

## Configuring Autoinstallation of Configuration Files (CLI Procedure)

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Autoinstallation is the automatic configuration of a device over the network from a pre-existing configuration file that you create and store on a configuration server—typically a Trivial File Transfer Protocol (TFTP) server. You can use autoinstallation to automatically configure new devices and to deploy multiple devices from a central location in the network.

No configuration is required on a new switch (a switch that has the factory default configuration file), because it is an automated process. However, to specify autoinstallation to run when you power on a switch already installed in your network, you can enable it by specifying one or more interfaces, protocols, and configuration servers to be used for autoinstallation.

Before you explicitly enable and configure autoinstallation on the switch, perform these tasks as needed for your network's configuration:

- Have a service available—typically Dynamic Host Configuration Protocol (DHCP)—to assign an IP address to the switch
- Configure a DHCP server on your network to meet your network requirements. You can configure an EX Series switch to operate as a DHCP server. For more information, see *Configuring DHCP Services (J-Web Procedure)*.
- Create one of the following configuration files, and store it on a TFTP server (or HTTP server or FTP server) in the network:
  - A host-specific file with the name *hostname.conf* for each switch undergoing autoinstallation. Replace *hostname* with the name of a switch. The *hostname.conf* file typically contains all the configuration information necessary for the switch with this hostname.
  - A default configuration file named *switch.conf* with the minimum configuration necessary to enable you to telnet into the new switch for further configuration.
- Physically attach the switch to the network using a Gigabit Ethernet port.
- If you configure the DHCP server to provide only the TFTP server hostname, add an IP address-to-hostname mapping entry for the TFTP server to the DNS database file on the Domain Name System (DNS) server in the network.
- If the new switch is not on the same network segment as the DHCP server (or other device providing IP address resolution), configure an existing device as an intermediate device to receive TFTP and DNS requests and forward them to the TFTP server and the DNS server. You must configure the LAN or serial interface on the intermediate device with the IP addresses of the hosts providing TFTP and DNS services. Connect this interface to the new switch.
- If you are using *hostname.conf* files for autoinstallation, you must also complete the following tasks:
  - Configure the DHCP server to provide a *hostname.conf* filename to each new switch. Each switch uses its *hostname.conf* filename to request a configuration file from the TFTP server. Copy the necessary *hostname.conf* configuration files to the TFTP server.

- Create a default configuration file named `network.conf`, and copy it to the TFTP server. This file contains IP-address-to-hostname mapping entries. If the DHCP server does not send a `hostname.conf` filename to a new switch, the switch uses `network.conf` to resolve its hostname based on its IP address.

Alternatively, you can add the IP-address-to-hostname mapping entry for the new switch to a DNS database file.

The switch uses the hostname to request a `hostname.conf` file from the TFTP server.

To configure autoinstallation:

1. Specify the URL address of one or more servers from which to obtain configuration files.

```
[edit system]
user@switch# set autoinstallation configuration-servers
tftp://tftpconfig.sp.com
```



**NOTE:** You can also use an FTP address, for example, <ftp://user:password@sftpconfig.sp.com>.

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2. Configure one or more Ethernet interfaces to perform autoinstallation and one or two procurement protocols for each interface. The switch uses the protocols to send a request for an IP address for the interface:

```
[edit system]
user@switch# set autoinstallation interfaces ge-0/0/0 bootp
```

- Related Topics**
- Verifying Autoinstallation Status on an EX Series Switch
  - Understanding Autoinstallation of Configuration Files on EX Series Switches
  - DHCP Services for EX Series Switches Overview

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Published: 2010-01-19