



## Overview

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The Cisco Catalyst 8300 and 8200 Series Edge Platforms are best-of-breed, 5G-ready, cloud edge platforms designed for accelerated services, multi-layer security, cloud-native agility, and edge intelligence to accelerate your journey to cloud.

Cisco Catalyst 8300 and 8200 Series Edge Platforms with Cisco IOS XE SD-WAN Software deliver Cisco's secure, cloud-scale SD-WAN solution for the branch. The Cisco Catalyst 8300 and 8200 Series Edge Platforms is built for high performance and integrated SD-WAN Services along with flexibility to deliver security and networking services together from the cloud or on premises. It provides higher WAN port density and a redundant power supply capability. The Cisco Catalyst 8300 and 8200 Series Edge Platforms have a wide variety of interface options to choose from—ranging from lower and higher module density with backward compatibility to a variety of existing WAN, LAN, LTE, voice, and compute modules. Powered by Cisco IOS XE, fully programmable software architecture, and API support, these platforms can facilitate automation at scale to achieve zero-touch IT capability while migrating workloads to the cloud. The Cisco Catalyst 8300 and 8200 Series Edge Platforms also come with Trustworthy Solutions 2.0 infrastructure that secures the platforms against threats and vulnerabilities with integrity verification and remediation of threats.

The Cisco Catalyst 8300 and 8200 Series Edge Platforms are well suited for medium-sized and large enterprise branch offices for high WAN IPsec performance with integrated SD-WAN services.

Cisco Catalyst 8300 and 8200 Series Edge Platforms target these use-cases:

- Enterprise Branch office, Managed Service Provide CPE, Internet Gateway for DIA, SASE cloud platform with SD-WAN
- Next-generation of Software Defined (SD) Branch routing platforms

This document is a summary of software functionality that is specific to the Cisco Catalyst 8300 and 8200 Series Edge Platforms. You can access the Cisco IOS XE and Cisco IOS XE SD-WAN functionality through Autonomous and Controller execution modes, respectively. The Autonomous mode is the default mode for the device and includes the Cisco IOS XE functionality. To access Cisco IOS XE SD-WAN functionality switch to the Controller mode. You can use the existing Plug and Play workflow to determine the mode of the device.

You can use the universalk9 image to deploy both Cisco IOS XE SD-WAN and Cisco IOS XE on Cisco IOS XE platforms. The Cisco IOS XE Amsterdam 17.3 helps in seamless upgrades of both the SD-WAN and non-SDWAN features and deployments.

### Switch Between Controller and Autonomous Modes Using Cisco CLI

Use the **controller-mode** command in Privileged EXEC mode to switch between controller and autonomous modes.

The **controller-mode disable** command switches the device to autonomous mode.

```
Device# controller-mode disable
```

The **controller-mode enable** command switches the device to controller mode.

```
Device# controller-mode enable
```



**Note** When the device mode is switched from autonomous to controller, the startup configuration and the information in NVRAM (certificates), are erased. This action is same as the **write erase**.

When the device mode is switched from controller to autonomous, all Yang-based configuration is preserved and can be reused if you switch back to controller mode. If you want to switch the mode from controller to autonomous, ensure that the configuration on the device is set to auto-boot.

### Switch Between Controller and Autonomous Modes using Bootstrap Configuration Files

On a device that already runs a Cisco IOS XE non SD-WAN image, after installing Cisco IOS XE Release 17.3.2 or later image, the device boots up in autonomous mode.

On a device that already runs a Cisco IOS XE SD-WAN image, after installing Cisco IOS XE Release 17.3.1r or later image, the device boots up in controller mode.

To switch modes, use the **controller-mode enable** command to switch from autonomous to controller mode and **controller-mode disable** command to switch from controller mode to autonomous mode. After the device boots up, the configuration present in the configuration file is applied.

After the device boots up in controller mode, the configuration present in the configuration file is applied.

For more information on how to use a single universal image to deploy Cisco IOS XE SD-WAN and Cisco IOS XE functionality on all the supported devices, see the [Install and Deploy Cisco IOS XE and Cisco IOS XE SD-WAN Functionality on Edge Platforms](#) guide.

The following are the Cisco Catalyst 8300 and 8200 Series Edge Platforms models:

- C8300-2N2S-4T2X
- C8300-2N2S-6T
- C8300-1N1S-4T2X
- C8300-1N1S-6T
- C8200-1N-4T
- C8200L-1N-4T

The following table provides the supported modules and features on Cisco Catalyst 8300 and 8200 Series Edge Platforms.

**Table 1: Supported Modules and Features on Cisco 8300 and 8200 Series Edge Platforms**

Features	Cisco 8300	Cisco 8200	Cisco 8200L
Service Plane Applications (UTD, AppQoS, and TcpOpt)	Yes	No	No
CPU Core	8 Core C8300-2N2S-4T2X supports 12 Core	8 Core	4 Core
CPU Memory	8 G	8 G	4 G
Backplane Support	10 G	10 G	1 G

The following sections are included in this chapter:

- [Sections in this Document, on page 3](#)

## Sections in this Document

**Table 2: Sections in this Document**

Section	Description
<a href="#">Overview, on page 1</a>	Provides a high-level description of the router and describes the main internal processes of the router.
<a href="#">Using Cisco IOS XE Software</a>	Describes the basics of using Cisco IOS XE software with the router.
<a href="#">Managing the Device Using Web User Interface</a>	Describes the uses of a Gigabit Ethernet management interface and a web user interface.
<a href="#">Console Port, Telnet, and SSH Handling</a>	Describes software features that are common across Cisco IOS XE platforms.
<a href="#">Installing the Software</a>	Contains important information about filesystems, packages, licensing, and installing software.
<a href="#">Basic Platform Configuration</a>	Describes the basic tasks required to configure a router.
<a href="#">Slot and Subslot Configuration</a>	Provides information about the chassis slot numbers and subslots where the service modules are installed.
<a href="#">Process Health Monitoring</a>	Provides information about managing and monitoring the health of various components of the router.
<a href="#">System Messages</a>	Provides information about syslog messages.

Section	Description
<a href="#">Trace Management</a>	Describes the tracing function where logs of internal events on a router are recorded.
<a href="#">Environmental Monitoring and PoE Management</a>	Describes the environmental monitoring features on a router.
<a href="#">Configuring High Availability</a>	Provides information about high availability features on a router to ensure network-wide protection.
<a href="#">Configuring Secure Storage</a>	Describes how to configure secure storage.
<a href="#">Configuring Call Home</a>	Call Home feature provides e-mail-based and web-based notification of critical system events.
<a href="#">Managing Cisco Enhanced Services and Network Interface Modules</a>	Includes information about modules that can be attached to the router and provides related links to further documentation. For further details on configuring the modules (NIMs and SMs), also see the <a href="#">Documentation Roadmap</a> .
<a href="#">Cellular IPv6 Address</a>	This chapter provides an overview of the IPv6 addresses and describes how to configure Cellular IPv6 address on Cisco C8000 series routers.
<a href="#">Radio Aware Routing</a>	This chapter provides an overview of the Radio-Aware Routing (RAR). RAR is a mechanism that uses radios to interact with the routing protocol OSPFv3 to signal the appearance, disappearance, and link conditions of one-hop routing neighbors.
<a href="#">Dying Gasp Through SNMP, Syslog and Ethernet OAM</a>	A dying gasp is a message (or signal) sent by a Customer Premises Equipment (CPE) to equipment managed by an Internet Service Provider to indicate that the CPE has lost power.