security login commands

ONTAP commands

NetApp
February 03, 2026

This PDF was generated from https://docs.netapp.com/us-en/ontap-cli-9111/security-login-create.html on February 03, 2026. Always check docs.netapp.com for the latest.

Table of Contents

security login commands . . . 1
- security login create . . . 1
  - Description . . . 1
  - Parameters . . . 1
  - Examples . . . 2
- security login delete . . . 4
  - Description . . . 4
  - Parameters . . . 4
  - Examples . . . 5
- security login expire-password . . . 5
  - Description . . . 5
  - Parameters . . . 5
  - Examples . . . 6
- security login lock . . . 7
  - Description . . . 7
  - Parameters . . . 7
  - Examples . . . 7
- security login modify . . . 7
  - Description . . . 7
  - Parameters . . . 7
  - Examples . . . 9
- security login password-prepare-to-downgrade . . . 10
  - Description . . . 10
  - Parameters . . . 10
  - Examples . . . 10
- security login password . . . 11
  - Description . . . 11
  - Parameters . . . 11
  - Examples . . . 11
- security login show . . . 12
  - Description . . . 12
  - Parameters . . . 12
  - Examples . . . 14
- security login unlock . . . 15
  - Description . . . 15
  - Parameters . . . 15
  - Examples . . . 16
- security login whoami . . . 16
  - Description . . . 16
  - Examples . . . 16
- security login banner modify . . . 16
  - Description . . . 16
  - Parameters . . . 16

Examples . . . 17
security login banner show . . . 17
Description . . . 17
Parameters . . . 17
Examples . . . 18
security login domain-tunnel create . . . 18
Description . . . 18
Parameters . . . 19
Examples . . . 19
Related Links . . . 19
security login domain-tunnel delete . . . 19
Description . . . 19
Examples . . . 19
Related Links . . . 19
security login domain-tunnel modify . . . 20
Description . . . 20
Parameters . . . 20
Examples . . . 20
Related Links . . . 20
security login domain-tunnel show . . . 20
Description . . . 20
Examples . . . 20
Related Links . . . 21
security login motd modify . . . 21
Description . . . 21
Parameters . . . 21
Examples . . . 22
security login motd show . . . 23
Description . . . 23
Parameters . . . 23
Examples . . . 23
security login publickey create . . . 24
Description . . . 24
Parameters . . . 24
Examples . . . 25
security login publickey delete . . . 25
Description . . . 25
Parameters . . . 25
Examples . . . 25
security login publickey load-from-uri . . . 26
Description . . . 26
Parameters . . . 26
Examples . . . 26
security login publickey modify . . . 27
Description . . . 27

Parameters . . . 27
Examples . . . 27
Related Links . . . 28
security login publickey show . . . 28
Description . . . 28
Parameters . . . 28
Examples . . . 29
security login rest-role create . . . 29
Description . . . 29
Parameters . . . 30
Examples . . . 30
Related Links . . . 31
security login rest-role delete . . . 31
Description . . . 31
Parameters . . . 31
Examples . . . 31
security login rest-role modify . . . 32
Description . . . 32
Parameters . . . 32
Examples . . . 32
security login rest-role show . . . 33
Description . . . 33
Parameters . . . 33
Examples . . . 34
security login rest-role expanded-rest-roles modify . . . 35
Description . . . 35
Parameters . . . 35
Examples . . . 35
security login rest-role expanded-rest-roles show . . . 35
Description . . . 35
Examples . . . 35
security login role create . . . 36
Description . . . 36
Parameters . . . 36
Examples . . . 36
Related Links . . . 36
security login role delete . . . 37
Description . . . 37
Parameters . . . 37
Examples . . . 37
security login role modify . . . 37
Description . . . 37
Parameters . . . 37
Examples . . . 38
security login role prepare-to-downgrade . . . 38

Description . . . 38
Examples . . . 38
security login role show-ontapi . . . 38
Description . . . 39
Parameters . . . 39
Examples . . . 39
security login role show . . . 41
Description . . . 41
Parameters . . . 41
Examples . . . 42
security login role config modify . . . 42
Description . . . 42
Parameters . . . 42
Examples . . . 44
security login role config reset . . . 44
Description . . . 44
Examples . . . 45
security login role config show . . . 45
Description . . . 45
Parameters . . . 46
Examples . . . 47

security login commands

security login create

Add a login method

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

Description

The `security login create` command creates a login method for the management utility. A login method consists of a user name, an application (access method), and an authentication method. A user name can be associated with multiple applications. It can optionally include an access-control role name. If an Active Directory, LDAP, or NIS group name is used, then the login method gives access to users belonging to the specified group. If the user is a member of multiple groups provisioned in the security login table, then the user will get access to a combined list of the commands authorized for the individual groups.

Parameters

`-vserver <vserver name>` - Vserver

This specifies the Vserver name of the login method.

`-user-or-group-name <text>` - User Name or Group Name

This specifies the user name or Active Directory, LDAP, or NIS group name of the login method. The Active Directory, LDAP, or NIS group name can be specified only with the *`domain`* or *`nsswitch`* authentication method and *`ontapi`* and *`ssh`* application. If the user is a member of multiple groups provisioned in the security login table, then the user will get access to a combined list of the commands authorized for the individual groups.

`-application <text>` - Application

This specifies the application of the login method. Possible values include amqp, console, http, ontapi, rsh, snmp, service-processor, ssh, and telnet.

Setting this parameter to *`service-processor`* grants the user access to the Service Processor (SP). Because the SP supports only password authentication, when you set this parameter to *`service-processor`* , you must also set the -authentication-method parameter to *`password`* . Vserver user accounts cannot access the SP. Therefore, you cannot use the -vserver parameter when you set this parameter to *`service-processor`* .

`-authentication-method <text>` - Authentication Method

This specifies the authentication method for login. Possible values include the following:

- cert - SSL certificate authentication
- community - SNMP community strings
- domain - Active Directory authentication
- nsswitch - LDAP or NIS authentication
- password - Password
- publickey - Public-key authentication

- usm - SNMP user security model
- saml - SAML authentication

[-remote-switch-ipaddress <IP Address>] - Remote Switch IP Address

This specifies the IP address of the remote switch. The remote switch could be a cluster switch monitored by cluster switch health monitor (CSHM) or a Fibre Channel (FC) switch monitored by MetroCluster health monitor (MCC-HM). This parameter is applicable only when the application is *snmp* and authentication method is *usm* (SNMP user security model).

-role <text> - Role Name

This specifies an access-control role name for the login method.

[-comment <text>] - Comment Text

This specifies comment text for the user account, for example, "Guest account". The maximum length is 128 characters.

[-is-ns-switch-group {yes|no}] - Whether Ns-switch Group

This specifies whether *user-or-group-name* is an LDAP or NIS group. Possible values are yes or no. Default value is no.

[-second-authentication-method {none|publickey|password|nsswitch}] - Second Authentication Method2

This specifies the authentication method for the login. It will be used as the second factor for authentication. Possible values include the following:

- password - Password
- publickey - Public-key authentication
- nsswitch - NIS or LDAP authentication
- none - default value

[-is-ldap-fastbind {yes|no}] - LDAP Fastbind Authentication

This flag specifies whether the authentication is LDAP fastbind or Not. Default:false

Examples

The following example illustrates how to create a login that has the user name *monitor* , the application *ssh* , the authentication method *password* , and the access-control role *guest* for Vserver *vs* :

```
cluster1::> security login create -vserver vs -user-or-group-name monitor
  -application ssh -authentication-method password -role guest
```

The following example illustrates how to create a login that has the user name *monitor* , the application *ontapi* , the authentication method *password* , and the access-control role *vsadmin* for Vserver *vs* :

```
cluster1::> security login create -vserver vs -user-or-group-name monitor
  -application ontapi -authentication-method password -role vsadmin
```

The following example illustrates how to create a login that has the user name *monitor* , the application *ssh* , the authentication method *publickey* , and the access-control role *guest* for Vserver *vs* :

```
cluster1::> security login create -vserver vs -user-or-group-name monitor
  -application ssh -authentication-method publickey -role guest
```

The following example illustrates how to create a login that has the user name *monitor* , the application *http* , the authentication method *cert* , and the access-control role *admin* for Vserver *vs* :

```
cluster1::> security login create -vserver vs -user-or-group-name monitor
  -application http -authentication-method cert -role admin
```

The following example illustrates how to create a login that has the Active Directory group name *adgroup* in *DOMAIN1* , the application *ssh* , the authentication method *domain* , and the access-control role *vsadmin* for Vserver *vs* :

```
cluster1::> security login create -vserver vs
  -user-or-group-name DOMAIN1\adgroup -application ssh
  -authentication-method domain -role vsadmin
```

The following example illustrates how to create a login that has a group name *nssgroup* in the LDAP or NIS server, the application *ontapi* , the authentication method *nsswitch* , and the access-control role *vsadmin* for Vserver *vs* . Here *is-ns-switch-group* must be set to *yes* :

```
cluster1::> security login create -vserver vs -user-or-group-name nssgroup
  -application ontapi -authentication-method nsswitch -role vsadmin
  -is-ns-switch-group yes
```

The following example illustrates how to create a login that has the user name *monitor* , the application *ssh* , the authentication method *password* , the second authentication method *publickey* and the access-control role *vsadmin* for Vserver *vs* :

```
cluster1::> security login create -vserver vs -user-or-group-name monitor
  -application ssh -authentication-method password
  -second-authentication-method publickey -role vsadmin
```

The following example illustrates how to create a login that has the user name *monitor* , the application *ssh* , the authentication method *password* , the second authentication method *none* and the access-control role *vsadmin* for Vserver *vs* :

```
cluster1::> security login create -vserver vs -user-or-group-name monitor
  -application ssh -authentication-method password
  -second-authentication-method none -role vsadmin
```

security login delete

Delete a login method

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

Description

The `security login delete` command deletes a login method.

Parameters

`-vserver <vserver name>` - Vserver

This optionally specifies the Vserver name of the login method.

`-user-or-group-name <text>` - User Name or Group Name

This specifies the user name or Active Directory, LDAP, or NIS group name of the login method that is to be deleted. A user name can be associated with multiple applications.

`-application <text>` - Application

This specifies the application of the login method. Possible values include amqp, console, http, ontapi, rsh, snmp, service-processor, ssh, and telnet.

`-authentication-method <text>` - Authentication Method

This specifies the authentication method of the login method. Possible values include the following:

- cert - SSL certificate authentication
- community - SNMP community strings
- domain - Active Directory authentication
- nsswitch - LDAP or NIS authentication
- password - Password
- publickey - Public-key authentication
- usm - SNMP user security model
- saml - SAML authentication

`[-remote-switch-ipaddress <IP Address>]` - Remote Switch IP Address

This specifies the IP address of the remote switch. The remote switch could be a cluster switch monitored by cluster switch health monitor (CSHM) or a Fibre Channel (FC) switch monitored by MetroCluster health monitor (MCC-HM). This parameter is applicable only when the application is *`snmp`* and authentication method is *`usm`* (SNMP user security model).

Examples

The following example illustrates how to delete a login that has the username *guest* , the application *ssh* , and the authentication method *password* for Vserver *vs* :

```
cluster1::> security login delete -user-or-group-name guest
  -application ssh -authentication-method password -vserver vs
```

The following example illustrates how to delete a login that has the username *guest* , the application *ontapi* , and the authentication method *cert* for Vserver *vs* :

```
cluster1::> security login delete -user-or-group-name guest
  -application ontapi -authentication-method cert -vserver vs
```

The following example illustrates how to delete a login that has the Active Directory group name *adgroup* in *DOMAIN1* , the application *ssh* , and the authentication method *domain* for Vserver *vs* :

```
cluster1::> security login delete -user-or-group-name DOMAIN1\adgroup
  -application ssh -authentication-method domain -vserver vs
```

The following example illustrates how to delete a login that has a group name *nssgroup* in the LDAP or NIS server, the application *ontapi* , and the authentication method *nsswitch* for Vserver *vs* :

```
cluster1::> security login delete -user-or-group-name nssgroup
  -application ontapi -authentication-method nsswitch -vserver vs
```

security login expire-password

Expire user's password

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

Description

The `security login expire-password` command expires a specified user account password, forcing the user to change the password upon next login.

Parameters

`-vserver <vserver name>` - Vserver

This optionally specifies the Vserver to which the user account belongs.

-username <text> - Username

This specifies the user name of the account whose password you want to expire.

[-hash-function {sha512|sha256}] - Password Hash Function

This optionally specifies the password-hashing algorithm used for encrypting the passwords that you want to expire. The supported values include are as follows:

- sha512 - Secure hash algorithm (512 bits)
- sha256 - Secure hash algorithm (256 bits)
- md5 - Message digest algorithm (128 bits)

[-lock-after <integer>] - Lock User Account After N days (privilege: advanced)

This optionally specifies the number of days after which the new password hash policy will be enforced. The enforcement will lock all user accounts that are still compliant with the provided hash alogrithm using `-hash -function` parameter.

Examples

The following command expires the password of the 'jdoe' user account which belongs to the 'vs1' Vserver.

```
cluster1::> security login expire-password -vserver vs1 -username jdoe
```

The following command expires all user account passwords that are encrypted with the MD5 hash function.

```
cluster1::> security login expire-password -vserver * -username * -hash
-function md5
```

The following command expires the password of any Vserver's user account named 'jdoe' that is encrypted with the MD5 hash function.

```
cluster1::> security login expire-password -vserver * -username jdoe -hash
-function md5
```

The following command expires the password of the 'vs1' Vserver user account named 'jdoe' that is encrypted with the MD5 hash function.

```
cluster1::> security login expire-password -vserver vs1 -username jdoe
-hash-function md5
```

The following command expires all user account passwords that are encrypted with the MD5 hash function and enforce the new password hash policy after 180 days.

```
cluster1::> security login expire-password -vserver * -username * -hash
-function md5 -lock-after 180
```

security login lock

Lock a user account with password authentication method

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

Description

The `security login lock` command locks a specified account, preventing it from accessing the management interface.

Parameters

`-vserver <vserver name>` - Vserver

This optionally specifies the Vserver to which the user account belongs.

`-username <text>` - Username

This specifies the user name of the account that is to be locked.

Examples

The following example locks a user account named 'jdoe' which belongs to the Vserver 'vs1'.

```
cluster1::> security login lock -vserver vs1 -username jdoe
```

security login modify

Modify a login method

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

Description

The `security login modify` command modifies the access-control role name of a login method. If the user is a member of multiple groups provisioned in the security login table, then the user will get access to a combined list of the commands authorized for the individual groups.

Parameters

`-vserver <vserver name>` - Vserver

This specifies the Vserver name of the login method.

-user-or-group-name <text> - User Name or Group Name

This specifies the user name, Active Directory, LDAP, or NIS group name of the login method that is to be modified. A user name can be associated with multiple applications. If the user is a member of multiple groups provisioned in the security login table, then the user will get access to a combined list of the commands authorized for the individual groups.

-application <text> - Application

This specifies the application of the login method. Possible values include amqp, console, http, ontapi, rsh, snmp, service-processor, ssh, and telnet.

-authentication-method <text> - Authentication Method

This specifies the authentication method of the login method. Possible values include the following:

- cert - SSL certificate authentication
- community - SNMP community strings
- domain - Active Directory authentication
- nsswitch - LDAP or NIS authentication
- password - Password
- publickey - Public-key authentication
- usm - SNMP user security model
- saml - SAML authentication

[-remote-switch-ipaddress <IP Address>] - Remote Switch IP Address

This specifies the IP address of the remote switch. The remote switch could be a cluster switch monitored by cluster switch health monitor (CSHM) or a Fibre Channel (FC) switch monitored by MetroCluster health monitor (MCC-HM). This parameter is applicable only when the application is *snmp* and authentication method is *usm* (SNMP user security model).

[-role <text>] - Role Name

This modifies the access-control role name for the login method.

[-comment <text>] - Comment Text

This specifies comment text for the user account, for example, "Guest account". The maximum length is 128 characters.

[-is-ns-switch-group {yes|no}] - Whether Ns-switch Group

This specifies if *user-or-group-name* is an LDAP or NIS group. Possible values are yes or no. Default value is no.

[-second-authentication-method {none|publickey|password|nsswitch}] - Second Authentication Method2

This specifies the authentication method for the login method. It will be used as the second factor for authentication. Possible values include the following:

- password - Password
- publickey - Public-key authentication
- nsswitch - NIS or LDAP authentication

- none - default value

[-is-ldap-fastbind {yes|no}] - LDAP Fastbind Authentication

This flag specifies whether modify is allowed or not when the authentication is LDAP fastbind.

Examples

The following example illustrates how to modify a login method that has the user name *guest* , the application *ontapi* , and the authentication method *password* to use the access-control role *guest* for Vserver *vs* :

```
cluster1::> security login modify -user-or-group-name guest
  -application ontapi -authentication-method password -role guest
  -vserver vs
```

The following example illustrates how to modify a login method that has the user name *guest* , the application *ssh* , and the authentication method *publickey* to use the access-control role *vsadmin* for Vserver *vs* :

```
cluster1::> security login modify -user-or-group-name guest
  -application ssh -authentication-method publickey -role vsadmin
  -vserver vs
```

The following example illustrates how to modify a login method that has the group name *nssgroup* , the application *ontapi* , and the authentication method *nsswitch* to use the access-control role *readonly* for Vserver *vs* . Here *is-ns-switch-group* must be set to *yes* :

```
cluster1::> security login modify -user-or-group-name nssgroup
  -application ontapi -authentication-method nsswitch -role readonly
  -vserver vs -is-ns-switch-group yes
```

The following example illustrates how to modify a login method that has the user name *guest* , the application *ssh* , and the authentication method *publickey* to use the second-authentication-method *password* for Vserver *vs* :

```
cluster1::> security login modify -user-or-group-name guest
  -application ssh -authentication-method publickey
  -second-authentication-method password -vserver vs
```

The following example illustrates how to modify a login method to have individual authentication methods that have the user name *guest* , the application *ssh* , and the authentication method *publickey* to use the second-authentication-method *none* for Vserver *vs* :

```
cluster1::> security login modify -user-or-group-name guest
  -application ssh -authentication-method publickey
  -second-authentication-method none -vserver vs
```

security login password-prepare-to-downgrade

Reset password features introduced in the Data ONTAP version

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

Description

If the password of the system administrator is not encrypted with an encryption type supported by releases earlier than ONTAP 9.0, this command prompts the administrator for a new password and encrypt it using a supported encryption type on each cluster or at each site in a MetroCluster configuration. In a MetroCluster configuration, this command must be run on both sites. The password for all other users are marked as "expired". This causes them to be re-encrypted using a compatible encryption type. The expired passwords are changed with an internally generated password. The administrator must change the passwords for all users before the users can login. The users are prompted to change their password upon login. This command disables the logging of unsuccessful login attempts. The command must be run by a user with the cluster admin role from a clustershell session on the console device. This user must be unlocked. If you fail to run this command, the revert process fails.

Parameters

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

This parameter specifies the Data ONTAP version that introduced the password feature set.

Examples

The following command disables the logging of unsuccessful login attempts.

```
cluster1::*> security login password prepare-to-downgrade -disable-feature
-set 8.3.1

         Warning: This command will disable the MOTD feature that prints
unsuccessful login attempts.
         Do you want to continue? {y|n}: y
cluster1::*>
```

The following command prompts system administrator to enter password and encrypt it with the hashing algorithm supported by releases earlier than Data ONTAP 9.0.

```
cluster1::*> security login password prepare-to-downgrade -disable-feature
-set 9.0.0
Warning: If your password is not encrypted with an encryption type
supported by
                releases earlier than Data ONTAP 9.0.0, this command will
prompt you
                for a new password and encrypt it using a supported
encryption type on
     each cluster or at each site in a MetroCluster configuration. In a
     MetroCluster configuration, this command must be run on both sites.
     The password for all other users are marked as "expired" and
     changed to an internally generated password. The administrator must
change
     the passwords for all users before the users can login. The users are
                prompted to change their password upon login.
        Do you want to continue? {y|n}:

        Enter a new password:
        Enter it again:

        cluster1::*>
```

security login password

Modify a password for a user

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

Description

The `security login password` command resets the password for a specified user. The command prompts you for the user's old and new password.

Parameters

`-vserver <vserver name>` - Vserver

This optionally specifies the Vserver name of the login method.

`-username <text>` - Username

This optionally specifies the user name whose password is to be changed. If you do not specify a user, the command defaults to the user name you are currently using.

Examples

The following command initiates a password change for the 'admin' user account of the 'vs' Vserver.

```
cluster1::> security login password -username admin -vserver vs
```

The following command initiates a password change for the 'vs' Vserver user account named 'admin'. The new password will be encrypted by using the SHA512 password-hashing algorithm.

```
cluster1::*> security login password -username admin -vserver vs -hash
-function sha512
```

The following command initiates a password change for the 'vs' Vserver user account named 'admin'. The new password will be encrypted by using the SHA256 password-hashing encryption algorithm.

```
cluster1::*> security login password -username admin -vserver vs -hash
-function sha256
```

security login show

Show user login methods

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

Description

The `security login show` command displays the following information about user login methods:

- User name
- Application (amqp, console, http, ontapi, rsh, snmp, service-processor, ssh, or telnet)
- Authentication method (community, password, publickey, or usm)
- Role name
- Whether the account is locked
- Whether the user name refers to *`nsswitch`* group
- Password hash function
- LDAP fastbind authentication

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

Displays the login methods that match the specified Vserver name.

[-user-or-group-name <text>] - User Name or Group Name

Displays the login methods that match this parameter value. Value can be a user name or Active Directory, LDAP, or NIS group name.

[-application <text>] - Application

Displays the login methods that match the specified application type. Possible values include amqp, console, http, ontapi, rsh, snmp, service-processor, ssh, and telnet.

[-authentication-method <text>] - Authentication Method

Displays the login methods that match the specified authentication method. Possible values include the following:

- cert - SSL certificate authentication
- community - SNMP community strings
- domain - Active Directory authentication
- nsswitch - LDAP or NIS authentication
- password - Password
- publickey - Public-key authentication
- usm - SNMP user security model
- saml - SAML authentication

[-remote-switch-ipaddress <IP Address>] - Remote Switch IP Address

Displays the login methods that match the specified IP address of the remote switch. The remote switch could be a cluster switch monitored by cluster switch health monitor (CSHM) or a Fibre Channel (FC) switch monitored by MetroCluster health monitor (MCC-HM). This parameter is applicable only when the application is *snmp* and authentication method is *usm* (SNMP user security model).

[-role <text>] - Role Name

Displays the login methods that match the specified role.

[-is-account-locked {yes|no}] - Account Locked

Displays the login methods that match the specified account lock status.

[-comment <text>] - Comment Text

Displays the login methods that match the specified comment text.

[-is-ns-switch-group {yes|no}] - Whether Ns-switch Group

This specifies whether *user-or-group-name* is an LDAP or NIS group. Possible values are yes or no.

[-hash-function {sha512|sha256}] - Password Hash Function (privilege: advanced)

Displays the login methods that match the specified password-hashing algorithm. Possible values are:

- sha512 - Secure hash algorithm (512 bits)
- sha256 - Secure hash algorithm (256 bits)

- md5 - Message digest algorithm (128 bits)

[-second-authentication-method {none|publickey|password|nsswitch}] - Second Authentication Method2

Displays the login methods that match the specified authentication method to be used as the second factor. Possible values include the following:

- password - Password
- publickey - Public-key authentication
- nsswitch - NIS or LDAP authentication
- none - default value

[-is-ldap-fastbind {yes|no}] - LDAP Fastbind Authentication

Displays the authentication methods that are LDAP fastbind.

Examples

The example below illustrates how to display information about all user login methods:

```
cluster1::> security login show

Vserver: cluster1
                                                                 Second
User/Group                 Authentication                 Acct
Authentication
Name           Application Method        Role Name        Locked Method
-------------- ----------- ------------- ---------------- ------
--------------
admin          amqp        password      admin            no     none
admin          console     password      admin            no     none
admin          http        password      admin            no     none
admin          ontapi      password      admin            no     none
admin          service-processor
                           password      admin            no     none
admin          ssh         password      admin            no     none
autosupport    console     password      autosupport      no     none

Vserver: vs1.netapp.com
                                                                 Second
User/Group                 Authentication                 Acct
Authentication
Name           Application Method        Role Name        Locked Method
-------------- ----------- ------------- ---------------- ------
--------------
vsadmin        http        password      vsadmin          yes    none
vsadmin        ontapi      password      vsadmin          yes    none
vsadmin        ssh         password      vsadmin          yes    none
9 entries were displayed.
```

security login unlock

Unlock a user account with password authentication method

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

Description

The `security login unlock` command unlocks a specified account, enabling it to access the management interface.

Parameters

`-vserver <vserver name>` - Vserver

This optionally specifies the Vserver to which the user account belongs.

-username <text> - Username

This specifies the user name of the account that is to be unlocked.

Examples

The following command unlocks a user account named jdoe which belongs to the Vserver vs1.

```
cluster1::> security login unlock -vserver vs1 -username jdoe
```

security login whoami

Show the current user and role of this session

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

Description

The `security login whoami` command displays the name and role of the user logged in at the current console session. It takes no options or other parameters.

Examples

The following example shows that the current session is logged in by using the 'admin' user account:

```
cluster1::> whoami
               (security login whoami)
User: admin
             Role: admin
```

security login banner modify

Modify the login banner message

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

Description

The `security login banner modify` command modifies the login banner. The login banner is printed just before the authentication step during the SSH and console device login process.

Parameters

-vserver <Vserver Name> - Vserver Name

Use this parameter to specify the Vserver whose banner will be modified. Use the name of the cluster admin Vserver to modify the cluster-level message. The cluster-level message is used as the default for data Vservers that do not have a message defined.

{ [-message <text>] - Login Banner Message

This optional parameter can be used to specify a login banner message. If the cluster has a login banner message set, the cluster login banner will be used by all data Vservers as well. Setting a data Vserver's login banner will override the display of the cluster login banner. To reset a data Vserver's login banner to use the cluster login banner, use this parameter with the value `"-"`.

If you use this parameter, the login banner cannot contain newlines (also known as end of lines (EOLs) or line breaks). To enter a login banner message with newlines, do not specify any parameter. You will be prompted to enter the message interactively. Messages entered interactively can contain newlines.

Non-ASCII characters must be provided as Unicode UTF-8.

| [-uri {(ftp|http)://(hostname|IPv4 Address|'['IPv6 Address']')…}] - Download URI for the Banner Message }

Use this parameter to specify the URI from where the login banner will be downloaded. Note that the message must not exceed 2048 bytes in length. Non-ASCII characters must be provided as Unicode UTF-8.

Examples

This example shows how to enter a login banner interactively:

```
cluster1::> security login banner modify
Enter the login banner for Vserver "cluster1".
Max size: 2048. Enter a blank line to terminate input. Press Ctrl-C to
abort.
0        1         2         3         4         5         6         7
8
12345678901234567890123456789012345678901234567890123456789012345678901234
567890
Authorized users only!
cluster1::>
```

security login banner show

Display the login banner message

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

Description

The `security login banner show` command displays the login banner.

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 Name

Selects login banners that match the specified value. Use the name of the admin Vserver to specify the cluster-level login banner.

[-message <text>] - Login Banner Message

Selects login banners that match the specified value. By default, this command will not display unconfigured, or empty, login banners. To display all banners, specify `-message *`.

Examples

The following shows sample output from this command:

```
cluster1::> security login banner show
Message
 ---------------------------------------------------------------------------
----
Authorized users only!
cluster1::>
```

security login domain-tunnel create

Add authentication tunnel Vserver for administrative Vserver

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

Description

This command establishes a gateway (tunnel) for authenticating Windows Active Directory (AD) domain users' access to the cluster.

Before using this command to establish the tunnel, the following must take place:

- You must use the security login create command to create one or more AD domain user accounts that will be granted access to the cluster.
- The -authmethod parameter of the security login create command must be set to 'domain'.
- The -username parameter of the security login create command must be set to a valid AD domain user account that is defined in a Windows Domain Controller's Active Directory. The user account must be specified in the format of *<domainname>**<username>*, where "domainname" is the name of the CIFS domain server.
- You must identify or create a CIFS-enabled data Vserver that will be used for Windows authentication with the Active Directory server. This Vserver is the tunnel Vserver, and it must be running for this command to succeed.

Only one Vserver can be used as the tunnel. If you attempt to specify more than one Vserver for the tunnel, Data ONTAP returns an error. If the tunnel Vserver is stopped or deleted, AD domain users' authentication

requests to the cluster will fail.

Parameters

`-vserver <vserver>` - Authentication Tunnel Vserver

This parameter specifies a data Vserver that has been configured with CIFS. This Vserver will be used as the tunnel for authenticating AD domain users' access to the cluster.

Examples

The following commands create an Active Directory domain user account ('DOMAIN1\Administrator') for the 'cluster1' cluster, create a data Vserver ('vs'), create a CIFS server ('vscifs') for the Vserver, and specify 'vs' as the tunnel for authenticating the domain user access to the cluster.

```
cluster1::> security login create -vserver cluster1 -username
DOMAIN1\Administrator -application ssh -authmethod domain -role admin
    cluster1::> vserver create -vserver vs -rootvolume vol -aggregate aggr
-rootvolume-security-style mixed
    cluster1::> vserver cifs create -vserver vs -cifs-server vscifs
-domain companyname.example.com -ou CN=Computers
    cluster1::> security login domain-tunnel create -vserver vs
```

Related Links

- security login create

security login domain-tunnel delete

Delete authentication tunnel Vserver for administrative Vserver

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

Description

The `security login domain-tunnel delete` command deletes the tunnel established by the security login domain-tunnel create command. An error message will be generated if no tunnel exists.

Examples

The following command deletes the tunnel established by security login domain-tunnel create .

```
cluster1::> security login domain-tunnel delete
```

Related Links

- security login domain-tunnel create

security login domain-tunnel modify

Modify authentication tunnel Vserver for administrative Vserver

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

Description

The `security login domain-tunnel modify` command modifies or replaces the tunnel Vserver. If a tunnel Vserver is not already specified, it sets the current tunnel Vserver with this Vserver, otherwise, it replaces the current tunnel Vserver with the Vserver that you specify. If the tunnel Vserver is changed, authentication requests via previous Vserver will fail. See security login domain-tunnel create for more information.

Parameters

`[-vserver <vserver>]` - Authentication Tunnel Vserver

This parameter specifies a Vserver that has been configured with CIFS and is associated with a Windows Domain Controller's Active Directory authentication. This Vserver will be used as an authentication tunnel for login accounts so that they can be used with administrative Vservers.

Examples

The following command modifies the tunnel Vserver for administrative Vserver.

```
cluster1::> security login domain-tunnel modify -vserver vs
```

Related Links

- security login domain-tunnel create

security login domain-tunnel show

Show authentication tunnel Vserver for administrative Vserver

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

Description

The `security login domain-tunnel show` command shows the tunnel Vserver that was specified by the security login domain-tunnel create or security login domain-tunnel modify command.

Examples

The example below shows the tunnel Vserver, *vs* , that is currently used as an authentication tunnel. The output informs you that the table is currently empty if tunnel Vserver has not been specified.

```
cluster1::> security login domain-tunnel show
  Tunnel Vserver: vs
```

Related Links

- security login domain-tunnel create
- security login domain-tunnel modify

security login motd modify

Modify the message of the day

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

Description

The `security login motd modify` command updates the message of the day (MOTD).

There are two categories of MOTDs: the cluster-level MOTD and the data Vserver-level MOTD. A user logging in to a data Vserver's clustershell will potentially see two messages: the cluster-level MOTD followed by the Vserver-level MOTD for that Vserver. The cluster administrator can enable or disable the cluster-level MOTD on a per-Vserver basis. If the cluster administrator disables the cluster-level MOTD for a Vserver, a user logging into the Vserver will not see the cluster-level message. Only a cluster administrator can enable or disable the cluster-level message.

Parameters

`-vserver <Vserver Name>` - Vserver Name

Use this parameter to specify the Vserver whose MOTD will be modified. Use the name of the cluster admin Vserver to modify the cluster-level message.

{ `[-message <text>]` - Message of the Day (MOTD)

This optional parameter can be used to specify a message. If you use this parameter, the MOTD cannot contain newlines (also known as end of lines (EOLs) or line breaks). If you do not specify any parameter other than the `-vserver` parameter, you will be prompted to enter the message interactively. Messages entered interactively can contain newlines. Non-ASCII characters must be provided as Unicode UTF-8.

The message may contain dynamically generated content using the following escape sequences:

- `\\` - A single backlash character.
- `\b` - No output: supported for compatibility with Linux only.
- `\C` - Cluster name.
- `\d` - Current date as set on the login node.
- `\t` - Current time as set on the login node.
- `\I` - Incoming LIF IP address (prints 'console' for a console login).
- `\l` - Login device name (prints 'console' for a console login).

- \L - Last login for the user on any node in the cluster.
- \m - Machine architecture.
- \n - Node or data Vserver name.
- \N - Name of user logging in.
- \o - Same as \O. Provided for Linux compatibility.
- \O - DNS domain name of the node. Note that the output is dependent on the network configuration and may be empty.
- \r - Software release number.
- \s - Operating system name.
- \u - Number of active clustershell sessions on the local node. For the cluster admin: all clustershell users. For the data Vserver admin: only active sessions for that data Vserver.
- \U - Same as \u, but has 'user' or 'users' appended.
- \v - Effective cluster version string.
- \W - Active sessions across the cluster for the user logging in ('who').

A backslash followed by any other character is emitted as entered.

| [-uri {(ftp|http)://(hostname|IPv4 Address|'['IPv6 Address']')…}] - Download URI for the MOTD }

Use this parameter to specify the URI from where the message of the day will be downloaded. Note that the message must not exceed 2048 bytes in length. Non-ASCII characters must be provided as Unicode UTF-8.

[-is-cluster-message-enabled {true|false}] - Is Cluster-level Message Enabled?

Use this parameter to enable or disable the display of the cluster-level MOTD for the specified Vserver.

Examples

This example shows how to enter a MOTD interactively:

```
cluster1::> security login motd modify -vserver vs0

Enter the message of the day for Vserver "vs0".
Max size: 2048. Enter a blank line to terminate input. Press Ctrl-C to
abort.
0        1         2         3         4         5         6         7
8
12345678901234567890123456789012345678901234567890123456789012345678901234
567890
Welcome to the Vserver!
cluster1::>
```

security login motd show

Display the message of the day

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

Description

The `security login motd show` command displays information about the cluster-level and data Vserver clustershell message of the day (MOTD).

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 Name

Selects the message of the day entries that match this parameter value. Use the name of the cluster admin Vserver to see the cluster-level MOTD.

[-message <text>] - Message of the Day (MOTD)

Selects the message of the day entries that match this parameter value.

[-is-cluster-message-enabled {true|false}] - Is Cluster-level Message Enabled?

Selects the message of the day entries that match this parameter value.

Examples

The following example displays all message of the day entries:

```
cluster1::> security login motd show
Vserver: cluster1
Is the Cluster MOTD Displayed?: true
Message
 ------------------------------------------------------------------------
----
The cluster is running normally.

Vserver: vs0
Is the Cluster MOTD Displayed?: true
Message
 ------------------------------------------------------------------------
----
Welcome to the Vserver!

2 entries were displayed.
```

security login publickey create

Add a new public key

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

Description

The `security login publickey create` associates an existing public key with a user account. This command requires that you enter a valid OpenSSH-formatted public key, a user name, index number, and optionally, a comment.

Parameters

`-vserver <vserver name>` - Vserver

This parameter optionally specifies the Vserver of the user for whom you are adding the public key.

`-username <text>` - Username

This parameter specifies the name of the user for whom you are adding the public key. If you do not specify a user, the user named admin is specified by default.

`[-index <integer>]` - Index

This parameter specifies an index number for the public key. The default value is the next available index value, starting with zero if it is the first public key created for the user.

`-publickey <certificate>` - Public Key

This specifies the OpenSSH public key, which must be enclosed in double quotation marks.

[-comment <text>] - Comment

This optionally specifies comment text for the public key. Note that comment text should be enclosed in quotation marks.

Examples

The following command associates a public key with a user named tsmith for Vserver vs1. The public key is assigned index number 5 and the comment text is “This is a new key”.

```
cluster1::> security login publickey create -vserver vs1 -username tsmith
-index 5 -publickey
"ssh-rsa AAAAB3NzaC1yc2EAAAABIwAAAIEAspH64CYbUsDQCdW22JnK6J
/vU9upnKzd2zAk9C1f7YaWRUAFNs2Qe5lUmQ3ldi8AD0Vfbr5T6HZPCixNAIza
FciDy7hgnmdj9eNGedGr/JNrftQbLD1hZybX+72DpQB0tYWBhe6eDJ1oPLob
ZBGfMlPXh8VjeU44i7W4+s0hG0E=tsmith@publickey.example.com"
-comment "This is a new key"
```

security login publickey delete

Delete a public key

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

Description

The `security login publickey delete` command deletes a public key for a specific user. To delete a public key, you must specify a user name and index number.

Parameters

-vserver <vserver name> - Vserver

This parameter optionally specifies the Vserver of the user for whom you are adding the public key.

-username <text> - Username

This parameter specifies the name of the user for whom you are deleting a public key. If you do not specify a user, the user named admin is specified by default.

-index <integer> - Index

This parameter specifies an index number for the public key.

Examples

The following command deletes the public key for the user named tsmith with the index number 5.

```
cluster1::> security login publickey delete -username tsmith -index 5
```

security login publickey load-from-uri

Load one or more public keys from a URI

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

Description

The `security login publickey load-from-uri` command loads one or more public keys from a Universal Resource Identifier (URI). To load public keys from a URI, you must specify a user name, the URI from which to load them, and optionally, whether you want to overwrite the existing public keys.

Parameters

`-vserver <vserver name>` - Vserver

This parameter optionally specifies the Vserver for the user associated with the public keys.

`-username <text>` - Username

This parameter specifies the username for the public keys. If you do not specify a username, the username *`"admin"`* is used by default.

`-uri {(ftp|http)://(hostname|IPv4 Address|'['IPv6 Address']')…}` - URI to load from

This parameter specifies the URI from which the public keys will be loaded.

`-overwrite {true|false}` - Overwrite Entries

This parameter optionally specifies whether you want to overwrite existing public keys. The default value for this parameter is *`false`* . If the value is *`true`* and you confirm to overwrite, then the existing public keys are overwritten with the new public keys. If you use the value *`false`* or do not confirm the overwrite, then newly loaded public keys are appended to the list of existing public keys using the next available index.

Examples

The following command shows how to load public keys for the user named tsmith from the URI ftp://ftp.example.com/identity.pub. This user's existing public keys are not overwritten.

```
cluster1::> security login publickey load-from-uri -username tsmith
  -uri ftp://ftp.example.com/identity.pub -overwrite false
```

The following command shows how to load public keys for the user named tsmith from the URI ftp:ftp://ftp.example.com/identity.pub. This user's existing public keys are overwritten if user entered the option 'y' or 'Y'. The user's existing public keys are not overwritten if user entered the option 'n' or 'N' and the newly loaded public keys are appended to the list of existing public keys using the next available index. The user and password credentials that you provide when you use this command are the credentials to access the server specified by the URI.

```
cluster1::> security login publickey load-from-uri -username
  tsmith -uri ftp://ftp.example.com/identity.pub -overwrite true -vserver
vs0

Enter User:
Enter Password:

Warning: You are about to overwrite the existing publickeys for the user
"tsmith" in Vserver "vs0". Do you want to proceed? {y|n}:
```

security login publickey modify

Modify a public key

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

Description

The `security login publickey modify` command modifies a public key and optionally its comment text.

Parameters

`-vserver <vserver name>` - Vserver

Specifies the Vserver for the user associated with the public key.

`-username <text>` - Username

Specifies the username for the public key. If you do not specify a username, the username 'admin' is used by default.

`-index <integer>` - Index

Specifies the index number of the public key. The index number of the public key can be found by using the security login publickey show command.

`[-publickey <certificate>]` - Public Key

Specifies the new public key. You must enclose the new public key in double quotation marks.

`[-comment <text>]` - Comment

Specifies the new comment text for the public key.

Examples

The following command modifies the public key at index number 10 for the user named tsmith of Vserver vs1.

```
cluster1::> security login publickey modify -vserver vs1 -username tsmith
-index 10 -publickey
"ssh-rsa
AAAAB3NzaC1yc2EAAAADAQABAAABAQDDD+pFzFgV/2dlowKRFgym9K910H/u+BVTGitCtHteHy
o8thmaXT
1GLCzaoC/12+XXiYKMRhJ00S9Svo4QQKUXHdCPXFSgR5PnAs39set39ECCLzmduplJnkWtX96p
QH/bg2g3upFcdC6z9
c37uqFtNVPfv8As1Si/9WDQmEJ2mRtJudJeU5GZwZw5ybgTaN1jxDWus9SO2C43F/vmoCKVT52
9UHt4/ePcaaHOGTiQ
O8+Qmm59uTgcfnpg53zYkpeAQV8RdYtMdWlRr44neh1WZrmW7x5N4nXNvtEzr9cvb9sJyqTX1C
kQGfDOdb+7T7y3X7M
if/qKQY6FsovjvfZD"
```

Related Links

- security login publickey show

security login publickey show

Display public keys

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

Description

The `security login publickey show` command displays information about public keys.

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

Selects the public keys that match this parameter value.

[-username <text>] - Username

Selects the public keys that match this parameter value.

[-index <integer>] - Index

Selects the public keys that match this parameter value.

[-publickey <certificate>] - Public Key

Selects the public keys that match this parameter value.

[-fingerprint <text>] - Hex Fingerprint

Selects the public keys that match this parameter value.

[-bubblebabble <text>] - Bubblebabble Fingerprint

Selects the public keys that match this parameter value.

[-comment <text>] - Comment

Selects the public keys that match this parameter value.

Examples

The example below displays public key information for the user named tsmith.

```
cluster1::> security login publickey show -username tsmith
UserName: tsmith Index: 5
Public Key:
ssh-rsa AAAAB3NzaC1yc2EAAAABIwAAAIEAspH64CYbUsDQCdW22JnK6J
/vU9upnKzd2zAk9C1f7YaWRUAFNs2Qe5lUmQ3ldi8AD0Vfbr5T6HZPCixNAIza
FciDy7hgnmdj9eNGedGr/JNrftQbLD1hZybX+72DpQB0tYWBhe6eDJ1oPLob
ZBGfMlPXh8VjeU44i7W4+s0hG0E=tsmith@publickey.example.com
Fingerprint:
07:b4:27:52:ce:7f:35:81:5a:f2:07:cf:c1:87:91:97
Bubblebabble fingerprint:
xuzom-nelug-bisih-nihyr-metig-kemal-puhut-somyd-mumuh-zomis-syxex
Comment:
This is a new key
```

security login rest-role create

Add a REST access control role

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

Description

The `security login rest-role create` command creates a Representational State Transfer (REST) access-control role. A REST access-control role consists of a role name and an Application Programming Interface (API) to which the role has access. It optionally includes an access level (*`none`* , *`readonly`* , *`read_create`* , *`read_modify`* , *`read_create_modify`* or *`all`*) for the API. After you create a REST access-control role, you can apply it to a management-utility login account by using the security login modify or security login create commands.

Parameters

-vserver <vserver name> - Vserver

This optionally specifies the Vserver name associated with the REST role.

-role <text> - Role Name

This specifies the REST role that is to be created.

-api <text> - API Path

This specifies the API to which the REST role has access. This API can be a resource-qualified endpoint. Currently, the only supported resource-qualified endpoints are */api/storage/volumes/{volume.uuid}/snapshots* and */api/storage/volumes/*/snapshots* . *** is a wildcard character denoting *all* volumes.

-access {none|readonly|read_create|read_modify|read_create_modify|all} - Access Level

This optionally specifies an access level for the REST role. Possible access level settings are *none* , *readonly* , *read_create* , *read_modify* , *read_create_modify* and *all* .

Examples

The following command creates a REST access-control role named *admin* for the *vs1.example.com* Vserver. This REST role has an access-level of *all* for the */api/storage/volumes* API.

```
cluster1::> security login rest-role create -role admin -api
"/api/storage/volumes" -access all -vserver vs1.example.com
cluster1::>
```

The following command creates a REST access-control role named *rest_role1* for the *cluster1.example.com* administrative Vserver. This REST role has an access-level of *read_create_modify* for the */api/snapmirror/policies* API.

```
cluster1::> security login rest-role create -role rest_role1 -api
"/api/snapmirror/policies" -access read_create_modify -vserver
cluster1.example.com
cluster1::>
```

The following command creates a REST access-control role named *vs1_role* for the *vs1.example.com* Vserver. This REST role has an access level of *readonly* for all snapshots on the volume with UUID *f8a541b5-b68c-11ea-9581-005056bbabe6* .

```
cluster1::> security login rest-role create -role vs1_role -api
"/api/storage/volumes/f8a541b5-b68c-11ea-9581-005056bbabe6/snapshots"
-access readonly -vserver vs1.example.com
Warning: Operating on an alias operates on the target of the specified
alias:
           "volume snapshot"
cluster1::>
```

Related Links

- security login modify
- security login create

security login rest-role delete

Delete a REST access control role

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

Description

The `security login rest-role delete` command deletes a Representational State Transfer (REST) access-control role.

Parameters

`-vserver <vserver name>` - Vserver

This optionally specifies the Vserver name associated with the REST role.

`-role <text>` - Role Name

This specifies the REST role that is to be deleted.

`-api <text>` - API Path

This specifies the Application Programming Interface (API) to which the REST role has access. This API can be a resource-qualified endpoint. Currently, the only supported resource-qualified endpoints are *`/api/storage/volumes/{volume.uuid}/snapshots`* and *`/api/storage/volumes/*/snapshots`*. *`*`* is a wildcard character denoting *`all`* volumes.

Examples

The following command deletes a REST access-control role entry with the role name *`readonly`* and the API *`/api/storage/volumes`* from Vserver *`vs.example.com`*.

```
cluster1::> security login rest-role delete -role readonly -api
"/api/storage/volumes" -vserver vs.example.com
cluster1::>
```

The following command deletes a REST access-control role entry with the role name *vs1_role* and the resource-qualified endpoint corresponding to all snapshots on the volume with UUID *0aa39ec1-b68d-11ea-9581-005056bbabe6* from Vserver *vs1.example.com* .

```
cluster1::> security login rest-role delete -role vs1_role -api
"/api/storage/volumes/0aa39ec1-b68d-11ea-9581-005056bbabe6/snapshots"
-vserver vs1.example.com
cluster1::>
```

security login rest-role modify

Modify a REST access control role

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

Description

The `security login rest-role modify` command modifies a Representational State Transfer (REST) access-control role.

Parameters

`-vserver <vserver name>` - Vserver

This optionally specifies the Vserver name associated with the REST role.

`-role <text>` - Role Name

This specifies the REST role that is to be modified.

`-api <text>` - API Path

This specifies the Application Programming Interface (API) to which the REST role has access. This API can be a resource-qualified endpoint. Currently, the only supported resource-qualified endpoints are */api/storage/volumes/{volume.uuid}/snapshots* and */api/storage/volumes/*/snapshots* . *** is a wildcard character denoting *all* volumes.

`[-access {none|readonly|read_create|read_modify|read_create_modify|all}]` - Access Level

This specifies a new access level for the REST role. Possible access level settings are *none* , *readonly* , *read_create* , *read_modify* , *read_create_modify* and *all* .

Examples

The following command modifies a REST access-control role with the role name *readonly* and the API */api/storage/volumes* to have the access level *readonly* for Vserver *vs.example.com* :

```
cluster1::> security login rest-role modify -role readonly -api
"/api/storage/volumes" -access readonly -vserver vs.example.com
cluster1::>
```

The following command modifies a REST access-control role with the role name *rest_role1* and the API */api/snapmirror/policies* to have the access level *read_create* for Vserver *cluster1.example.com*:

```
cluster1::> security login rest-role modify -role rest_role1 -api
"/api/snapmirror/policies" -access read_create -vserver
cluster1.example.com
cluster1::>
```

The following command modifies a REST access-control role with the role name *vs1_role* and the resource-qualified endpoint */api/storage/volumes/*/snapshots* to have the access level *readonly* for Vserver *vs1.example.com*:

```
cluster1::> security login rest-role modify -role vs1_role -api
"/api/storage/volumes/*/snapshots" -access readonly -vserver
vs1.example.com
cluster1::>
```

security login rest-role show

Show REST access control roles

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

Description

The `security login rest-role show` command displays the following information about Representational State Transfer (REST) access-control roles:

- Vserver
- Role name
- Application Programming Interface (API) to which the REST role has access
- Access Level (*none* , *readonly* , *read_create* , *read_modify* , *read_create_modify* , or *all*)

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

Selects the REST roles that match this parameter value.

[-role <text>] - Role Name

Selects the REST roles that match this parameter value. If this parameter and the `-api` parameter are both used, the command displays detailed information about the specified REST access-control role.

[-api <text>] - API Path

Selects the REST roles that match this parameter value. If this parameter and the `-role` parameter are both used, the command displays detailed information about the specified REST access-control role. This API can be a resource-qualified endpoint. Currently, the only supported resource-qualified endpoints are */api/storage/volumes/{volume.uuid}/snapshots* and */api/storage/volumes/*/snapshots*. *`*`* is a wildcard character denoting *`all`* volumes.

[-access {none|readonly|read_create|read_modify|read_create_modify|all}] - Access Level

Selects the roles that match this parameter value.

Examples

The example below displays information about all REST access-control roles:

```
cluster1::> security login rest-role show
Role                            Access
      Vserver           Name            API             Level
      ----------        -------------   -----------     -----------
      vs                vsadmin         /api            none
      vs                vsadmin         /api/storage/volumes/f8a541b5-
b68c-11ea-9581-005056bbabe6/snapshots
                                                        readonly
      vs                vsadmin         /api/storage/volumes/843b87f9-
2f5e-11ec-9524-005056bb0bee/snapshots
                                                        read_create
      cluster1          readonly        /api/storage    none
      cluster1          custom          /api/cluster    read_modify
      cluster1          custom          /api/security/accounts
                                                        read_create_modify
      cluster1          custom          /api/storage/volumes/*/snapshots
                                                        all
cluster1::>
```

security login rest-role expanded-rest-roles modify

Modify the status of Expanded REST roles for granular resource control feature

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

Description

The `security login rest-role expanded-rest-roles modify` command enables or disables *`Expanded REST roles for granular resource control`* feature.

Parameters

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

This parameter specifies whether the *`Expanded REST roles for granular resource control`* feature is enabled or disabled. The default value is *`true`* i.e. the feature is enabled by default.

Examples

The following command disables the *`Expanded REST roles for granular resource control`* feature.

```
cluster1::*> security login rest-role expanded-rest-roles modify -is
-enabled false
cluster1::*>
```

security login rest-role expanded-rest-roles show

Show the status of Expanded REST roles for granular resource control feature

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

Description

The `security login rest-role expanded-rest-roles show` command specifies whether the *`Expanded REST roles for granular resource control`* feature is enabled (*`true`*) or disabled (*`false`*).

Examples

The command below specfies that the *`Expanded REST roles for granular resource control`* feature is enabled.

```
cluster1::> security login rest-role expanded-rest-roles show

Is Enabled? true
```

security login role create

Add an access control role

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

Description

The `security login role create` command creates an access-control role. An access-control role consists of a role name and a command or directory to which the role has access. It optionally includes an access level (none, readonly, or all) and a query that applies to the specified command or command directory. After you create an access-control role, you can apply it to a management-utility login account by using the security login modify or security login create commands.

Parameters

`-vserver <vserver name>` - Vserver

This optionally specifies the Vserver name associated with the role.

`-role <text>` - Role Name

This specifies the role that is to be created.

`-cmddirname <text>` - Command / Directory

This specifies the command or command directory to which the role has access. To specify the default setting, use the special value "`DEFAULT` ".

`[-access {none|readonly|read_create|read_modify|read_create_modify|all}]` - Access Level

This optionally specifies an access level for the role. Possible access level settings are none, readonly, and all. The default setting is `all` .

`[-query <query>]` - Query

This optionally specifies the object that the role is allowed to access. The query object must be applicable to the command or directory name specified by -cmddirname. The query object must be enclosed in double quotation marks (""), and it must be a valid field name.

Examples

The following command creates an access-control role named "admin" for the vs1.example.com Vserver. The role has all access to the "volume" command but only within the "aggr0" aggregate.

```
cluster1::> security login role create -role admin -cmddirname volume
-query "-aggr aggr0" -access all -vserver vs1.example.com
```

Related Links

- security login modify
- security login create

security login role delete

Delete an access control role

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

Description

The `security login role delete` command deletes an access-control role.

Parameters

`-vserver <vserver name>` - Vserver

This optionally specifies the Vserver name associated with the role.

`-role <text>` - Role Name

This specifies the role that is to be deleted.

`-cmddirname <text>` - Command / Directory

This specifies the command or command directory to which the role has access. To specify the default setting, use the special value "`DEFAULT` ".

Examples

The following command deletes an access-control role with the role name readonly and the command access "volume" for Vserver vs.example.com.

```
cluster1::> security login role delete -role readonly -cmddirname volume
-vserver vs.example.com
```

security login role modify

Modify an access control role

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

Description

The `security login role modify` command modifies an access-control role.

Parameters

`-vserver <vserver name>` - Vserver

This optionally specifies the Vserver name associated with the role.

`-role <text>` - Role Name

This specifies the role that is to be modified.

-cmddirname <text> - Command / Directory

This specifies the command or command directory to which the role has access. To specify the default setting for a role, use the special value `"DEFAULT"` . This value can be modified only for the roles created for the admin Vserver.

[-access {none|readonly|read_create|read_modify|read_create_modify|all}] - Access Level

This optionally specifies a new access level for the role. Possible access level settings are none, readonly, and all. The default setting is `all` .

[-query <query>] - Query

This optionally specifies the object that the role is allowed to access. The query object must be applicable to the command or directory name specified by -cmddirname. The query object must be enclosed in double quotation marks (""), and it must be a valid field name.

Examples

The following command modifies an access-control role with the role name readonly and the command access "volume" to have the access level readonly for Vserver vs.example.com:

```
cluster1::> security login role modify -role readonly -cmddirname volume
-access readonly -vserver vs.example.com
```

security login role prepare-to-downgrade

Update role configurations so that they are compatible with earlier releases of Data ONTAP

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

Description

The `security login role prepare-to-downgrade` command restores predefined roles of all Vservers earlier than Data ONTAP 8.3.2. You must run this command in advanced privilege mode when prompted to do so during the release downgrade.

Examples

The following command restores predefined roles of all Vservers earlier than Data ONTAP 8.3.2.

```
cluster1::*> security login role prepare-to-downgrade
```

security login role show-ontapi

Display the mapping between Data ONTAP APIs and CLI commands

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

Description

The `security login role show-ontapi` command displays Data ONTAP APIs (ONTAPIs) and the CLI commands that they are mapped to.

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.

[-ontapi <text>] - ONTAPI Name

Use this parameter to view the corresponding CLI command for the specified API.

[-command <text>] - CLI Command

Use this parameter to view the corresponding API or APIs for the specified CLI command.

Examples

The following command displays all Data ONTAP APIs and their mapped CLI commands:

```
cluster1::> security login role show-ontapi
ONTAPI                       Command
---------------------------
------------------------------------------------
aggr-add                     storage aggregate add-disks
aggr-check-spare-low         storage aggregate check_spare_low
aggr-create                  storage aggregate create
aggr-destroy                 storage aggregate delete
aggr-get-filer-info          aggr
aggr-get-iter                storage aggregate show-view
aggr-offline                 storage aggregate offline
aggr-online                  storage aggregate online
aggr-options-list-info       storage aggregate show
aggr-rename                  storage aggregate rename
aggr-restrict                storage aggregate restrict
aggr-set-option              storage aggregate modify
autosupport-budget-get       system node autosupport budget show
autosupport-budget-get-iter system node autosupport budget show
autosupport-budget-get-total-records
                             system node autosupport budget show
autosupport-budget-modify    system node autosupport budget modify
autosupport-config-get       system node autosupport show
autosupport-config-get-iter system node autosupport show
autosupport-config-get-total-records
                             system node autosupport show
autosupport-config-modify    system node autosupport modify
Press <space> to page down, <return> for next line, or 'q' to quit...
```

The following example displays all Data ONTAP APIs which are mapped to the specified CLI command:

```
cluster1::> security login role show-ontapi -command version
ONTAPI                       Command
---------------------------
------------------------------------------------
system-get-ontapi-version    version
system-get-version           version
2 entries were displayed.
```

The following example displays the CLI command that is mapped to the specified Data ONTAPI API:

```
cluster1::> security login role show-ontapi -ontapi aggr-create

ONTAPI Name: aggr-create
    Command: storage aggregate create
```

security login role show

Show access control roles

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

Description

The `security login role show` command displays the following information about access-control roles:

- Role name
- Command or command directory to which the role has access
- Access level (none, read-only, or all)
- Query (detailed view only)

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

Selects the roles that match this parameter value.

[-role <text>] - Role Name

Selects the roles that match this parameter value. If this parameter and the `-cmddirname` parameter are both used, the command displays detailed information about the specified access-control role.

[-cmddirname <text>] - Command / Directory

Selects the roles that match this parameter value. If this parameter and the `-role` parameter are both used, the command displays detailed information about the specified access-control role.

[-access {none|readonly|read_create|read_modify|read_create_modify|all}] - Access Level

Selects the roles that match this parameter value.

[-query <query>] - Query

Selects the roles that match this parameter value.

Examples

The example below displays information about all access-control roles:

```
cluster1::> security login role show

Vserver    RoleName      Command/Directory                Query
AccessLevel
---------- ------------- -------------------------------- -----
-----------
vs         vsadmin       DEFAULT                                none
vs         vsadmin       dashboard health vserver               readonly
vs         vsadmin       job                                    readonly
vs         vsadmin       job schedule                           none
vs         vsadmin       lun                                    all
vs         vsadmin       network connections                    readonly
cluster1   admin         DEFAULT                                all
cluster1   readonly      DEFAULT                                readonly
cluster1   readonly      volume                                 none
```

security login role config modify

Modify local user account restrictions

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

Description

The `security login role config modify` command modifies user account and password restrictions.

For the password character restrictions documented below (uppercase, lowercase, digits, etc.), the term "characters" refers to ASCII-range characters only - not extended characters.

Parameters

`-vserver <vserver name>` - Vserver

This specifies the Vserver name associated with the profile configuration.

`-role <text>` - Role Name

This specifies the role whose account restrictions are to be modified.

`[-username-minlength <integer>]` - Minimum Username Length Required

This specifies the required minimum length of the user name. Supported values are 3 to 16 characters. The default setting is *3* characters.

`[-username-alphanum {enabled|disabled}]` - Username Alpha-Numeric

This specifies whether a mix of alphabetic and numeric characters are required in the user name. If this

parameter is enabled, a user name must contain at least one letter and one number. The default setting is *disabled*.

[-passwd-minlength <integer>] - Minimum Password Length Required

This specifies the required minimum length of a password. Supported values are 3 to 64 characters. The default setting is *8* characters.

[-passwd-alphanum {enabled|disabled}] - Password Alpha-Numeric

This specifies whether a mix of alphabetic and numeric characters is required in the password. If this parameter is enabled, a password must contain at least one letter and one number. The default setting is *enabled*.

[-passwd-min-special-chars <integer>] - Minimum Number of Special Characters Required in the Password

This specifies the minimum number of special characters required in a password. Supported values are from 0 to 64 special characters. The default setting is *0* , which requires no special characters.

[-passwd-expiry-time <unsigned32_or_unlimited>] - Password Expires In (Days)

This specifies password expiration in days. A value of *0* means all passwords associated with the accounts in the role expire now. The default setting is *unlimited* , which means the passwords never expire.

[-require-initial-passwd-update {enabled|disabled}] - Require Initial Password Update on First Login

This specifies whether users must change their passwords when logging in for the first time. Initial password changes can be done only through SSH or serial-console connections. The default setting is *disabled*.

[-max-failed-login-attempts <integer>] - Maximum Number of Failed Attempts

This specifies the allowed maximum number of consecutive invalid login attempts. When the failed login attempts reach the specified maximum, the account is automatically locked. The default is *0* , which means failed login attempts do not cause an account to be locked.

[-lockout-duration <integer>] - Maximum Lockout Period (Days)

This specifies the number of days for which an account is locked if the failed login attempts reach the allowed maximum. The default is *0* , which means the accounts will be locked for 1 day.

[-disallowed-reuse <integer>] - Disallow Last 'N' Passwords

This specifies the number of previous passwords that are disallowed for reuse. The default setting is six, meaning that the user cannot reuse any of their last six passwords. The minimum allowed value is *6* .

[-change-delay <integer>] - Delay Between Password Changes (Days)

This specifies the number of days that must pass between password changes. The default setting is *0* .

[-delay-after-failed-login <integer>] - Delay after Each Failed Login Attempt (Secs)

This specifies the amount of delay observed by the system in seconds upon invalid login attempts. The default setting is *4* seconds.

[-passwd-min-lowercase-chars <integer>] - Minimum Number of Lowercase Alphabetic Characters Required in the Password

This specifies the minimum number of lowercase characters required in a password. Supported values are

from 0 to 64 lowercase characters. The default setting is *0* , which requires no lowercase characters.

[-passwd-min-uppercase-chars <integer>] - Minimum Number of Uppercase Alphabetic Characters Required in the Password

This specifies the minimum number of uppercase characters required in a password. Supported values are from 0 to 64 uppercase characters. The default setting is *0* , which requires no uppercase characters.

[-passwd-min-digits <integer>] - Minimum Number of Digits Required in the Password

This specifies the minimum number of digits required in a password. Supported values are from 0 to 64 digits charaters. The default setting is *0* , which requires no digits.

[-passwd-expiry-warn-time <unsigned32_or_unlimited>] - Display Warning Message Days Prior to Password Expiry (Days)

This specifies the warning period for password expiry in days. A value of *0* means warn user about password expiry upon every successful login. The default setting is *unlimited* , which means never warn about password expiry.

[-account-expiry-time <unsigned32_or_unlimited>] - Account Expires in (Days)

This specifies account expiration in days. The default setting is *unlimited* , which means the accounts never expire. The account expiry time must be greater than account inactive limit.

[-account-inactive-limit <unsigned32_or_unlimited>] - Maximum Duration of Inactivity before Account Expiration (Days)

This specifies inactive account expiry limit in days. The default setting is *unlimited* , which means the inactive accounts never expire. The account inactive limit must be less than account expiry time.

Examples

The following command modifies the user-account restrictions for an account with the role name admin for a Vserver named vs. The minimum size of the password is set to 12 characters.

```
cluster1::> security login role config modify -role admin -vserver vs
-passwd-minlength 12
```

security login role config reset

Reset RBAC characteristics supported on releases later than Data ONTAP 8.1.2

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

Description

The `security login role config reset` command resets the following role based access control (RBAC) characteristics to their default values. The system prompts you to run this command if you revert to Data ONTAP 8.1.2 or earlier. If you do not reset these characteristics, the revert process will fail.

- Minimum number of special characters required in password ("0")
- Password-expiration time, in days ("unlimited")

- Whether the password must be changed at the initial login ("disabled")
- Maximum number of failed login attempts permitted before the account is locked out ("0")
- Number of days that the user account is locked out after the maximum number of failed login attempts is reached ("0")

Examples

The following command resets the above mentioned RBAC characteristics of all cluster and Vserver roles to their default values.

```
cluster1::> security login role config reset
```

security login role config show

Show local user account restrictions

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

Description

The `security login role config show` command displays the following information about account restrictions for management-utility user accounts:

- Role name `-role`
- Minimum size of the password, in characters `-passwd-minlength`
- Whether the password requires alphanumeric characters `-passwd-alphanum`
- Number of previous passwords that cannot be reused `-disallowed-reuse`
- Minimum number of days that must elapse before users can change their passwords `-change-delay`

You can display detailed information about the restrictions on a specific account by specifying the `-role` parameter. This adds the following information:

- Minimum length of the user name, in characters `-username-minlength`
- Whether the user name requires alphanumeric characters `-username-alphanum`
- Minimum length of the password, in characters `-passwd-minlength`
- Whether the password requires alphanumeric characters `-passwd-alphanum`
- Minimum number of special characters required in password `-passwd-min-special-chars`
- Minimum number of lowercase characters required in password `-passwd-min-lowercase-chars`
- Minimum number of uppercase characters required in password `-passwd-min-uppercase-chars`
- Minimum number of digits required in password `-passwd-min-digits`
- Minimum number of days that must elapse before users can change their passwords `-change-delay`
- Whether the password must be changed at the initial login `-require-initial-passwd-update`

- Password-expiration time, in days `-passwd-expiry-time`
- Display warning message days prior to password expiry `-passwd-expiry-warn-time`
- Number of previous passwords that cannot be reused `-disallowed-reuse`
- Maximum number of failed login attempts permitted before the account is locked out `-max-failed -login-attempts`
- Number of days for which the user account is locked after the maximum number of failed login attempts is reached `-lockout-duration`
- Account-expiration time, in days `-account-expiry-time`
- Maximum duration of inactivity before account expiration, in days `-account-inactive-limit`
- Delay after each failed login attempt, in secs `-delay-after-failed-login`

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

Selects the profile configurations that match this parameter value

[-role <text>] - Role Name

If this parameter is specified, the command displays detailed information about restrictions for the specified user account.

[-username-minlength <integer>] - Minimum Username Length Required

Selects the profile configurations that match this parameter value.

[-username-alphanum {enabled|disabled}] - Username Alpha-Numeric

Selects the profile configurations that match this parameter value. Enabled means a user name must contain both letters and numbers.

[-passwd-minlength <integer>] - Minimum Password Length Required

Selects the profile configurations that match this parameter value.

[-passwd-alphanum {enabled|disabled}] - Password Alpha-Numeric

Selects the profile configurations that match this parameter value. Enabled means a password must contain both letters and numbers.

[-passwd-min-special-chars <integer>] - Minimum Number of Special Characters Required in the Password

Selects the profile configurations that match this parameter value.

[-passwd-expiry-time <unsigned32_or_unlimited>] - Password Expires In (Days)

Selects the profile configurations that match this parameter value.

[-require-initial-passwd-update {enabled|disabled}] - Require Initial Password Update on First Login

Selects the profile configurations that match this parameter value.

[-max-failed-login-attempts <integer>] - Maximum Number of Failed Attempts

Selects the profile configurations that match this parameter value.

[-lockout-duration <integer>] - Maximum Lockout Period (Days)

Selects the profile configurations that match this parameter value.

[-disallowed-reuse <integer>] - Disallow Last 'N' Passwords

Selects the profile configurations that match this parameter value.

[-change-delay <integer>] - Delay Between Password Changes (Days)

Selects the profile configurations that match this parameter value.

[-delay-after-failed-login <integer>] - Delay after Each Failed Login Attempt (Secs)

Selects the profile configurations that match this parameter value.

[-passwd-min-lowercase-chars <integer>] - Minimum Number of Lowercase Alphabetic Characters Required in the Password

Selects the profile configurations that match this parameter value.

[-passwd-min-uppercase-chars <integer>] - Minimum Number of Uppercase Alphabetic Characters Required in the Password

Selects the profile configurations that match this parameter value.

[-passwd-min-digits <integer>] - Minimum Number of Digits Required in the Password

Selects the profile configurations that match this parameter value.

[-passwd-expiry-warn-time <unsigned32_or_unlimited>] - Display Warning Message Days Prior to Password Expiry (Days)

Selects the profile configurations that match this parameter value.

[-account-expiry-time <unsigned32_or_unlimited>] - Account Expires in (Days)

Selects the profile configurations that match this parameter value.

[-account-inactive-limit <unsigned32_or_unlimited>] - Maximum Duration of Inactivity before Account Expiration (Days)

Selects the profile configurations that match this parameter value.

Examples

The example below displays restriction information about all user accounts:

```
cluster1::> security login role config show
                          ----- Password Restrictions -----
Vserver     RoleName      Size AlphaNum NoReuse ChangeDelay
----------- ------------- ---- -------- ------- -----------
vs          vsadmin          8  enabled       6      0 days
vs          vsadmin-protocol 8  enabled       6      0 days
vs          vsadmin-readonly 8  enabled       6      0 days
vs          vsadmin-volume   8  enabled       6      0 days
cluster1    admin            6  enabled       6      0 days
cluster1    readonly         6  enabled       6      0 days
```

Copyright information

Copyright © 2026 NetApp, Inc. All Rights Reserved. Printed in the U.S. No part of this document covered by copyright may be reproduced in any form or by any means—graphic, electronic, or mechanical, including photocopying, recording, taping, or storage in an electronic retrieval system—without prior written permission of the copyright owner.

Software derived from copyrighted NetApp material is subject to the following license and disclaimer:

THIS SOFTWARE IS PROVIDED BY NETAPP “AS IS” AND WITHOUT ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE HEREBY DISCLAIMED. IN NO EVENT SHALL NETAPP BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

NetApp reserves the right to change any products described herein at any time, and without notice. NetApp assumes no responsibility or liability arising from the use of products described herein, except as expressly agreed to in writing by NetApp. The use or purchase of this product does not convey a license under any patent rights, trademark rights, or any other intellectual property rights of NetApp.

The product described in this manual may be protected by one or more U.S. patents, foreign patents, or pending applications.

LIMITED RIGHTS LEGEND: Use, duplication, or disclosure by the government is subject to restrictions as set forth in subparagraph (b)(3) of the Rights in Technical Data -Noncommercial Items at DFARS 252.227-7013 (FEB 2014) and FAR 52.227-19 (DEC 2007).

Data contained herein pertains to a commercial product and/or commercial service (as defined in FAR 2.101) and is proprietary to NetApp, Inc. All NetApp technical data and computer software provided under this Agreement is commercial in nature and developed solely at private expense. The U.S. Government has a non-exclusive, non-transferrable, nonsublicensable, worldwide, limited irrevocable license to use the Data only in connection with and in support of the U.S. Government contract under which the Data was delivered. Except as provided herein, the Data may not be used, disclosed, reproduced, modified, performed, or displayed without the prior written approval of NetApp, Inc. United States Government license rights for the Department of Defense are limited to those rights identified in DFARS clause 252.227-7015(b) (FEB 2014).

Trademark information

NETAPP, the NETAPP logo, and the marks listed at http://www.netapp.com/TM are trademarks of NetApp, Inc. Other company and product names may be trademarks of their respective owners.