vs1.

```
vs1::> vserver cifs share access-control show
               Share       User/Group                  User/Group  Access
Vserver        Name        Name                        Type
Permission
-------------- ----------- --------------------------- -----------
-----------
vs1            vol3        CIFSQA\administrator        windows     Read
vs1            vol3        Everyone                    windows
Full_Control
vs1            vol3        pcuser                      unix-user   Read
vs1            vol3        daemon                      unix-group  Read
```

vserver cifs share properties add

Add to the list of share properties

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

The `vserver cifs share properties add` command adds share properties to the list of share properties of an existing CIFS share. You can add one or more share properties. You can add additional share properties at any time by rerunning this command. Any share properties that you have previously specified will remain in effect and newly added properties are appended to the existing list of share properties.

Parameters

`-vserver <vserver name>` - Vserver

This parameter specifies the name of the Vserver containing the CIFS share whose share properties you want to add.

`-share-name <Share>` - Share

This parameter specifies the name of the CIFS share.

`-share-properties <share properties>,…` - Share Properties

This parameter specifies the list of share properties you want to add to the CIFS share. The share properties can be one or more of the following:

- oplocks - This property specifies that the share uses opportunistic locks, also known as client-side caching. This is a default initial property for all shares; however, some applications do not work well when oplocks are enabled. In particular, database applications such as Microsoft Access are vulnerable to corruption when oplocks are enabled. An advantage of shares is that a single path can be shared multiple times, with each share having different properties. For instance, if a path named *`/dept/finance`* contains both a database and other types of files, you can create two shares to it, one with oplocks disabled for safe database access and one with oplocks enabled for client-side caching.
- browsable - This property allows Windows clients to browse the share. This is a default initial property for all shares.

- showsnapshot - This property specifies that Snapshot copies can be viewed and traversed by clients.
- changenotify - This property specifies that the share supports ChangeNotify requests. This is a default initial property for all shares.
- attributecache - This property enables the file attribute caching on the CIFS share in order to provide faster access of attributes over SMB 1.0.

> For certain workloads, stale file attribute data could be delivered to a client.

- continuously-available - This property permits SMB clients that support it to open files in a persistent manner. Files opened this way are protected from disruptive events, such as failover and giveback. This option is not supported for FlexGroups or workgroup CIFS servers.
- branchcache - This property specifies that the share allows clients to request BranchCache hashes on the files within this share. This option is useful only if you specify "per-share" as the operating mode in the CIFS BranchCache configuration, and also specify the *"oplocks"* share property.
- access-based-enumeration - This property specifies that Access Based Enumeration(ABE) is enabled on this share. ABE-filtered shared folders are visible to a user based on that individual user's access rights, preventing the display of folders or other shared resources that the user does not have rights to access.
- namespace-caching - This property specifies that the SMB clients connecting to this share can cache the directory enumeration results returned by the CIFS servers.
- encrypt-data - This property specifies that SMB encryption must be used when accessing this share. Clients that do not support encryption will not be able to access this share.
- show-previous-versions - This property specifies that the previous version can be viewed and restored from the client. This property is enabled by default.

> The oplock, browsable, changenotify and show-previous-versions share properties are assigned to a share by default. If you have removed them from a share, you can use the vserver cifs share properties add command to add these properties to the share.

Examples

The following example adds the "showsnapshot" and "changenotify" properties to a share named "sh1".

```
cluster1::> vserver cifs share properties add -vserver vs1 -share-name sh1
-share-properties showsnapshot,changenotify
```

vserver cifs share properties remove

Remove from the list of share properties

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

The `vserver cifs share properties remove` command removes share properties from the list of share properties of an existing CIFS share. You can remove one or more share properties. You can remove additional share properties at any time by rerunning this command. Any existing share properties that you do

not remove remain in effect.

Parameters

-vserver <vserver name> - Vserver

This parameter specifies the name of the Vserver containing the CIFS share whose share properties you want to remove.

-share-name <Share> - Share

This parameter specifies the name of the CIFS share.

-share-properties <share properties>,… - Share Properties

This parameter specifies the list of share properties you want to remove from the CIFS share. The share properties can be one or more of the following:

- oplocks - This property specifies that the share uses opportunistic locks, also known as client-side caching. Oplocks are enabled on shares by default; however, some applications do not work well when oplocks are enabled. In particular, database applications such as Microsoft Access are vulnerable to corruption when oplocks are enabled. An advantage of shares is that a single path can be shared multiple times, with each share having different properties. For instance, if a path named *`/dept/finance`* contains both a database and other types of files, you can create two shares to it, one with oplocks disabled for safe database access and one with oplocks enabled for client-side caching.
- browsable - This property allows Windows clients to browse the share.
- showsnapshot - This property specifies that Snapshot copies can be viewed and traversed by clients.
- changenotify - This property specifies that the share supports ChangeNotify requests. This is a default initial property for all shares.
- attributecache - This property enables the file attribute caching on the CIFS share in order to provide faster access of attributes over SMB 1.0.

  For certain workloads, stale file attribute data could be delivered to a client.

- continuously-available - This property permits SMB clients that support it to open files in a persistent manner. Files opened this way are protected from disruptive events, such as failover and giveback. This option is not supported for FlexGroups or workgroup CIFS servers.
- branchcache - This property specifies that the share allows clients to request BranchCache hashes on the files within this share. This option is useful only if you specify "per-share" as the operating mode in the CIFS BranchCache configuration, and also specify the *`"oplocks"`* share property.
- access-based-enumeration - This property specifies that Access Based Enumeration(ABE) is enabled on this share. ABE-filtered shared folders are visible to a user based on that individual user’s access rights, preventing the display of folders or other shared resources that the user does not have rights to access.
- namespace-caching - This property specifies that the SMB clients connecting to this share can cache the directory enumeration results returned by the CIFS servers.
- encrypt-data - This property specifies that SMB encryption must be used when accessing this share. Clients that do not support encryption will not be able to access this share.
- show-previous-versions - This property specifies that the previous version can be viewed and restored from the client. This property is enabled by default.

Examples

The following example removes "showsnapshot" and "changenotify" properties to a share named "sh1".

```
cluster1::> vserver cifs share properties remove -vserver vs1 -share-name
sh1 -share-properties showsnapshot,changenotify
```

vserver cifs share properties show

Display share properties

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

The `vserver cifs share properties show` command displays the CIFS share properties.

Parameters

{ [-fields <fieldname>,…]

If you specify the `-fields <fieldname>, …` parameter, the command output also includes the specified field or fields. You can use '-fields ?' to display the fields to specify.

| [-instance] }

If you specify the `-instance` parameter, the command displays detailed information about all fields.

[-vserver <vserver name>] - Vserver

This optional parameter specifies the name of the Vserver containing the CIFS share for which you want to display share properties.

[-share-name <Share>] - Share

If you specify this parameter, the command displays share properties only for the CIFS share that you specify.

[-share-properties <share properties>,…] - Share Properties

If you specify this parameter, the command displays share properties only for CIFS shares using the properties you specify. The share properties can be one or more of the following:

- homedirectory - This property specifies that the share and path names are dynamic. Specify this value for a home directory share. In a home directory share, the share's name and path can be generated by substituting %w and %d variables with the corresponding user's name and domain, respectively, specified as the value of the `-share-name` and `-path` parameters. For instance, if a dynamic share is defined with a name of `%d%w_` , a user logged on as *`barbara`* from a domain named *`FIN`* sees the share as *`FIN_barbara`* . Using the homedirectory value specifies that the share and path names are dynamically expanded.
- oplocks - This property specifies that the share uses opportunistic locks, also known as client-side caching.
- browsable - This property allows Windows clients to browse the share.

- showsnapshot - This property specifies that Snapshot copies can be viewed and traversed by clients.
- changenotify - This property specifies that the share supports Change Notify requests.
- attributecache - This property enables the file attribute caching on the CIFS share in order to provide faster access of attributes over SMB 1.0.

  For certain workloads, stale file attribute data could be delivered to a client.

- continuously-available - This property permits SMB clients that support it to open files in a persistent manner. Files opened this way are protected from disruptive events, such as failover and giveback. This attribute is not supported for FlexGroups and workgroup CIFS servers.
- branchcache - This property specifies that the share allows clients to request BranchCache hashes on the files within this share. This option is useful only if you specify "per-share" as the operating mode in the CIFS BranchCache configuration, and also specify the *"oplocks"* share property.
- shadowcopy - This property specifies that the share is pointing to a shadow copy. This attribute cannot be added nor removed from a share.
- access-based-enumeration - This property specifies that Access Based Enumeration is enabled on this share. ABE-filtered shared folders are visible to a user based on that individual user's access rights, preventing the display of folders or other shared resources that the user does not have rights to access.
- namespace-caching - This property specifies that the SMB clients connecting to this share can cache the directory enumeration results returned by the CIFS servers.
- encrypt-data - This property specifies that SMB encryption must be used when accessing this share. Clients that do not support encryption will not be able to access this share.
- show-previous-versions - This property specifies that the previous version can be viewed and restored from the client. This property is enabled by default.

Examples

The following example displays share properties for shares in Vserver vs1.

```
cluster1::> vserver cifs share properties show
Vserver          Share            Properties
---------------- ---------------- -----------------
vs1              abc              oplocks
                                  browsable
                                  changenotify
                                  show-previous-versions
vs1              admin$           browsable
vs1              ipc$             browsable
vs1              sh1              oplocks
                                  browsable
                                  changenotify
                                  show-previous-versions
4 entries were displayed.
```

vserver cifs superuser create

Adds superuser permissions to a CIFS account

Availability: This command is available to *cluster* and *Vserver* administrators at the *advanced* privilege level.

Description

The `vserver cifs superuser create` command elevates the privileges of the specified domain account in this Vserver to superuser. With superuser privileges, Data ONTAP bypasses some of the security checks. This command is not supported for workgroup CIFS servers.

Parameters

`-vserver <vserver name>` - Vserver (privilege: advanced)

Vserver name.

`-domain <CIFS domain>` - Domain (privilege: advanced)

The domain name of accountname.

`-accountname <CIFS account>` - User (privilege: advanced)

The domain account to which you want to give superuser privileges.

Examples

The following example shows how to elevate ExampleUser in EXAMPLE domain to superuser for a Vserver vs1.

```
vs1::> vserver cifs superuser create -domain EXAMPLE -accountname
ExampleUser -vserver vs1
```

vserver cifs superuser delete

Deletes superuser permissions from a CIFS account

Availability: This command is available to *cluster* and *Vserver* administrators at the *advanced* privilege level.

Description

The `vserver cifs superuser delete` command removes the superuser privileges for the specified domain account in this Vserver. With superuser privileges, Data ONTAP bypasses some of the security checks.

Parameters

`-vserver <vserver name>` - Vserver (privilege: advanced)

Vserver name.

-domain <CIFS domain> - Domain (privilege: advanced)

The domain name of accountname.

-accountname <CIFS account> - User (privilege: advanced)

The domain account name you want to remove superuser privileges.

Examples

The following example shows how to remove superuser privileges for ExampleUser in EXAMPLE domain for a Vserver vs1.

```
vs1::> vserver cifs superuser delete -domain EXAMPLE -accountname
ExampleUser -vserver vs1
```

vserver cifs superuser show

Display superuser permissions for CIFS accounts

Availability: This command is available to *cluster* and *Vserver* administrators at the *advanced* privilege level.

Description

The `vserver cifs superuser show` command displays all account names with superuser privileges. The command output depends on the parameter or parameters specified with the command. If you do not specify any parameters, the command displays the following superuser information for all CIFS servers:

- Vserver name
- CIFS server NetBIOS name
- Domain
- Account Name

Parameters

{ [-fields <fieldname>,…]

If you specify the `-fields <fieldname>, …` parameter, the command output also includes the specified field or fields. You can use '-fields ?' to display the fields to specify.

| [-instance] }

If you specify the `-instance` parameter, the command displays detailed information about all fields.

[-vserver <vserver name>] - Vserver (privilege: advanced)

If you specify this parameter, the command displays superuser information of only the specified Vservers.

[-domain <CIFS domain>] - Domain (privilege: advanced)

If you specify this parameter, the command displays superuser information of only for accounts that are in the specified domain.

[-accountname <CIFS account>] - User (privilege: advanced)

If you specify this parameter, the command displays superuser information of only the CIFS servers with the specified superuser account.

[-cifs-server <NetBIOS>] - CIFS Server NetBIOS Name (privilege: advanced)

If you specify this parameter, the command displays superuser information of only the Vservers with specified CIFS server name.

Examples

The following example displays superuser information of all Vservers.

```
vs1::> vserver cifs superuser show

Vserver        CIFS Server     Domain          Account Name
-------------- --------------- --------------- ------------
vs1            SMB_SERVER1     CIFSDOMAIN      ADMINISTRATOR
vs2            SMB_SERVER2     CIFSDOMAIN      ADMINISTRATOR
```

vserver cifs symlink create

Create a symlink path mapping

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

The `vserver cifs symlink create` command creates a symbolic link mapping for CIFS. A mapping consists of a Vserver name, a UNIX (NFS) path, a CIFS share name, and a CIFS path. You can also specify a CIFS server name and whether the CIFS symbolic link is a local link, a free link (obsolete), or wide link. A local symbolic link maps to the local CIFS share. A free symbolic link can map anywhere on the local server. A wide symbolic link maps to any CIFS share on the network. If the target share is a Home Directory, then the `-home -directory` field must be set to true for correct processing.

Parameters

-vserver <vserver name> - Vserver

This parameter specifies the Vserver on which you want to create the mapping.

-unix-path <text> - UNIX Path

This parameter specifies the UNIX (NFS) path for the mapping.

> It must begin and end with a forward slash (/).

[-share-name <Share>] - CIFS Share

This parameter specifies the CIFS share for the mapping.

-cifs-path <TextNoCase> - CIFS Path

This parameter specifies the CIFS path for the mapping. Note that this value is specified by using a UNIX-style path.

> It must begin and end with a forward slash (/).

[-cifs-server <TextNoCase>] - Remote NetBIOS Server Name

This parameter specifies a new CIFS server DNS name, IP address, or NetBIOS name for the mapping.

[-locality {local|widelink}] - Local or Wide Symlink

This parameter specifies whether the CIFS symbolic link is a local link, a free link (obsolete), or wide link. A local symbolic link maps to the local CIFS share. A free symbolic link can map anywhere on the local server. A wide symbolic link maps to any CIFS share on the network. The default setting is `local` . The free link option is obsolete.

[-home-directory {true|false}] - Home Directory

This parameter specifies whether the target share is a home directory. The default value is false.

> This field must be set to true when the target share is a Home Directory for correct processing.

Examples

The following example creates a symbolic link mapping on a Vserver named vs1. It has the UNIX path /sales/, the CIFS share name SALES_SHARE, and the CIFS path /mycompany/sales/.

```
cluster1::> vserver cifs symlink create -vserver vs1
-unix-path /sales/ -share-name SALES_SHARE -cifs-path "/mycompany/sales/"
```

The following example creates a symbolic link mapping on a Vserver named vs1. It has the UNIX path /example/, the CIFS share name EXAMPLE_SHARE, the CIFS path /mycompany/example/, the CIFS server IP address, and is a wide link.

```
cluster1::> vserver cifs symlink create -vserver vs1 -unix-path /example/
-share-name EXAMPLE_SHARE
-cifs-path "/mycompany/example/" -cifs-server CIFSSERVER1 -locality
widelink
```

vserver cifs symlink delete

Delete a symlink path mapping

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

The `vserver cifs symlink delete` command deletes a symbolic link mapping for CIFS.

Parameters

`-vserver <vserver name>` - Vserver

This specifies the Vserver on which the symbolic link mapping is located.

`-unix-path <text>` - UNIX Path

This specifies the UNIX (NFS) path of the mapping that you want to delete.

Examples

The following example deletes a symbolic link mapping to a UNIX path /example/ from a Vserver named vs1:

```
cluster1::> vserver cifs symlink delete -vserver vs1 -unix-path /example/
```

vserver cifs symlink modify

Modify a symlink path mapping

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

The `vserver cifs symlink modify` command modifies the CIFS share name, CIFS path, CIFS server name, or locality of a symbolic link mapping. It can also be used to modify the value of `-home-directory` field.

Parameters

`-vserver <vserver name>` - Vserver

This parameter specifies the Vserver on which the symbolic link mapping is located.

`-unix-path <text>` - UNIX Path

This parameter specifies the UNIX (NFS) path of the mapping that you want to modify.

It must begin and end with a forward slash (/).

`[-share-name <Share>]` - CIFS Share

This parameter specifies a new CIFS share name for the mapping.

`[-cifs-path <TextNoCase>]` - CIFS Path

This parameter specifies a new CIFS path for the mapping. Note that this value is specified by using a UNIX-style path.

It must begin and end with a forward slash (/).

[-cifs-server <TextNoCase>] - Remote NetBIOS Server Name

This parameter specifies a new CIFS server DNS name, IP address, or NetBIOS name for the mapping.

[-locality {local|widelink}] - Local or Wide Symlink

This parameter specifies a new locality for the mapping. A local symbolic link maps to the local CIFS share. A free symbolic link can map anywhere on the local server. A wide symbolic link maps to any CIFS share on the network. The default setting is `local` . The free link option is obsolete.

[-home-directory {true|false}] - Home Directory

This parameter specifies whether the new target share is a home directory.

This field must be set to true when the target share is a Home Directory for correct processing.

Examples

The following example modifies the symbolic link mapping to a UNIX path /example/ on a Vserver named vs1. The mapping is modified to use the CIFS path /mycompany/example/.

```
cluster1::> vserver cifs symlink modify -vserver vs1 -unix-path /example/
-cifs-path "/mycompany/example/"
```

The following example modifies the symbolic link mapping to a UNIX path /example/ on a Vserver named vs1. The mapping is modified to use the CIFS share name EXAMPLE_SHARE, the CIFS path /mycompany/example/, on the CIFS server cifs.example.com, and to be a wide link.

```
cluster1::> vserver cifs symlink modify -vserver vs1 -unix-path /example/
-share-name EXAMPLE_SHARE -cifs-path "/mycompany/example/" -cifs-server
cifs.example.com
-locality widelink
```

vserver cifs symlink show

Show symlink path mappings

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

The `vserver cifs symlink show` command displays the following information about symbolic link mappings for CIFS:

- Vserver
- UNIX (NFS) path

- The DNS name, IP address, or NetBIOS name of the CIFS server
- CIFS share name
- CIFS path
- Whether the locality of the CIFS server is a local, free, or wide link. (A local symbolic link maps to the local CIFS share. A free symbolic link can map anywhere on the local server. A wide symbolic link maps to any CIFS share on the network. The free link option is deprecated and may be removed in a future release of Data ONTAP.)

Parameters

{ [-fields <fieldname>,…]

If you specify the -fields <fieldname>, … parameter, the command only displays the fields that you specify.

| [-instance] }

If you specify the -instance parameter, the command displays detailed information about all entries.

[-vserver <vserver name>] - Vserver

If you specify this parameter, the command displays information about symbolic link mappings on the specified Vserver.

[-unix-path <text>] - UNIX Path

If you specify this parameter, the command displays information only about the symbolic link mapping that uses the specified UNIX (NFS) path.

[-share-name <Share>] - CIFS Share

If you specify this parameter, the command displays information only about the symbolic link mapping or mappings that use the specified CIFS share.

[-cifs-path <TextNoCase>] - CIFS Path

If you specify this parameter, the command displays information only about the symbolic link mapping that uses the specified CIFS path.

[-cifs-server <TextNoCase>] - Remote NetBIOS Server Name

If you specify this parameter, the command displays information only about the symbolic link mapping that uses the specified CIFS server.

[-locality {local|widelink}] - Local or Wide Symlink

If you specify this parameter, the command displays information only about the symbolic link mappings that have the specified locality.

[-home-directory {true|false}] - Home Directory

If you specify this parameter, the command displays information only about the symbolic link mappings that have the target share as a home directory (if true) or as a static CIFS share (if false).

Examples

The following example displays information about all symbolic link mappings for CIFS:

```
cluster1::> vserver cifs symlink show
Vserver    Unix Path  CIFS Server         CIFS Share  CIFS Path
Locality
---------- ---------- ------------------- ----------- ------------------
--------
vs1        /hr/       192.0.2.160         HR_SHARE    /mycompany/hr/
widelink
vs1        /sales/    WINDATA             SALES_SHARE /mycompany/sales/
local
vs1        /web/      cifs.example.com    WEB_SHARE   /mycompany/web/
widelink
3 entries were displayed.
```

The following example displays information about all symbolic link mappings that are wide links:

```
cluster1::> vserver cifs symlink show -locality widelink
Vserver    Unix Path  CIFS Server         CIFS Share  CIFS Path
Locality
---------- ---------- ------------------- ----------- ---------------
--------
vs1        /hr/       192.0.2.160         HR_SHARE    /mycompany/hr/
widelink
vs1        /web/      cifs.example.com    WEB_SHARE   /mycompany/web/
widelink
2 entries were displayed.
```

vserver cifs users-and-groups remove-stale-records

Delete the Stale CIFS local users-and-groups records for the specified vserver

Availability: This command is available to *cluster* and *Vserver* administrators at the *advanced* privilege level.

Description

The `vserver cifs users-and-groups remove-stale-records` command removes Stale local users and groups entries associated with old CIFS server.

Parameters

`-vserver <vserver>` - Vserver (privilege: advanced)

The command deletes Stale local users and groups entries associated with the specified Vserver.

Examples

The following example displays the syntax of the command.

```
cluster1::*> vserver cifs users-and-groups remove-stale-records -vserver
vs1
```

vserver cifs users-and-groups update-names

Update the names of Active Directory users and groups

Availability: This command is available to *cluster* and *Vserver* administrators at the *advanced* privilege level.

Description

The `vserver cifs users-and-groups update-names` command updates the names of Active Directory users and groups that are registered in local databases on the cluster and reports the status of the update operations. This is done so that objects that were renamed in the Active Directory can be properly displayed and configured in the local databases.

Parameters

`-vserver <vserver name>` - Vserver (privilege: advanced)

If you specify this parameter, the command will only be performed within the scope of the Vserver that matches the specified Vserver name.

{ `[-display-failed-only {true|false}]` - Display Only Failures (privilege: advanced)

If you set this parameter to true, the command displays only the Active Directory users and groups that failed to update. If set to false, the command displays only the Active Directory users and groups that successfully updated.

| `[-suppress-all-output {true|false}]` - Suppress All Output (privilege: advanced) }

If you set this parameter to true, the command does not display information about the status of the updates of Active Directory users and groups. To display information about the status of the updates, set this parameter to false or do not specify this parameter in the command.

Examples

The following example updates the names of Active Directory users and groups associated with Vserver "vs1". In the last case, there is a dependent chain of names that needs to be updated.

```
cluster1::*> vserver cifs users-and-groups update-names -vserver vs1
Vserver:           vs1
   SID:               S-1-5-21-123456789-234565432-987654321-12345
   Domain:            EXAMPLE1
   Out-of-date Name:  dom_user1
   Updated Name:      dom_user2
   Status:            Successfully updated
Vserver:           vs1
   SID:               S-1-5-21-123456789-234565432-987654322-23456
   Domain:            EXAMPLE2
   Out-of-date Name:  dom_user1
   Updated Name:      dom_user2
   Status:            Successfully updated
Vserver:           vs1
   SID:               S-1-5-21-123456789-234565432-987654321-123456
   Domain:            EXAMPLE1
   Out-of-date Name:  dom_user3
   Updated Name:      dom_user4
   Status:            Successfully updated; also updated SID "S-1-5-21-
123456789-234565432-987654321-123457"
                      to name "dom_user5"; also updated SID "S-1-5-21-
123456789-234565432-987654321-123458"
                      to name "dom_user6"; also updated SID "S-1-5-21-
123456789-234565432-987654321-123459"
                      to name "dom_user7"; also updated SID "S-1-5-21-
123456789-234565432-987654321-123460"
                      to name "dom_user8"

The command completed successfully. 7 Active Directory objects have been
updated.
```

vserver cifs users-and-groups local-group add-members

Add members to a local group

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

The `vserver cifs users-and-groups local-group add-members` command adds members to a local group.

Parameters

-vserver <vserver name> - Vserver

This specifies the name of the Vserver.

-group-name <CIFS name> - Group Name

This specifies the name of the local group.

-member-names <CIFS name>,… - Names of Users or Active Directory Groups to be Added

This specifies the list of local users, Active Directory users, or Active Directory groups to be added to a particular local group.

Examples

The following example adds a local user "CIFS_SERVER\loc_usr1" and an Active Directory group "CIFS_SERVER\dom_grp2" to the local group "CIFS_SERVER\g1".

```
cluster1::> vserver cifs users-and-groups local-group add-members -vserver
vs1 -group-name CIFS_SERVER\g1 -member-names
CIFS_SERVER\loc_usr1,AD_DOMAIN\dom_grp2
```

vserver cifs users-and-groups local-group create

Create a local group

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

The `vserver cifs users-and-groups local-group create` command creates a local group and optionally sets the description of that local group. The group name must meet the following criteria:

- The group name length must not exceed 256 characters.
- The group name cannot be terminated by a period.
- The group name cannot include commas.
- The group name cannot include any of the following printable characters: ", /, \, [,], :, |, <, >, +, =, ;, ?, *, @
- The group name cannot include characters in the ASCII range 1-31, which are non-printable.

Parameters

-vserver <vserver name> - Vserver

This specifies the name of the Vserver.

-group-name <CIFS name> - Group Name

This specifies the name of the local group.

[-description <TextNoCase>] - Description

This specifies a description for this local group. If the description contains a space, enclose the parameter in quotation marks.

Examples

The following example creates a local group "CIFS_SERVER\g1" associated with Vserver "vs1".

```
cluster1::> vserver cifs users-and-groups local-group create -vserver vs1
-group-name CIFS_SERVER\g1
```

vserver cifs users-and-groups local-group delete

Delete a local group

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

The `vserver cifs users-and-groups local-group delete` command deletes a local group. Removing a local group removes its membership records.

Parameters

`-vserver <vserver name>` - Vserver

This specifies the name of the Vserver.

`-group-name <CIFS name>` - Group Name

This specifies the name of the local group to delete.

Examples

The following example deletes the local group "CIFS_SERVER\g1" associated with Vserver "vs1".

```
cluster1::> vserver cifs users-and-groups local-group delete -vserver vs1
-group-name CIFS_SERVER\g1
```

vserver cifs users-and-groups local-group modify

Modify a local group

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

The `vserver cifs users-and-groups local-group modify` command modifies the description of a local group.

Parameters

-vserver <vserver name> - Vserver

This specifies the name of the Vserver.

-group-name <CIFS name> - Group Name

This specifies the name of the local group.

[-description <TextNoCase>] - Description

This specifies a description for this local group. If the description contains a space, enclose the parameter in quotation marks.

Examples

The following example modifies the description of the local group "CIFS_SERVER\g1" associated with Vserver "vs1".

```
cluster1::> vserver cifs users-and-groups local-group modify -vserver vs1
-group-name CIFS_SERVER\g1 -description "Example Description"
```

vserver cifs users-and-groups local-group remove-members

Remove members from a local group

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

The `vserver cifs users-and-groups local-group remove-members` command removes members from a local group.

Parameters

-vserver <vserver name> - Vserver

This specifies the name of the Vserver.

-group-name <CIFS name> - Group Name

This specifies the name of the local group.

-member-names <CIFS name>,... - Names of Users or Active Directory Groups to be Removed

This specifies the list of local users, Active Directory users, or Active Directory groups to be removed from a particular local group.

Examples

The following example removes the local users "CIFS_SERVER\u1" and "CIFS_SERVER\u2" from the local group "CIFS_SERVER\g1".

```
cluster1::> vserver cifs users-and-groups local-group remove-members
-vserver vs1 -group-name CIFS_SERVER\g1 -member-names
CIFS_SERVER\u1,CIFS_SERVER\u2
```

vserver cifs users-and-groups local-group rename

Rename a local group

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

The `vserver cifs users-and-groups local-group rename` command renames a local group. The new group name must remain in the same domain as the old group name. The new group name must meet the following criteria:

- The group name length must not exceed 256 characters.
- The group name cannot be terminated by a period.
- The group name cannot include commas.
- The group name cannot include any of the following printable characters: ", /, \, [,], :, |, <, >, +, =, ;, ?, *, @
- The group name cannot include characters in the ASCII range 1-31, which are non-printable.

Parameters

`-vserver <vserver name>` - Vserver

This specifies the name of the Vserver.

`-group-name <CIFS name>` - Group Name

This specifies the local group's name.

`-new-group-name <CIFS name>` - New Group Name

This specifies the local group's new name.

Examples

The following example renames the local group "CIFS_SERVER\g_old" to "CIFS_SERVER\g_new" on Vserver "vs1".

```
cluster1::> vserver cifs users-and-groups local-group rename -group-name
CIFS_SERVER\g_old -new-group-name CIFS_SERVER\g_new -vserver vs1
```

vserver cifs users-and-groups local-group show-members

Display local groups' members

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

The `vserver cifs users-and-groups local-group show-members` command displays members of a local group. The members can be local or Active Directory users or groups.

Parameters

{ [-fields <fieldname>,…]

If you specify the `-fields <fieldname>, …` parameter, the command output also includes the specified field or fields. You can use '-fields ?' to display the fields to specify.

| [-instance] }

If you specify the `-instance` parameter, the command displays detailed information about all fields.

[-vserver <vserver name>] - Vserver

If this parameter is specified, the command displays group members of local groups that match the specified Vserver name.

[-group-name <CIFS name>] - Group Name

If this parameter is specified, the command displays group members of local groups that match the specified group name.

[-member <CIFS name>,…] - Member Name

If this parameter is specified, the command displays group members that match the specified member name. The name can be that of a local user, Active Directory user, or Active Directory group.

Examples

The following example displays members of local groups associated with Vserver "vs1".

```
cluster1::> vserver cifs users-and-groups local-group show-members
-vserver vs1
Vserver        Group Name                    Members
-------------- ----------------------------- ------------------------
vs1            BUILTIN\Administrators        CIFS_SERVER\Administrator
                                             AD_DOMAIN\Domain Admins
                                             AD_DOMAIN\dom_grp1
               BUILTIN\Users                 AD_DOMAIN\Domain Users
                                             AD_DOMAIN\dom_usr1
               CIFS_SERVER\g1                CIFS_SERVER\u1
6 entries were displayed.
```

vserver cifs users-and-groups local-group show

Display local groups

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

The `vserver cifs users-and-groups local-group show` command displays local groups.

Parameters

{ [-fields <fieldname>,…]

If you specify the `-fields <fieldname>, …` parameter, the command output also includes the specified field or fields. You can use '-fields ?' to display the fields to specify.

| [-instance] }

If you specify the `-instance` parameter, the command displays detailed information about all fields.

[-vserver <vserver name>] - Vserver

If this parameter is specified, the command displays information only about local groups that match the specified Vserver name.

[-group-name <CIFS name>] - Group Name

If this parameter is specified, the command displays information only about local groups that match the specified group name.

[-description <TextNoCase>] - Description

If this parameter is specified, the command displays information only about local groups that match the specified description.

Examples

The following example displays all local groups associated with Vserver "vs1".

```
cluster1::> vserver cifs users-and-groups local-group show -vserver vs1
Vserver        Group Name                      Description
-------------- ------------------------------
----------------------------
vs1            BUILTIN\Administrators          Built-in Administrators
group
vs1            BUILTIN\Backup Operators        Backup Operators group
vs1            BUILTIN\Power Users             Restricted administrative
privileges
vs1            BUILTIN\Users                   All users
vs1            CIFS_SERVER\g1
vs1            CIFS_SERVER\g2
6 entries were displayed.
```

vserver cifs users-and-groups local-user create

Create a local user

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

The `vserver cifs users-and-groups local-user create` command creates a local user and optionally sets the attributes for that local user. The command prompts for the local user's password. + + + The user name must meet the following criteria: +

- The user name length must not exceed 20 characters.
- The user name cannot be terminated by a period.
- The user name cannot include commas.
- The user name cannot include any of the following printable characters: ", /, \, [,], :, |, <, >, +, =, ;, ?, *, @
- The user name cannot include characters in the ASCII range 1-31, which are non-printable.

The password must meet the following criteria:

- The password must be at least six characters in length.
- The password must not contain user account name.
- The password must contain characters from three of the following four categories:
- English uppercase characters (A through Z)
- English lowercase characters (a through z)
- Base 10 digits (0 through 9)
- Special characters: ~, !, @, #, 0, ^, , *, _, -, +, =, `, \, |, (,), [,], :, ;, ", ', <, >, ,, ., ?, /

Parameters

`-vserver <vserver name>` - Vserver

This specifies the name of the Vserver.

`-user-name <CIFS name>` - User Name

This specifies the user name.

`[-full-name <TextNoCase>]` - Full Name

This specifies the user's full name. If the full name contains a space, enclose the full name within double quotation marks.

`[-description <TextNoCase>]` - Description

This specifies a description for this local user. If the description contains a space, enclose the parameter in quotation marks.

`[-is-account-disabled {true|false}]` - Is Account Disabled

This specifies whether the user account is enabled or disabled. Set this parameter to true to disable the account. Set this parameter to false to enable the account. If this parameter is not specified, the default is to

enable the user account.

Examples

The following example creates a local user "CIFS_SERVER\u1" associated with Vserver "vs1".

```
cluster1::> vserver cifs users-and-groups local-user create -vserver vs1
-user-name CIFS_SERVER\u1

Enter the password:
Confirm the password:
```

vserver cifs users-and-groups local-user delete

Delete a local user

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

The `vserver cifs users-and-groups local-user delete` command deletes a local user. Upon deletion, all membership entries for this local user are deleted.

Parameters

`-vserver <vserver name>` - Vserver

This specifies the name of the Vserver.

`-user-name <CIFS name>` - User Name

This specifies the user name.

Examples

The following example deletes the local user "CIFS_SERVER\u1" associated with Vserver "vs1".

```
cluster1::> vserver cifs users-and-groups local-user show-membership
  (vserver cifs users-and-groups local-user show-membership)
Vserver        User Name                       Membership
-------------- ------------------------------- ------------------------
vs1            CIFS_SERVER\Administrator       BUILTIN\Administrators
               CIFS_SERVER\u1                  CIFS_SERVER\g1
2 entries were displayed.

cluster1::> vserver cifs users-and-groups local-user delete -vserver vs1
-user-name CIFS_SERVER\u1

cluster1::> vserver cifs users-and-groups local-user show-membership
Vserver        User Name                       Membership
-------------- ------------------------------- ------------------------
vs1            CIFS_SERVER\Administrator       BUILTIN\Administrators
```

vserver cifs users-and-groups local-user modify

Modify a local user

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

The `vserver cifs users-and-groups local-user modify` command modifies attributes of a local user.

Parameters

`-vserver <vserver name>` - Vserver

This specifies the name of the Vserver.

`-user-name <CIFS name>` - User Name

This specifies the user name.

`[-full-name <TextNoCase>]` - Full Name

This specifies the user's full name. If the full name contains a space in the name, enclose it within double quotation marks

`[-description <TextNoCase>]` - Description

This specifies a description for this local user. If the description contains a space, enclose the parameter in quotation marks.

`[-is-account-disabled {true|false}]` - Is Account Disabled

This specifies if the user account is enabled or disabled. Set this parameter to true to disable the account. Set this parameter to false to enable the account.

Examples

The following example modifies the full name of the local user "CIFS_SERVER\u1".

```
cluster1::> vserver cifs users-and-groups local-user modify -user-name
CIFS_SERVER\u1 -full-name "John Smith" -vserver vs1
```

vserver cifs users-and-groups local-user rename

Rename a local user

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

The `vserver cifs users-and-groups local-user rename` command renames a local user. The new user name must remain in the same domain as the old user name. + The new user name must meet the following criteria:

- The user name length must not exceed 20 characters.
- The user name cannot be terminated by a period.
- The user name cannot include commas.
- The user name cannot include any of the following printable characters: ", /, \, [,], :, |, <, >, +, =, ;, ?, *, @
- The user name cannot include characters in the ASCII range 1-31, which are non-printable.

Parameters

`-vserver <vserver name>` - Vserver

This specifies the name of the Vserver.

`-user-name <CIFS name>` - User Name

This specifies the user name.

`-new-user-name <CIFS name>` - New User Name

This specifies the new user name.

Examples

The following example renames the local user "CIFS_SERVER\u_old" to "CIFS_SERVER\u_new" on Vserver "vs1".

```
cluster1::> vserver cifs users-and-groups local-user rename -user-name
CIFS_SERVER\u_old -new-user-name CIFS_SERVER\u_new -vserver vs1
```

vserver cifs users-and-groups local-user set-password

Set a password for a local user

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

The `vserver cifs users-and-groups local-user set-password` command sets the password for the specified local user. The password must meet the following criteria:

- The password must be at least six characters in length.
- The password must not contain user account name.
- The password must contain characters from three of the following four categories:
- English uppercase characters (A through Z)
- English lowercase characters (a through z)
- Base 10 digits (0 through 9)
- Special characters: ~, !, @, #, 0, ^, , *, _, -, +, =, `, \, |, (,), [,], :, ;, ", ', <, >, ,, ., ?, /

Parameters

`-vserver <vserver name>` - Vserver

This specifies the name of the Vserver.

`-user-name <CIFS name>` - User Name

This specifies the user name.

Examples

The following example sets the password for the local user "CIFS_SERVER\u1" associated with Vserver "vs1".

```
cluster1::> vserver cifs users-and-groups local-user set-password -user
-name CIFS_SERVER\u1 -vserver vs1

Enter the new password:
Confirm the new password:
```

```
+ + The following example attempts to set the password but fails because
the password did not meet password complexity requirements.
```

```
cluster1::> vserver cifs users-and-groups local-user set-password -user
-name CIFS_SERVER\u1 -vserver vs1

Enter the new password:
Confirm the new password:

Error: command failed: The password does not meet the password complexity
       requirements. Refer to the man page for details.
```

vserver cifs users-and-groups local-user show-membership

Display local users' membership information

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

The `vserver cifs users-and-groups local-user show-membership` command displays the membership of local users.

Parameters

{ [-fields <fieldname>,…]

If you specify the `-fields <fieldname>, …` parameter, the command output also includes the specified field or fields. You can use '-fields ?' to display the fields to specify.

| [-instance] }

If you specify the `-instance` parameter, the command displays detailed information about all fields.

[-vserver <vserver name>] - Vserver

If this parameter is specified, the command displays local user membership information for local users that are associated with the specified Vserver.

[-user-name <CIFS name>] - User Name

If this parameter is specified, the command displays local user membership information for a local user that matches the specified user name.

[-membership <CIFS name>,…] - Local Group That This User is a Member of

If this parameter is specified, the command displays local user membership information for the local group of which this local user is a member.

Examples

The following example displays the membership information of all local users; user "CIFS_SERVER\Administrator" is a member of "BUILTIN\Administrators" group, and "CIFS_SERVER\u1" is a member of "CIFS_SERVER\g1" group.

```
cluster1::> vserver cifs users-and-groups local-user show-membership
Vserver        User Name                       Membership
-------------- ------------------------------- ------------------------
vs1            CIFS_SERVER\Administrator       BUILTIN\Administrators
               CIFS_SERVER\u1                  CIFS_SERVER\g1
2 entries were displayed.
```

vserver cifs users-and-groups local-user show

Display local users

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

The `vserver cifs users-and-groups local-user show` command displays local users and their attributes.

Parameters

{ [-fields <fieldname>,…]

If you specify the `-fields <fieldname>, …` parameter, the command output also includes the specified field or fields. You can use '-fields ?' to display the fields to specify.

| [-instance] }

If you specify the `-instance` parameter, the command displays detailed information about all fields.

[-vserver <vserver name>] - Vserver

If this parameter is specified, the command displays information only about local users that match the specified Vserver name.

[-user-name <CIFS name>] - User Name

If this parameter is specified, the command displays information only about local users that match the specified user name.

[-full-name <TextNoCase>] - Full Name

If this parameter is specified, the command displays information only about local users that match the specified full name.

[-description <TextNoCase>] - Description

If this parameter is specified, the command displays information only about local users that match the specified description.

[-is-account-disabled {true|false}] - Is Account Disabled

If this parameter is specified, the command displays information only about local users that match the status specified.

Examples

The following example displays information about all local users.

```
cluster1::> vserver cifs users-and-groups local-user show
Vserver      User Name                   Full Name            Description
------------ --------------------------- --------------------
-------------
vs1          CIFS_SERVER\Administrator   James Raynor         Built-in
administrator account
vs1          CIFS_SERVER\u1              Sarah Kerrigan
2 entries were displayed.
```

vserver cifs users-and-groups privilege add-privilege

Add local privileges to a user or group

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

The `vserver cifs users-and-groups privilege add-privilege` command adds privileges to a local or Active Directory user or group.

Parameters

`-vserver <vserver name>` - Vserver

This specifies the name of the Vserver.

`-user-or-group-name <CIFS name>` - User or Group Name

This specifies the name of the local or Active Directory user or group.

`-privileges <Privilege>,…` - Privileges

This specifies the list of privileges to be associated with this user or group.

Examples

The following example adds the privileges "SeTcbPrivilege" and "SeTakeOwnershipPrivilege" to the user "CIFS_SERVER\u1".

```
cluster1::> vserver cifs users-and-groups privilege add-privilege -vserver
vs1 -user-or-group-name CIFS_SERVER\u1 -privileges
SeTcbPrivilege,SeTakeOwnershipPrivilege
```

vserver cifs users-and-groups privilege remove-privilege

Remove privileges from a user or group

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

The `vserver cifs users-and-groups privilege remove-privilege` command removes privileges from a local or Active Directory user or group. This command creates a new or modifies an existing privilege entry.

Parameters

`-vserver <vserver name>` - Vserver

This specifies the name of the Vserver.

`-user-or-group-name <CIFS name>` - User or Group Name

This specifies the name of the local or Active Directory user or group.

`-privileges <Privilege>,…` - Privileges

This specifies the list of privileges to be removed from this user or group.

Examples

The following example removes the previously added "SeTcbPrivilege" and "SeTakeOwnershipPrivilege" privileges from the user "CIFS_SERVER\u1".

```
cluster1::> vserver cifs users-and-groups privilege show
Vserver        User or Group Name           Privileges
-------------- ---------------------------- -------------------
vs1            CIFS_SERVER\u1               SeTcbPrivilege
                                            SeTakeOwnershipPrivilege

cluster1::> vserver cifs users-and-groups privilege remove-privilege
-vserver vs1 -user-or-group-name CIFS_SERVER\u1 -privileges
SeTcbPrivilege,SeTakeOwnershipPrivilege

cluster1::> vserver cifs users-and-groups privilege show
Vserver        User or Group Name           Privileges
-------------- ---------------------------- -------------------
vs1            CIFS_SERVER\u1               -
```

```
+ + The following example removes "SeBackupPrivilege" from the group
"BUILTIN\Administrators".
```

```
cluster1::> vserver cifs users-and-groups privilege show
This table is currently empty.

cluster1::> vserver cifs users-and-groups privilege remove-privilege
-vserver vs1 -user-or-group-name BUILTIN\Administrators -privileges
SeBackupPrivilege

cluster1::> vserver cifs users-and-groups privilege show
Vserver        User or Group Name           Privileges
-------------- ---------------------------- -------------------
vs1            BUILTIN\Administrators       SeRestorePrivilege
                                            SeSecurityPrivilege
                                            SeTakeOwnershipPrivilege
```

vserver cifs users-and-groups privilege reset-privilege

Reset local privileges for a user or group

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

The `vserver cifs users-and-groups privilege reset-privilege` command resets privileges of a local or Active Directory user or group.

Parameters

`-vserver <vserver name>` - Vserver

This specifies the name of the Vserver.

`-user-or-group-name <CIFS name>` - User or Group Name

This specifies the name of the local or Active Directory user or group.

Examples

The following example resets the privileges for the local user "CIFS_SERVER\u1". This operation removes the privilege entry, if any, associated with the local user "CIFS_SERVER\u1".

```
cluster1::> vserver cifs users-and-groups privilege show
Vserver        User or Group Name           Privileges
-------------- ---------------------------- -------------------
vs1            CIFS_SERVER\u1               SeTakeOwnershipPrivilege
                                            SeRestorePrivilege

cluster1::> vserver cifs users-and-groups privilege reset-privilege
-vserver vs1 -user-or-group-name CIFS_SERVER\u1

cluster1::> vserver cifs users-and-groups privilege show
This table is currently empty.
```

```
+ + The following example resets the privileges for the group
"BUILTIN\Administrators", effectively removing the privilege entry.
```

```
cluster1::> vserver cifs users-and-groups privilege show
Vserver        User or Group Name           Privileges
-------------- ---------------------------- -------------------
vs1            BUILTIN\Administrators       SeRestorePrivilege
                                            SeSecurityPrivilege
                                            SeTakeOwnershipPrivilege

cluster1::> vserver cifs users-and-groups privilege reset-privilege
-vserver vs1 -user-or-group-name BUILTIN\Administrators

cluster1::> vserver cifs users-and-groups privilege show
This table is currently empty.
```

vserver cifs users-and-groups privilege show

Display privileges

Availability: This command is available to *cluster* and *Vserver* administrators at the *admin* privilege level.

Description

The `vserver cifs users-and-groups privilege show` command displays privilege overrides assigned to local or Active Directory users or groups.

Parameters

{ [-fields <fieldname>,…]

If you specify the `-fields <fieldname>, …` parameter, the command output also includes the specified

field or fields. You can use '-fields ?' to display the fields to specify.

| [-instance] }

If you specify the `-instance` parameter, the command displays detailed information about all fields.

[-vserver <vserver name>] - Vserver

If this parameter is specified, the command displays information only about privilege overrides assigned to local or Active Directory users or groups that match the specified Vserver name.

[-user-or-group-name <CIFS name>] - User or Group Name

If this parameter is specified, the command displays information only about privilege overrides assigned to local or Active Directory users or groups that match the specified user name or group name.

[-privileges <Privilege>,…] - Privileges

If this parameter is specified, the command displays information only about privilege overrides assigned to local or Active Directory users or groups that match the specified privileges.

Examples

The following example displays all privileges explicitly associated with local or Active Directory users or groups for Vserver "vs1".

```
cluster1::> vserver cifs users-and-groups privilege show -vserver vs1
Vserver        User or Group Name           Privileges
-------------- ---------------------------- -------------------
vs1            BUILTIN\Administrators       SeTakeOwnershipPrivilege
                                            SeRestorePrivilege
```