Whats New in Cisco IOS XE Dublin 17.10.x

Hardware Features in Cisco IOS XE Dublin 17.10.1b

Feature Name	Description
Cisco Catalyst 9500X Series Switches (C9500X-60L4D)	The following model is introduced in the series: C9500X-60L4D: 60x50G SFP56 and 4x400G QSFP-DD ports; 2 power supply slots For information about the hardware including installation and technical specifications, see the Cisco Catalyst 9500X Series Switches Hardware Installation Guide.

Hardware Features in Cisco IOS XE Dublin 17.10.1

Feature Name	Description
100GBASE DR QSFP Module	Supported transceiver module product numbers: • QSFP-100G-DR-S 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 Dublin 17.10.1

Feature Name	Applicable Models	Description
BGP EVPN VXLAN support on C9500X-28C8D	9500X	The C9500X-28C8D model of Cisco Catalyst 9500X Series Switches supports the following BGP EVPN VXLAN features: • Layer 2 and Layer 3 overlay with IPv4 and IPv6 hosts • Multicast replication for Broadcast, Unknown Unicast, Multicast (BUM) traffic • Distributed Anycast Gateway • EVPN VXLAN External Connectivity with VRF-Lite and IEEE 802.1Q network This release does not support Ingress Replication, Multi-Homing and Centralized Default Gateway.
BGP EVPN VXLAN with IPv6 in the Underlay (VXLANv6)	9500, 9500H	Introduces support for IPv6 addressing in the underlay of a BGP EVPN VXLAN fabric. In a new deployment, you can build your BGP EVPN VXLAN fabric with IPv6 underlay. For an existing BGP EVPN VXLAN fabric with IPv4 underlay, you can seamlessly migrate to an IPv6 or dual stack underlay.
Cisco DNA Service for Bonjour	9500X	Cisco DNA Service for Wide Area Bonjour (Multicast DNS Mode only) and Local Area Bonjour in Unicast Mode for Multi-Layer Network and Routed Access Network was introduced on Cisco Catalyst 9600 Series Supervisor 2 Module (C9600X-SUP-2).
Cisco StackWise Virtual	9500X	Cisco StackWise Virtual is a network system virtualization technology that pairs two switches into one virtual switch to simplify operational efficiency with a single control and management plane. Starting with this release, the feature is supported on the C9500X-28C8D model of Cisco Catalyst 9500X Series Switches.
Custom EAPoL	9500, 9500H, 9500X	Allows customization of the default EAPoL EtherType to configure MACsec with EtherType as 876F.
Enhanced Password Security Through Updated Combination Rule	9500, 9500H	The **character-repetition** and **restrict-consecutive-letters** keywords were introduced for the **aaa common-criteria** policy command.

Feature Name	Applicable Models	Description
MACsec Fallback Key Support with High Availability	9500, 9500H, 9500X	Introduces support for the MACsec Fallback Key feature with High Availability. The MACsec Fallback Key feature establishes an MKA session with the pre-shared fallback key whenever the PSK fails to establish a session because of key mismatch.
NAT support on L3 Port Channel	9500, 9500H	Introduces support for configuring NAT on Layer 3 port channel using the **interface port-channel** command.
Programmability • Upgrade YANG Models to YANG 1.1 • YANG Data Models	9500, 9500H, 9500X	The following programmability features are introduced in this release: • Upgrade YANG Models to YANG 1.1: Cisco-defined YANG models are in YANG Version 1.1 in Cisco IOS XE Dublin 17.10.1 and later releases. • 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/17101.
PTPv2 with Cisco StackWise Virtual	9500, 9500H	Introduces support for PTPv2 with Cisco StackWise Virtual.
RADIUS Automated Testing Probe-on	9500, 9500H, 9500X	The command **automate-tester probe-on** was introduced. It starts a dead timer and packets are sent to the external RADIUS server after the timer expires.
Reflexive Access Lists (IPv4)	9500, 9500H	Reflexive access lists allow IP packets to be filtered based on upper-layer session information.
Secure Data Wipe	9500, 9500H, 9500X	Introduces support for performing factory reset by using the keyword **all secure** in the **factory-reset** command. This option performs data sanitisation and securely resets the device.
SGACL Monitor Mode and SGACL Logging	9500X	Introduces support for SGACL Monitor Mode and SGACL Logging on the Cisco Catalyst 9500X Series Switches.
SHA256 based Password-masking support	9500, 9500H	You can use the **masked-secret** keyword on the **enable algorithm type** command and **username** command. The keyword masks the secret input and converts to the selected encryption.

Feature Name	Applicable Models	Description
Standalone Mode on Layer 3 EtherChannels	9500, 9500H, 9500X	Introduces support for configuring standalone mode/independent mode on Layer 3 EtherChannels.
Stateful NAT64	9500H	Introduces support for a translation mechanism that translates IPv6 packets into IPv4 packets and vice versa. Packets generated in an IPv6 network can be sent to an IPv4 network within the IPv6 network using the Stateful NAT64 translator.
DHCP Gleaning	9500, 9500H, 9500X	Introduces support for a read–only DHCP snooping functionality that allows components to register and glean only DHCP version 4 packets.

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

Hardware and Software Behavior Changes in Cisco IOS XE Dublin 17.10.1

Behavior Change	Description
debug platform command	The **debug platform software fed switch active inject packet-capture start** command was modified. **full-packet** keyword was added. It allows you to capture 1500 bytes of packet. The default packet capture was only for 128 bytes of the packet prior to Cisco IOS XE Dublin 17.10.1.