Whats New in Cisco IOS XE Cupertino 17.9.x

Whats New in Cisco IOS XE Cupertino 17.9.5

Hardware Features in Cisco IOS XE Cupertino 17.9.5

There are no new hardware features in this release.

Software Features in Cisco IOS XE Cupertino 17.9.5

There are no new software features in this release.

Hardware and Software Behavior Changes in Cisco IOS XE Cupertino 17.9.5

There are no behavior changes in Cisco IOS XE Cupertino 17.9.5.

Whats New in Cisco IOS XE Cupertino 17.9.4a

There are no new features in this release. This release provides a fix for CSCwh87343: Cisco IOS XE Software Web UI Privilege Escalation Vulnerability. For more information, see Security Advisory: cisco-sa-iosxe-webui-privesc-j22SaA4z.

Whats New in Cisco IOS XE Cupertino 17.9.4

Hardware Features in Cisco IOS XE Cupertino 17.9.4

There are no new hardware features in this release.

Software Features in Cisco IOS XE Cupertino 17.9.4

Feature Name	Description
Support for Wireless in a LISP VXLAN Fabric	A LISP VXLAN Fabric supports wireless infrastructure and wireless clients through two modes: Fabric-enabled Wireless and Over-the-top (OTT) Centralized Wireless. In a Fabric-enabled Wireless deployment, the wireless infrastructure is integrated with the wired fabric network to provide a single overlay for the wired and wireless clients. In an OTT Wireless deployment, the wireless infrastructure uses the wired fabric network as a transport medium to carry the traditional wireless traffic.

Hardware and Software Behavior Changes in Cisco IOS XE Cupertino 17.9.4

There are no behavior changes in Cisco IOS XE Cupertino 17.9.4.

Whats New in Cisco IOS XE Cupertino 17.9.3

Hardware Features in Cisco IOS XE Cupertino 17.9.3

There are no new hardware features in this release.

Software Features in Cisco IOS XE Cupertino 17.9.3

Feature Name	Description
LISP VXLAN Fabric for a Wired Network	A LISP VXLAN fabric is an enterprise solution that enables policy-based segmentation over a LISP-based fabric overlay across a Campus and Branch network. It uses a LISP-based control plane and VXLAN-based data plane.

Hardware and Software Behavior Changes in Cisco IOS XE Cupertino 17.9.3

There are no behavior changes in Cisco IOS XE Cupertino 17.9.3.

Whats New in Cisco IOS XE Cupertino 17.9.2

Hardware Features in Cisco IOS XE Cupertino 17.9.2

Feature Name	Description
100GBASE DR QSFP Module	Supported transceiver module product numbers: • QSFP-100G-DR-S Compatible switch model: • C9500X-28C8D For information about the module, see Cisco 100GBASE QSFP-100G Modules Data Sheet. For information about device compatibility, see the Transceiver Module Group (TMG) Compatibility Matrix.

Software Features in Cisco IOS XE Cupertino 17.9.2

There are no new software features in this release.

Hardware and Software Behavior Changes in Cisco IOS XE Cupertino 17.9.2

There are no behavior changes in Cisco IOS XE Cupertino 17.9.2.

Whats New in Cisco IOS XE Cupertino 17.9.1

Hardware Features in Cisco IOS XE Cupertino 17.9.1

There are no new hardware features in this release.

Software Features in Cisco IOS XE Cupertino 17.9.1

Feature Name	Description
BGP EVPN VXLAN: TCP MSS Adjustment	TCP MSS Adjustment: Introduces support for IPv4 and IPv6 TCP MSS Adjustment for EVPN Routed Overlay.
Destination IP-based Conditional NAT using Route-map	Introduces support for configuring route map based NAT. Route map based NAT enables destination based translation and supports match addresses. This feature is supported on Cisco Catalyst 9500 Series Switches-High Performance switch models.

Feature Name	Description
DHCP Snooping with Egress SPAN on the same interface	Introduces support for configuring concurrent DHCP Snooping and egress SPAN on the same interface for non-SDA deployments.
Programmability • YANG Data Models • Pubd Restartability	The following programmability features are introduced in this release: • YANG Data Models: For the list of Cisco IOS XE YANG models available with this release, navigate to: https://github.com/YangModels/yang/tree/master/vendor/cisco/xe/1791. Revision statements embedded in the YANG files indicate if there has been a model revision. The README.md file in the same GitHub location highlights changes that have been made in the release. • Pubd Restartability: The pubd process is restartable on all platforms in this release. Prior to this release, pubd was restartable only on certain platforms. On other platforms, to restart the pubd process, the whole device had to be restarted.
Smart Licensing Using Policy • New mechanism to send data privacy related information • Hostname support	The following Smart Licensing Using Policy features are introduced in this release: • New mechanism to send data privacy related information: This information is no longer included in a RUM report. If data privacy is disabled (**no license smart privacy** { **all** | **hostname** | **version**} global configuration command), data privacy related information is sent in a separate sync message or offline file. Depending on the topology you have implemented, the product instance initiates the sending of this information in a separate message, or CSLU and SSM On-Prem initiates the retrieval of this information from the product instance, or this information is saved in the offline file that is generated when you enter the **license smart save usage** privileged EXEC command. • Hostname support: Support for sending hostname information was introduced. If you configure a hostname on the product instance and disable the corresponding privacy setting (**no license smart privacy hostname** global configuration command), hostname information is sent from the product instance, in a separate sync message or offline file. Depending on the topology you have implemented, the hostname information is received by CSSM, and CSLU or SSM On-Prem. It is then displayed on the corresponding user interface.
SMU Installation disabled in bundle mode	Support for SMU installation is disabled in bundle mode. Installation is supported only in install mode.
Support for PI SSH	Cisco IOS SSH Server and Client support for the following encryption algorithms have been introduced: • aes128-gcm@openssh.com • aes256-gcm@openssh.com
SXP Version 5	SXP version 5 has been designed to export and import SXP mappings between specified SXP peers.

New on the WebUI
There are no WebUI features in this release.

Hardware and Software Behavior Changes in Cisco IOS XE Cupertino 17.9.1

Behavior Change	Description
Custom SDM Templates: Default FIB MAC Address Value	The custom FIB MAC address minimum/default value is 16K. The configurable range for the number of 1k entries is 16 to 128. From Cisco IOS XE Cupertino 17.9.1, this is applicable to *all* subsequent releases.
DHCP Egress Packets Captured in SPAN Sessions	SPAN sessions capture Dynamic Host Configuration Protocol (DHCP) egress packets when DHCP snooping is enabled on the device.
Layer 2 Multicast Scale Numbers	Scale numbers for the following are modified. This applies only to Cisco Catalyst 9500 Series Switches-High Performance switch models: • Overflow unicast MAC addresses: Increased from 768 to 1536. • Layer 2 multicast OVF entries: Increased from 2048 OVF entries to 32,000 HASH and 768 OVF entries. • Ingress and egress NFL entries: Decreased from 48,000 to 32,000
MTU Packet Length	Prior to 17.9.1, the device was sending four bytes more than the maximum allowed packet length. Starting this release, the device sends packets as per the standard allowed packet length.
Non-queuing Service-Policy	Support for non-queuing service-policy is enabled on the port-channel subinterface of the Cisco Catalyst 9500X Series Switches.
PTP: BMCA Tree Hierarchy	PTP (Precision Time Protocol) profile is modified to create tree from Best Master Clock Algorithm (BMCA). To avoid faulty ports in the PTP topology, BMCA is made independent of the Spanning Tree Protocol (STP).

Behavior Change	Description
RUM report throttling	For all topologies where the product instance initiates communication, the minimum reporting frequency is throttled to one day. This means the product instance does not send more than one RUM report a day. The affected topologies are: *Connected Directly to CSSM*, *Connected to CSSM Through CSLU* (product instance-initiated communication), *CSLU Disconnected from CSSM* (product instance-initiated communication), and *SSM On-Prem Deployment* (product instance-initiated communication). This resolves the problem of too many RUM reports being generated and sent for certain licenses. It also resolves the memory-related issues and system slow-down that was caused by an excessive generation of RUM reports. You can override the reporting frequency throttling, by entering the **license smart sync** command in privileged EXEC mode. This triggers an on-demand synchronization with CSSM or CSLU, or SSM On-Prem, to send and receive any pending data. RUM report throttling also applies to the Cisco IOS XE Amsterdam 17.3.6 and later releases of the 17.3.x train, and Cisco IOS XE Bengaluru 17.6.4 and later releases of the 17.6.x train. From Cisco IOS XE Cupertino 17.9.1, RUM report throttling is applicable to *all* subsequent releases.
show vlan mapping command output	The **show vlan mapping** command output is modified. Information about Five GigabitEthernet interface is displayed in the output.