

## What's New in Cisco IOS XE Dublin 17.10.x

This chapter describes the new hardware and software features supported on the Cisco ASR 920 Series routers in Cisco IOS XE Dublin 17.10.x.

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 Dublin 17.10.x

There are no new hardware features for this release.

## What's New in Software for Cisco IOS XE Dublin 17.10.x

Feature	Description	
Carrier Ethernet		
Tagged Packet Support Using Link Layer Discovery Protocol (LLDP)	LLDP now supports tagged packet transmission over a service instance with dot1q encapsulation.	
	LLDP advertises information about themselves to their network neighbors, and store the information they discover from other devices. Though both these transmitted frames go through the same physical interface, they can be uniquely identified by the information advertised in the Port ID Type-Length-Value (TLV).	
	You can use the <u>lldp</u> enable command to enable LLDP over a particular service instance. Use the <b>show lldp neighbors</b> and <b>show lldp entry</b> command outputs for neighboring device details.	
CEM		
Frame Relay Configuration extended to RSP2 Module	You can configure frame relay on the iMSG serial interface for the following interface modules:  • 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	

Feature	Description
IP	
Improved IPv6 Forwarding Failure Notification	Improvements have been made to the Cisco IOS XE platforms to maintain compliance with IETF standards as specified for the Internet Protocol, Version 6 (IPv6) in RFC 8200. The enhancements fix some common causes of IPv6 forwarding faults and notify the sender about undelivered packets to a specified target. Notifications are received as log messages that can be accessed by enabling the following debugging command:
	debug ipv6
	Using the notifications, you can effectively troubleshoot IPv6 forwarding issues.
IP SLAs	
SADT over VC when Access Interface is Down	You can perform Service Activation and Deactivation (SADT) over Virtual Circuit (VC) even when access interface is down.
Programmability	
Telemetry for Monitoring Optical Transceivers	The Cisco-IOS-XE-transceiver-oper data model contains a collection of YANG definitions for monitoring optical transceivers. Maintaining certain parameters such as the voltage, temperature, or current at a desired level ensures optimal performance of optical modules. You can now subscribe to receive telemetry data, periodically, for debugging issues related to these parameters. Based on the telemetry data, you can mitigate problems such as elevated temperatures, which can have a significant effect on the performance of optical modules.
System Logging	
Support for Disabli	ng GARP
Support for Disabling GARP	You can now disable Gratuitous ARPs (GARP) on your router. A Gratuitous ARP (GARP) is an ARP request that is normally unneeded according to the ARP specification (RFC 826), however is useful in specific cases such as:  • Updating ARP mapping
	Announcing a node's existence
	• Redundancy
	GARP is disabled by default, and is enabled using the ip arp gratuitous arp local command.
	You can choose to ignore the GARPs using the ip arp gratuitous ignore command.
	For more information, see Cisco IOS IP Addressing Services Command Reference.
YANG Support	

Feature	Description
YANG Model Support for L2VPN Operations	The <b>Cisco-IOS-XE-l2vpn-oper</b> native model is a collection of YANG definitions for L2VPN services operational data. The leaves and lists present in the following sensor paths are now supported:
	Cisco-IOS-XE-l2vpn-oper\l2vpn-oper-data\l2vpn-services\l2vpn-xconnect
	Cisco-IOS-XE-l2vpn-oper\l2vpn-oper-data\l2vpn-services\l2vpn-atom-vc-info
	With this model, you can get the L2VPN service name, service type, interface name, peer address, status, encapsulation type, and virtual circuit ID by using a NETCONF RPC. In earlier releases, you could perform this action by using the following CLIs:
	• show l2vpn service xconnect peer peer_id vcid vcid
	• show l2vpn atom vc
	Note The show l2vpn atom vc details command is not supported in this release.

What's New in Software for Cisco IOS XE Dublin 17.10.x