



What's New for Cisco IOS XE Cupertino 17.8.x

This chapter describes the new hardware and software features that are supported on the Cisco NCS 4201 and Cisco NCS 4202 Series routers.

For information on features supported for each release, see [Feature Compatibility Matrix](#).

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What's New in Hardware for Cisco IOS XE Cupertino 17.8.x

| Feature | Description |
|--------------------|---|
| SFP Modules | |
| New SFP Modules | <p>This release introduces support for the following SFP module:</p> <ul style="list-style-type: none"> • ONS-SI-GE-SX <p>For more information, see the Cisco Network Convergence System Routers NCS 4201-02 Series Optics Matrix.</p> |

What's New in Software for Cisco IOS XE Cupertino 17.8.x

| Feature | Description |
|---|---|
| Carrier Ethernet | |
| Increase Maximum MTU Size | Maximum Transmission Unit (MTU) is increased to a maximum of 9670 bytes on the Cisco RSP2 module. You can configure the MTU bytes using the mtu bytes command. |
| CEM | |

| Feature | Description |
|--|--|
| Frame Relay Support for IP Interworking | <p>Support for frame relay encapsulation on iMSG serial interface for the following interface modules:</p> <ul style="list-style-type: none"> • 1-port OC-48/STM-16 or 4-port OC-12/OC-3 / STM-1/STM-4 + 12 port T1/E1 + 4-port T3/E3 CEM interface module • NCS 4200 Combo 8-Port SFP GE and 1-Port 10 GE 20G interface module <p>Frame Relay being a streamlined protocol facilitates higher performance and greater efficiency.</p> |
| NCS4200-48T1E1-CE support in NCS4202 | <p>The router supports the following features for the 48-Port T1/E1 Circuit Emulation (CEM) interface module:</p> <ul style="list-style-type: none"> • Basic mode, and T1 or E1 controller required configurations • CEM clocking, ACR, and DCR • CEM pseudowires such as Structure-Agnostic TDM over Packet (SATOP) and Circuit Emulation over Packet-Switched Network (CESoPSN) • BERT, loopback, and alarms • Performance monitoring <p>The support for the interface module provides cost-effective delivery of CEM over a packet-based network (MPLS).</p> |
| IP Routing: BGP | |
| Outbound Route Filtering (ORF) Support for BGP Labeled Unicast | <p>This feature uses BGP ORF send and receive capabilities to minimize the number of BGP updates that are sent between BGP peers. It can also filter out unwanted routing updates at the source to reduce the amount of system resources that are required for generating and processing routing updates.</p> |
| Layer 2 | |
| Mac Address Limiting Per Bridge Domain | <p>This feature restricts the number of MAC addresses that the router learns in a bridge-domain on an EFP, pseudowire or trunk EFP to a specified number. Use the feature to enable warning and limit actions when a violation occurs.</p> |
| Support for Ethernet Data Plane Loopback on Bundle Interface | <p>This feature enables ethernet data plane loopback on bundle interfaces.</p> |
| Y.1564 and EDPL support on dot1ad | <p>This feature allows Y.1564 and EDPL to be supported on interfaces that are configured with 802.1ad encapsulation.</p> <p>The following commands are introduced:</p> <ul style="list-style-type: none"> - inner-eth-type - outer-eth-type |
| Cisco IOS Multiprotocol Label Switching Command Reference | |

| Feature | Description |
|---|--|
| Long Service Name | The <code>description</code> command in the <code>l2vpn xconnect</code> configuration has been modified to support a maximum of 240 characters. In addition, a new <code>description</code> command, which supports 240 characters, has been added in the <code>connect connection-name</code> configuration. You can set this by executing the <code>description</code> command in the configuration mode. This implementation is useful for administrative purposes. |
| YANG Native Config Model Hardening: Cisco-IOS-XE-wccp.yang | Support for YANG Native Config Model Hardening: Cisco-IOS-XE-wccp.yang is introduced in this release. |
| Sensitive Data Erase | Support for sensitive data erase is introduced in this release. |

