



# Overview Basic Configuration of a Cisco Networking Device

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Cisco IOS XE software provides two features, AutoInstall and Setup mode, to simplify configuring a Cisco IOS XE-based networking device. AutoInstall enables automatic loading of device configuration files from a remote location and can be used to configure several devices concurrently. Setup is an interactive Cisco IOS XE software command-line interface (CLI) mode that guides you through a basic (also called a startup) configuration but limits you to configuring a single device at a time. AutoInstall is an automatic process for the device that is being configured; Setup is a manual process for the device that is being configured.

This module provides an introduction to each feature and directs you to modules that describe the features in detail and explain how to use them.

The terms *initialconfiguration* and *startupconfiguration* are used interchangeably.

- [Contents, page 1](#)
- [Information About Basic Configuration of a Cisco Networking Device, page 1](#)
- [Where to Go Next, page 2](#)
- [Additional References, page 3](#)
- [Feature Information for Overview Basic Configuration of a Cisco Networking Device, page 3](#)

## Contents

## Information About Basic Configuration of a Cisco Networking Device

Before you configure a networking device with a basic configuration, you should understand the following concepts and decide whether AutoInstall or Setup mode is the best method, based on your requirements.

- [Comparison of Cisco IOS XE AutoInstall and Cisco IOS XE Setup Mode, page 2](#)



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- [Cisco IOS XE AutoInstall, page 2](#)
- [Cisco IOS XE Setup Mode, page 2](#)

## Comparison of Cisco IOS XE AutoInstall and Cisco IOS XE Setup Mode

Cisco IOS XE AutoInstall enables automatic loading of device configuration files from a remote location and can be used to configure several devices concurrently. Setup is an interactive Cisco IOS XE software CLI mode that guides you through a basic (also called a startup) configuration but limits you to configuring a single device at a time. AutoInstall is an automatic process; Setup is a manual process.

### Cisco IOS XE AutoInstall

AutoInstall is the Cisco IOS XE software feature that enables the configuration of a remote networking device from a central location. The configuration files must be stored on a TFTP server that is accessible by the devices that you are using AutoInstall to setup.

AutoInstall is supported over Ethernet, Token Ring, and FDDI interfaces for LANs, serial interfaces using High-Level Data Link Control (HDLC) encapsulation, and serial interfaces using Frame Relay encapsulation for WANs.

AutoInstall is designed to facilitate central management of installations at remote sites. The AutoInstall process begins when a Cisco IOS XE software-based device is turned on and a valid configuration file is not found in NVRAM. AutoInstall may not start if the networking device has Cisco Router and Security Device Manager (SDM) or Cisco Network Assistant already installed. In this case, to enable AutoInstall you need to disable SDM.

[Using AutoInstall to Remotely Configure Cisco Networking Devices](#) describes how AutoInstall functions, how to disable SDM, and how to configure devices to use AutoInstall.

### Cisco IOS XE Setup Mode

Cisco IOS XE Setup mode enables you to build an initial configuration file using the Cisco IOS XE CLI or System Configuration Dialog. The dialog guides you through initial configuration and is useful when you are unfamiliar with Cisco products or the CLI and when configuration changes do not require the level of detail the CLI provides.

Setup starts automatically when a device has no configuration file in NVRAM and is not preconfigured from the factory to use Cisco SDM. When setup completes, it presents the System Configuration Dialog. This dialog guides you through an initial configuration with prompts for basic information about your device and network and then creates an initial configuration file. After the file is created, you can use the CLI to perform additional configuration.

[Using Setup Mode to Configure a Cisco Networking Device](#) describes how to use Setup to build a basic configuration and to make configuration changes.

## Where to Go Next

Proceed to either [Using AutoInstall to Remotely Configure Cisco Networking Devices](#) module or [Using Setup Mode to Configure a Cisco Networking Device](#) .

## Additional References

This section provides references related to the basic configuration of a Cisco networking device.

### Related Documents

Related Topic	Document Title
Configuring a networking device for the first time using the Cisco IOS XE software feature AutoInstall.	<a href="#">Using AutoInstall to Remotely Configure Cisco Networking Devices</a>
Configuring a networking device using Cisco IOS XE Setup mode	<a href="#">Using Setup Mode to Configure a Cisco Networking Device</a>
Configuration fundamentals and associated commands	<i>Cisco IOS XE Configuration Fundamentals Configuration Guide</i> for your release and the release-independent <a href="#">Cisco IOS Configuration Fundamentals Command Reference</a>

### Technical Assistance

Description	Link
<p>The Cisco Support website provides extensive online resources, including documentation and tools for troubleshooting and resolving technical issues with Cisco products and technologies.</p> <p>To receive security and technical information about your products, you can subscribe to various services, such as the Product Alert Tool (accessed from Field Notices), the Cisco Technical Services Newsletter, and Really Simple Syndication (RSS) Feeds.</p> <p>Access to most tools on the Cisco Support website requires a Cisco.com user ID and password.</p>	<a href="http://www.cisco.com/techsupport">http://www.cisco.com/techsupport</a>

## Feature Information for Overview Basic Configuration of a Cisco Networking Device

[Feature Information for Overview Basic Configuration of a Cisco Networking Device](#), page 3 lists the features in this module and provides links to specific configuration information.

Use Cisco Feature Navigator to find information about platform support and software image support. Cisco Feature Navigator enables you to determine which Cisco IOS XE software images support a specific software release, feature set, or platform. To access Cisco Feature Navigator, go to <http://www.cisco.com/go/cfn>. An account on Cisco.com is not required.

**Note**

[Feature Information for Overview Basic Configuration of a Cisco Networking Device, page 3](#) lists only the Cisco IOS XE software release that introduced support for a given feature in a given Cisco IOS XE software release train. Unless noted otherwise, subsequent releases of that Cisco IOS XE software release train also support that feature.

**Table 1** *Feature Information for Overview: Basic Configuration of a Cisco Networking Device*

<b>Feature Name</b>	<b>Releases</b>	<b>Feature Information</b>
Overview: Basic Configuration of a Cisco Networking Device	Cisco IOS XE Release 2.1	This feature was introduced.

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