



## U Commands

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This chapter describes the Cisco NX-OS security commands that begin with U.

use-vrf

## use-vrf

To specify a virtual routing and forwarding (VRF) instance for a RADIUS or TACACS+ server group, use the **use-vrf** command. To remove the VRF instance, use the **no** form of this command.

```
use-vrf {vrf-name | default | management}
no use-vrf {vrf-name | default | management}
```

<b>Syntax Description</b>	<table border="0"> <tr> <td><i>vrf-name</i></td><td>VRF instance name. The name is case sensitive and can be a maximum of 32 alphanumeric characters.</td></tr> <tr> <td><b>default</b></td><td>Specifies the default VRF.</td></tr> <tr> <td><b>management</b></td><td>Specifies the management VRF.</td></tr> </table>	<i>vrf-name</i>	VRF instance name. The name is case sensitive and can be a maximum of 32 alphanumeric characters.	<b>default</b>	Specifies the default VRF.	<b>management</b>	Specifies the management VRF.
<i>vrf-name</i>	VRF instance name. The name is case sensitive and can be a maximum of 32 alphanumeric characters.						
<b>default</b>	Specifies the default VRF.						
<b>management</b>	Specifies the management VRF.						

<b>Command Default</b>	None				
<b>Command Modes</b>	RADIUS server group configuration mode TACACS+ server group configuration mode				
<b>Command History</b>	<table border="0"> <tr> <th><b>Release</b></th> <th><b>Modification</b></th> </tr> <tr> <td>5.2(1)N1(1)</td> <td>This command was introduced.</td> </tr> </table>	<b>Release</b>	<b>Modification</b>	5.2(1)N1(1)	This command was introduced.
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<b>Usage Guidelines</b>	<p>You can configure only one VRF instance for a server group.</p> <p>Use the <b>aaa group server radius</b> command RADIUS server group configuration mode or the <b>aaa group server tacacs+</b> command to enter TACACS+ server group configuration mode.</p> <p>If the server is not found, use the <b>radius-server host</b> command or <b>tacacs-server host</b> command to configure the server.</p> <p>You must use the <b>feature tacacs+</b> command before you configure TACACS+.</p>
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<b>Examples</b>	<p>This example shows how to specify a VRF instance for a RADIUS server group:</p> <pre>switch(config)# aaa group server radius RadServer switch(config-radius)# use-vrf management</pre> <p>This example shows how to specify a VRF instance for a TACACS+ server group:</p> <pre>switch(config)# aaa group server tacacs+ TacServer switch(config-tacacs+)# use-vrf management</pre> <p>This example shows how to remove the VRF instance from a TACACS+ server group:</p> <pre>switch(config)# aaa group server tacacs+ TacServer switch(config-tacacs+)# no use-vrf management</pre>
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Related Commands	Command	Description
	<b>aaa group server</b>	Configures AAA server groups.
	<b>feature tacacs+</b>	Enables TACACS+.
	<b>radius-server host</b>	Configures a RADIUS server.
	<b>show radius-server groups</b>	Displays RADIUS server information.
	<b>show tacacs-server groups</b>	Displays TACACS+ server information.
	<b>tacacs-server host</b>	Configures a TACACS+ server.
	<b>vrf</b>	Configures a VRF instance.

**username**

# username

To create and configure a user account, use the **username** command. To remove a user account, use the **no** form of this command.

```
username user-id [expire date] [password {0 | 5} password] [role role-name] [priv-lvl level]
username user-id sshkey {key | filename filename}
no username user-id
```

Syntax Description	
<b>user-id</b>	User identifier for the user account. The <i>user-id</i> argument is a case-sensitive, alphanumeric character string with a maximum length of 28 characters.  <b>Note</b> The Cisco NX-OS software does not allow the “#” and “@” characters in the <i>user-id</i> argument text string.
<b>expire date</b>	(Optional) Specifies the expire date for the user account. The format for the <i>date</i> argument is YYYY-MM-DD.
<b>password</b>	(Optional) Specifies a password for the account. The default is no password.
<b>0</b>	Specifies that the password that follows should be in clear text. This is the default mode.
<b>5</b>	Specifies that the password that follows should be encrypted.
<b>password</b>	Password for the user (clear text). The password can be a maximum of 64 characters.  <b>Note</b> Clear text passwords cannot contain dollar signs (\$) or spaces anywhere in the password. Also, they cannot include these special characters at the beginning of the password: quotation marks (“ or ‘), vertical bars ( ), or right angle brackets (>).
<b>role role-name</b>	(Optional) Specifies the role which the user is to be assigned to. Valid values are as follows: <ul style="list-style-type: none"> <li>• <b>default-role</b>—User role</li> <li>• <b>network-admin</b>—System configured role</li> <li>• <b>network-operator</b>—System configured role</li> <li>• <b>priv-0</b>—Privilege role</li> <li>• <b>priv-1</b>—Privilege role</li> <li>• <b>priv-2</b>—Privilege role</li> <li>• <b>priv-3</b>—Privilege role</li> <li>• <b>priv-4</b>—Privilege role</li> <li>• <b>priv-5</b>—Privilege role</li> <li>• <b>priv-6</b>—Privilege role</li> <li>• <b>priv-7</b>—Privilege role</li> <li>• <b>priv-8</b>—Privilege role</li> <li>• <b>priv-9</b>—Privilege role</li> </ul>

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- **priv-10**—Privilege role
  - **priv-11**—Privilege role
  - **priv-12**—Privilege role
  - **priv-13**—Privilege role
  - **priv-14**—Privilege role
  - **priv-15**—Privilege role
  - **vdc-admin**—System configured role
  - **vdc-operator**—System configured role

<b>priv-lvl</b> <i>level</i>	(Optional) Specifies the privilege level to assign the user. Valid values are from 0 to 15.
<b>sshkey</b>	(Optional) Specifies an SSH key for the user account.
<i>key</i>	SSH key string.
<b>filename</b> <i>filename</i>	Specifies the name of a file that contains the SSH key string.

**Command Default** No expiration date, password, or SSH key.

**Command Modes** Global configuration mode

Command History	Release	Modification
	5.2(1)N1(1)	This command was introduced.

**Usage Guidelines** The switch accepts only strong passwords. The characteristics of a strong password include the following:

- At least eight characters long
- Does not contain many consecutive characters (such as “abcd”)
- Does not contain many repeating characters (such as “aaabbb”)
- Does not contain dictionary words
- Does not contain proper names
- Contains both uppercase and lowercase characters
- Contains numbers



**Caution** If you do not specify a password for the user account, the user might not be able to log in to the account.

You must enable the cumulative privilege roles for TACACS+ server using the **feature privilege** command to see the **priv-lvl** keyword.

**username****Examples**

This example shows how to create a user account with a password:

```
switch(config)# username user1 password Ci5co321
switch(config)#
```

This example shows how to configure the SSH key for a user account:

```
switch(config)# username user1 sshkey file bootflash:key_file
switch(config)#
```

This example shows how to configure the privilege level for a user account:

```
switch(config)# username user1 priv-lvl 15
switch(config)#
```

**Related Commands**

<b>Command</b>	<b>Description</b>
<b>feature privilege</b>	Enables the cumulative privilege of roles for command authorization on TACACS+ servers.
<b>show privilege</b>	Displays the current privilege level, username, and status of cumulative privilege support for a user.
<b>show user-account</b>	Displays the user account configuration.