



# Network Switch CLI Guide

## Auto-Update and Auto-Configuration

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# Auto-Update and Auto-Configuration Commands

## boot host auto-config

|                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Syntax</b>                | <b>boot host auto-config[tftp scp auto[extension]]</b><br><b>no boot host auto-config</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Parameters</b>            | <p><b>tftp</b>—Only the TFTP protocol is used by auto-configuration.</p> <p><b>scp</b>—Only the SCP protocol is used by auto-configuration.</p> <p><b>auto</b>—(Default) Auto-configuration uses the TFTP or SCP protocol depending on the configuration file's extension. If this option is selected, the extension parameter may be specified or, if not, the default extension is used.</p> <p><b>extension</b>—The SCP file extension. When no value is specified, 'scp' is used. (Range: 1-16 characters)</p>                                                     |
| <b>Default Configuration</b> | Auto configuration via DHCP is disabled.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Command Mode</b>          | Global configuration mode.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Usage</b>                 | <p>Use the <b>boot host auto-config</b> Global Configuration mode command to enable auto configuration via DHCP.</p> <p>Use the <b>no</b> form of this command to disable DHCP auto configuration.</p>                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Example</b>               | <p><b>Example 1.</b> The following example specifies the auto mode and specifies "scon" as the SCP extension:</p> <pre>switchxxxxx(config)# <b>boot host auto-config autoscon</b></pre> <p><b>Example 2.</b> The following example specifies the auto mode and does not provide an SCP extension. In this case "scp" is used.</p> <pre>switchxxxxx(config)# <b>boot host auto-config auto</b></pre> <p><b>Example 3.</b> The following example specifies that only the SCP protocol will be used:</p> <pre>switchxxxxx(config)# <b>boot host auto-config scp</b></pre> |
| <b>User Guideline</b>        | The TFTP or SCP protocol is used to download/upload a configuration file.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |

## boot host auto-update

|                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Syntax</b>                | <b>boot host auto-update [tftp   scp   auto [extension]]</b><br><b>no boot host auto-update</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Parameters</b>            | <p><b>tftp</b>—Only the TFTP protocol is used by auto-update.</p> <p><b>scp</b>—Only the SCP protocol is used by auto-update.</p> <p><b>auto</b> (Default)—Auto-configuration uses the TFTP or SCP protocol depending on the Indirect image file's extension. If this option is selected, the extension parameter may be specified or, if not, the default extension is used.</p> <p><b>extension</b>—The SCP file extension. When no value is specified, 'scp' is used. (Range: 1-16 characters)</p>                                                                   |
| <b>Default Configuration</b> | Auto update via DHCP is disabled.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Command Mode</b>          | Global Configuration mode.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Usage</b>                 | Use the <b>boot host auto-update</b> Global Configuration mode command to enable the support of auto update via DHCP. Use the <b>no</b> form of this command to disable DHCP auto configuration.                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Example</b>               | <p><b>Example 1</b>—The following example specifies the auto mode and specifies "scon" as the SCP extension:</p> <pre>switchxxxxxx(config)# <b>boot host auto-update auto scon</b></pre> <p><b>Example 2</b>—The following example specifies the auto mode and does not provide an SCP extension. In this case "scp" is used.</p> <pre>switchxxxxxx(config)# <b>boot host auto-update auto</b></pre> <p><b>Example 3</b>—The following example specifies that only the SCP protocol will be used:</p> <pre>switchxxxxxx(config)# <b>boot host auto-update scp</b></pre> |
| <b>User Guideline</b>        | The TFTP or SCP protocol is used to download/upload an image file.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |

## show boot

|                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
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| <b>Syntax</b>                | <b>show boot</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Parameters</b>            | N/A.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Default Configuration</b> | N/A.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Command Mode</b>          | Privileged EXEC mode.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Usage</b>                 | Use the <b>show boot</b> Privilege EXEC mode command to show the status of the IPDHCP Auto Config process.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Example</b>               | <pre>switchxxxxxx# show boot</pre> <p>Auto Config<br/> ConfigDownloadviaDHCP:enabled<br/> Download Protocol:auto<br/> SCPprotocolwillbeusedforfileswithextension:scp<br/> Configuration file auto-save:enabled<br/> AutoConfigState:FinishedsuccessfullyServer IP<br/> address: 1.2.20.2<br/> Configuration filename: /config/configfile1.cfgAuto Update<br/> Image Download via DHCP: enabled</p> <pre>switchxxxxxx# show boot</pre> <p>Auto Config<br/> ConfigDownloadviaDHCP:enabled<br/> Download Protocol:scp<br/> Configuration file auto-save: enabled<br/> AutoConfigState:Opening&lt;hostname&gt;-configfileAuto Update<br/> Image Download via DHCP: enabled</p> <pre>switchxxxxxx# show boot</pre> <p>Auto Config<br/> Config Download via DHCP: enabled<br/> "Download Protocol: scp Configurationfile<br/> auto-save:enabled<br/> AutoConfigState:DownloadingconfigurationfileAuto Update</p> |

|                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                       | <p>Image Download via DHCP: enabled</p> <p>switchxxxxxx# <b>show boot</b></p> <p>Auto Config</p> <p>Config Download via DHCP: enabled</p> <p>Download Protocol: tftp Configurationfileauto-save:enabled</p> <p>AutoConfigState:SearchingdevicehostnameinindirectfileAuto Update</p> <p>Image Download via DHCP: enabled</p> <p>switchxxxxxx# <b>show boot</b></p> <p>Auto Config</p> <p>Config Download via DHCP: enabled</p> <p>Download Protocol: tftp Configurationfileauto-save:enabled</p> <p>Auto Update</p> <p>Image Download via DHCP: enabled</p> <p>AutoUpdateState:DownloadedindirectimagefileIndirect Image</p> <p>filename: /image/indirectimage.txt</p> |
| <b>User Guideline</b> | -                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

## ip dhcp tftp-server ip address

|                              |                                                                                                                                                                                                                                                                                                                  |
|------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Syntax</b>                | <p><b>ip dhcp tftp-server ip address</b> <i>ip-addr</i></p> <p><b>no ip dhcp tftp-server ip address</b></p>                                                                                                                                                                                                      |
| <b>Parameters</b>            | <i>ip-addr</i> —IPv4 Address, or IPv6 Address or DNS name of TFTP or SCPserver.                                                                                                                                                                                                                                  |
| <b>Default Configuration</b> | No IP address.                                                                                                                                                                                                                                                                                                   |
| <b>Command Mode</b>          | Global Configuration mode.                                                                                                                                                                                                                                                                                       |
| <b>Usage</b>                 | <p>Use the <b>ip dhcp tftp-server ip address</b> Global Configuration mode command to set the backup server's IP address. This address server as the default address used by a switch when it has not been received from the DHCP server.</p> <p>Use the <b>no</b> form of the command to return to default.</p> |
| <b>Example</b>               | <p><b>Example 1.</b> The example specifies the IPv4 address of TFTP server:</p> <p>switchxxxxxx(config)# <b>ip dhcp tftp-server ip address</b> 10.5.234.232</p>                                                                                                                                                  |

|                       |                                                                                                                                                                                                                                                                                                                                    |
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|                       | <p><b>Example 2.</b> The example specifies the IPv6 address of TFTP server:</p> <pre>switchxxxxxx(config)# ip dhcp tftp-server ip address 3000:1::12</pre> <p><b>Example 3.</b> The example specifies the IPv6 address of TFTP server:</p> <pre>switchxxxxxx(config)# ip dhcp tftp-server ip address tftp-server.company.com</pre> |
| <b>User Guideline</b> | The backup server can be a TFTP server or a SCP server.                                                                                                                                                                                                                                                                            |

## ip dhcp tftp-serverfile

|                              |                                                                                                                                                                                                                                                                                                   |
|------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Syntax</b>                | <b>ip dhcp tftp-server file</b> <i>file-path</i><br><b>no ip dhcp tftp-server file</b>                                                                                                                                                                                                            |
| <b>Parameters</b>            | <i>file-path</i> —Full file path and name of the configuration file on the server.                                                                                                                                                                                                                |
| <b>Default Configuration</b> | No file name.                                                                                                                                                                                                                                                                                     |
| <b>Command Mode</b>          | Global Configuration mode.                                                                                                                                                                                                                                                                        |
| <b>Usage</b>                 | <p>Use the <b>ip dhcp tftp-server file</b> Global Configuration mode command to set the fullfile name of the configuration file to be downloaded from the backup server when it has not been received from the DHCP server.</p> <p>Use the <b>no</b> form of this command to remove the name.</p> |
| <b>Example</b>               | switchxxxxxx(config)# <b>ip dhcp tftp-server file conf/conf-file</b>                                                                                                                                                                                                                              |
| <b>User Guideline</b>        | The backup server can be a TFTP server or an SCP server.                                                                                                                                                                                                                                          |

## ip dhcp tftp-server image file

|                              |                                                                                                                                                                                                                                                                                                |
|------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Syntax</b>                | <b>ip dhcp tftp-server image file</b> <i>file-path</i><br><b>no ip dhcp tftp-server image file</b>                                                                                                                                                                                             |
| <b>Parameters</b>            | <b>file-path</b> —Full indirect file path and name of the configuration file on the server.                                                                                                                                                                                                    |
| <b>Default Configuration</b> | No file name.                                                                                                                                                                                                                                                                                  |
| <b>Command Mode</b>          | Global Configuration mode.                                                                                                                                                                                                                                                                     |
| <b>Usage</b>                 | Use the <b>ip dhcp tftp-server image file</b> Global Configuration mode command to set the indirect file name of the image file to be downloaded from the backup server when it has not been received from the DHCP server.<br>Use the <b>no</b> form of this command to remove the file name. |
| <b>Example</b>               | switchxxxxx(config)# <b>ip dhcp tftp-server image file</b> imag/imag-file                                                                                                                                                                                                                      |
| <b>User Guideline</b>        | The backup server can be a TFTP server or a SCP server.                                                                                                                                                                                                                                        |

## show ip dhcp tftp-server

|                              |                                                                                                                                                                                           |
|------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Syntax</b>                | <b>show ip dhcp tftp-server</b>                                                                                                                                                           |
| <b>Parameters</b>            | N/A.                                                                                                                                                                                      |
| <b>Default Configuration</b> | N/A.                                                                                                                                                                                      |
| <b>Command Mode</b>          | User EXEC mode.                                                                                                                                                                           |
| <b>Usage</b>                 | Use the <b>show ip dhcp tftp-server</b> EXEC mode command to display information about the backup server.                                                                                 |
| <b>Example</b>               | <b>show ip dhcp tftp-server</b><br>server address<br>active 1.1.1.1 from sname<br>manual 2.2.2.2<br>file path on server<br>active conf/conf-file from option 67 manual<br>conf/conf-file1 |
| <b>User Guideline</b>        | The backup server can be a TFTP server or a SCP server.                                                                                                                                   |