



T Commands

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

tacacs-server deadline

To set a periodic time interval where a nonreachable (nonresponsive) TACACS+ server is monitored for responsiveness, use the **tacacs-server deadline** command. To disable the monitoring of the nonresponsive TACACS+ server, use the **no** form of this command.

tacacs-server deadline *minutes*

no tacacs-server deadline *minutes*

| | | |
|---------------------------|---|--|
| Syntax Description | <i>time</i> Time interval in minutes. The range is from 1 to 1440. | |
| Command Default | 0 minutes | |
| Command Modes | Global configuration mode | |
| Command History | Release | Modification |
| | 6.0(2)N1(1) | This command was introduced. |
| Usage Guidelines | <p>Setting the time interval to zero disables the timer. If the dead-time interval for an individual TACACS+ server is greater than zero (0), that value takes precedence over the value set for the server group.</p> <p>When the dead-time interval is 0 minutes, TACACS+ server monitoring is not performed unless the TACACS+ server is part of a server group and the dead-time interval for the group is greater than 0 minutes.</p> <p>You must use the feature tacacs+ command before you configure TACACS+.</p> | |
| Examples | <p>This example shows how to configure the dead-time interval and enable periodic monitoring:</p> <pre>switch(config)# tacacs-server deadline 10</pre> <p>This example shows how to revert to the default dead-time interval and disable periodic monitoring:</p> <pre>switch(config)# no tacacs-server deadline 10</pre> | |
| Related Commands | Command | Description |
| | deadline | Sets a dead-time interval for monitoring a nonresponsive RADIUS or TACACS+ server group. |
| | feature tacacs+ | Enables TACACS+. |
| | show tacacs-server | Displays TACACS+ server information. |

tacacs-server directed-request

To allow users to send authentication requests to a specific TACACS+ server when logging in, use the **tacacs-server directed request** command. To revert to the default, use the **no** form of this command.

tacacs-server directed-request

no tacacs-server directed-request

Syntax Description

This command has no arguments or keywords.

Command Default

Sends the authentication request to the configured TACACS+ server groups.

Command Modes

Global configuration mode

Command History

| Release | Modification |
|-------------|------------------------------|
| 6.0(2)N1(1) | This command was introduced. |

Usage Guidelines

You must use the **feature tacacs+** command before you configure TACACS+.

During login, the user can specify the *username@vrfname:hostname*, where *vrfname* is the VRF to use and *hostname* is the name of a configured TACACS+ server. The username is sent to the server name for authentication.

Examples

This example shows how to allow users to send authentication requests to a specific TACACS+ server when logging in:

```
switch(config)# tacacs-server directed-request
```

This example shows how to disallow users to send authentication requests to a specific TACACS+ server when logging in:

```
switch(config)# no tacacs-server directed-request
```

Related Commands

| Command | Description |
|--|---|
| feature tacacs+ | Enables TACACS+. |
| show tacacs-server directed request | Displays a directed request TACACS+ server configuration. |

tacacs-server host

To configure TACACS+ server host parameters, use the **tacacs-server host** command. To revert to the defaults, use the **no** form of this command.

```
tacacs-server host {hostname | ipv4-address | ipv6-address} [key [0 | 7] shared-secret]
[port port-number] [test {idle-time time | password password | username name}]
[timeout seconds]
```

```
no tacacs-server host {hostname | ipv4-address | ipv6-address} [key [0 | 7] shared-secret]
[port port-number] [test {idle-time time | password password | username name}]
[timeout seconds]
```

Syntax Description

| | |
|---------------------------------|---|
| <i>hostname</i> | TACACS+ server Domain Name Server (DNS) name. The name is alphanumeric, case sensitive, and has a maximum of 256 characters. |
| <i>ipv4-address</i> | TACACS+ server IPv4 address in the <i>A.B.C.D</i> format. |
| <i>ipv6-address</i> | TACACS+ server IPv6 address in the <i>X:X:X::X</i> format. |
| key | (Optional) Configures the TACACS+ server's shared secret key. |
| 0 | (Optional) Configures a preshared key specified in clear text (indicated by 0) to authenticate communication between the TACACS+ client and server. This is the default. |
| 7 | (Optional) Configures a preshared key specified in encrypted text (indicated by 7) to authenticate communication between the TACACS+ client and server. |
| <i>shared-secret</i> | Preshared key to authenticate communication between the TACACS+ client and server. The preshared key is alphanumeric, case sensitive, and has a maximum of 63 characters. |
| port <i>port-number</i> | (Optional) Configures a TACACS+ server port for authentication. The range is from 1 to 65535. |
| test | (Optional) Configures parameters to send test packets to the TACACS+ server. |
| idle-time <i>time</i> | (Optional) Specifies the time interval (in minutes) for monitoring the server. The time range is 1 to 1440 minutes. |
| password <i>password</i> | (Optional) Specifies a user password in the test packets. The password is alphanumeric, case sensitive, and has a maximum of 32 characters. |
| username <i>name</i> | (Optional) Specifies a user name in the test packets. The username is alphanumeric, case sensitive, and has a maximum of 32 characters. |
| timeout <i>seconds</i> | (Optional) Configures a TACACS+ server timeout period (in seconds) between retransmissions to the TACACS+ server. The range is from 1 to 60 seconds. |

Command Default

Idle time: disabled.
Server monitoring: disabled.
Timeout: 1 second.
Test username: test.
Test password: test.

Command Modes

Global configuration mode

Command History

| Release | Modification |
|-------------|------------------------------|
| 6.0(2)N1(1) | This command was introduced. |

Usage Guidelines

You must use the **feature tacacs+** command before you configure TACACS+.
When the idle time interval is 0 minutes, periodic TACACS+ server monitoring is not performed.

Examples

This example shows how to configure TACACS+ server host parameters:

```
switch(config)# tacacs-server host 192.168.2.3 key HostKey
switch(config)# tacacs-server host tacacs2 key 0 abcd
switch(config)# tacacs-server host tacacs3 key 7 1234
switch(config)# tacacs-server host 192.168.2.3 test idle-time 10
switch(config)# tacacs-server host 192.168.2.3 test username tester
switch(config)# tacacs-server host 192.168.2.3 test password 2B9ka5
```

Related Commands

| Command | Description |
|---------------------------|--------------------------------------|
| feature tacacs+ | Enables TACACS+. |
| show tacacs-server | Displays TACACS+ server information. |

tacacs-server key

To configure a global TACACS+ shared secret key, use the **tacacs-server key** command. To remove a configured shared secret, use the **no** form of this command.

tacacs-server key [**0** | **7**] *shared-secret*

no tacacs-server key [**0** | **7**] *shared-secret*

| | | |
|--------------------|----------------------|---|
| Syntax Description | 0 | (Optional) Configures a preshared key specified in clear text to authenticate communication between the TACACS+ client and server. This is the default. |
| | 7 | (Optional) Configures a preshared key specified in encrypted text to authenticate communication between the TACACS+ client and server. |
| | <i>shared-secret</i> | Preshared key to authenticate communication between the TACACS+ client and server. The preshared key is alphanumeric, case sensitive, and has a maximum of 63 characters. |

| | |
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| Command Default | None |
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|---------------|---------------------------|
| Command Modes | Global configuration mode |
|---------------|---------------------------|

| Command History | Release | Modification |
|-----------------|-------------|------------------------------|
| | 6.0(2)N1(1) | This command was introduced. |

| | |
|------------------|--|
| Usage Guidelines | <p>You must configure the TACACS+ preshared key to authenticate the switch to the TACACS+ server. The length of the key is restricted to 65 characters and can include any printable ASCII characters (white spaces are not allowed). You can configure a global key to be used for all TACACS+ server configurations on the switch. You can override this global key assignment by using the key keyword in the tacacs-server host command.</p> |
|------------------|--|

You must use the **feature tacacs+** command before you configure TACACS+.

| | |
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| Examples | This example shows how to display configure TACACS+ server shared keys: |
|----------|---|

```
switch(config)# tacacs-server key AnyWord
switch(config)# tacacs-server key 0 AnyWord
switch(config)# tacacs-server key 7 public
```

| Related Commands | Command | Description |
|------------------|---------------------------|--------------------------------------|
| | feature tacacs+ | Enables TACACS+. |
| | show tacacs-server | Displays TACACS+ server information. |

tacacs-server timeout

To specify the time between retransmissions to the TACACS+ servers, use the **tacacs-server timeout** command. To revert to the default, use the **no** form of this command.

tacacs-server timeout *seconds*

no tacacs-server timeout *seconds*

| Syntax Description | <i>seconds</i> | Seconds between retransmissions to the TACACS+ server. The valid range is 1 to 60 seconds. |
|--------------------|----------------|--|
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| Command Default | 1 second |
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| Command Modes | Global configuration mode |
|---------------|---------------------------|
|---------------|---------------------------|

| Command History | Release | Modification |
|-----------------|-------------|------------------------------|
| | 6.0(2)N1(1) | This command was introduced. |

| Usage Guidelines | You must use the feature tacacs+ command before you configure TACACS+. |
|------------------|---|
|------------------|---|

| Examples | <p>This example shows how to configure the TACACS+ server timeout value:</p> <pre>switch(config)# tacacs-server timeout 3</pre> <p>This example shows how to revert to the default TACACS+ server timeout value:</p> <pre>switch(config)# no tacacs-server timeout 3</pre> |
|----------|--|
|----------|--|

| Related Commands | Command | Description |
|------------------|---------------------------|--------------------------------------|
| | feature tacacs+ | Enables TACACS+. |
| | show tacacs-server | Displays TACACS+ server information. |

telnet

To create a Telnet session using IPv4 on a Cisco Nexus 5000 Series switch, use the **telnet** command.

telnet {*ipv4-address* | *hostname*} [*port-number*] [**vrf** {*vrf-name* | **default** | **management**}]

| Syntax Description | | |
|--------------------|----------------------------|--|
| | <i>ipv4-address</i> | IPv4 address of the remote switch. |
| | <i>hostname</i> | Hostname of the remote switch. The name is alphanumeric, case sensitive, and has a maximum of 64 characters. |
| | <i>port-number</i> | (Optional) Port number for the Telnet session. The range is from 1 to 65535. |
| | vrf <i>vrf-name</i> | (Optional) Specifies the virtual routing and forwarding (VRF) name to use for the Telnet session. The name is case sensitive and can be a maximum of 32 alphanumeric characters. |
| | default | Specifies the default VRF. |
| | management | Specifies the management VRF. |

Command Default Port 23 is the default port.

Command Modes EXEC mode

| Command History | Release | Modification |
|-----------------|-------------|------------------------------|
| | 6.0(2)N1(1) | This command was introduced. |

Usage Guidelines To create a Telnet session with IPv6 addressing, use the **telnet6** command.

Examples This example shows how to start a Telnet session using IPv4:

```
switch# telnet 192.168.1.1 vrf management
switch#
```

| Related Commands | Command | Description |
|------------------|-----------------------------|---|
| | clear line | Clears Telnet sessions. |
| | telnet server enable | Enables the Telnet server. |
| | telnet6 | Creates a Telnet session using IPv6 addressing. |

telnet server enable

To enable the Telnet server, use the **telnet server enable** command. To disable the Telnet server, use the **no** form of this command.

telnet server enable

no telnet server enable

| | |
|---------------------------|--|
| Syntax Description | This command has no arguments or keywords. |
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| Command Default | Enable |
|------------------------|--------|

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| Command Modes | Global configuration mode |
|----------------------|---------------------------|

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|------------------------|----------------|------------------------------|
| Command History | Release | Modification |
| | 6.0(2)N1(1) | This command was introduced. |

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|-----------------|---|
| Examples | This example shows how to enable the Telnet server: |
|-----------------|---|

```
switch(config)# telnet server enable
```

| |
|--|
| This example shows how to disable the Telnet server: |
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```
switch(config)# no telnet server enable
```

| | | |
|-------------------------|--------------------|------------------------------------|
| Related Commands | Command | Description |
| | show telnet server | Displays the Telnet server status. |

telnet6

To create a Telnet session using IPv6 on the Cisco NX-OS switch, use the **telnet6** command.

telnet6 {*ipv6-address* | *hostname*} [*port-number*] [**vrf** {*vrf-name* | **default** | **management**}]

| Syntax Description | | |
|--------------------|----------------------------|--|
| | <i>ipv6-address</i> | IPv6 address of the remote device. |
| | <i>hostname</i> | Hostname of the remote device. The name is alphanumeric, case sensitive, and has a maximum of 64 characters. |
| | <i>port-number</i> | (Optional) Port number for the Telnet session. The range is from 1 to 65535. |
| | vrf <i>vrf-name</i> | (Optional) Specifies the virtual routing and forwarding (VRF) name to use for the Telnet session. The name is case sensitive and can be a maximum of 32 alphanumeric characters. |
| | default | Specifies the default VRF. |
| | management | Specifies the management VRF. |

Command Default Port 23 is the default port. The default VRF is used.

Command Modes EXEC mode

| Command History | Release | Modification |
|-----------------|-------------|------------------------------|
| | 6.0(2)N1(1) | This command was introduced. |

Usage Guidelines To use this command, you must enable the Telnet server using the **telnet server enable** command.
To create a Telnet session with IPv4 addressing, use the **telnet** command.

Examples This example shows how to start a Telnet session using an IPv6 address:

```
switch# telnet6 2001:0DB8:0:0:E000::F vrf management
switch#
```

| Related Commands | Command | Description |
|------------------|-----------------------------|---|
| | clear line | Clears Telnet sessions. |
| | telnet | Creates a Telnet session using IPv4 addressing. |
| | telnet server enable | Enables the Telnet server. |