



## New Features

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This chapter describes the new hardware and software features supported on the Cisco ASR 920 Series Routers for this release.

- [New Hardware Features in Cisco IOS XE Fuji 16.9.7, on page 1](#)
- [New Software Features in Cisco IOS XE Fuji 16.9.7, on page 1](#)
- [New Hardware Features in Cisco IOS XE Fuji 16.9.6, on page 1](#)
- [New Software Features in Cisco IOS XE Fuji 16.9.6, on page 2](#)
- [New Hardware Features in Cisco IOS XE Fuji 16.9.5, on page 2](#)
- [New Software Features in Cisco IOS XE Fuji 16.9.5, on page 2](#)
- [New Hardware Features in Cisco IOS XE Fuji 16.9.4c, on page 2](#)
- [New Software Features in Cisco IOS XE Fuji 16.9.4c, on page 2](#)
- [New Hardware Features in Cisco IOS XE Fuji 16.9.4, on page 2](#)
- [New Software Features in Cisco IOS XE Fuji 16.9.4, on page 2](#)
- [New Hardware Features in Cisco IOS XE Fuji 16.9.3, on page 3](#)
- [New Software Features in Cisco IOS XE Fuji 16.9.3, on page 3](#)
- [New Hardware Features in Cisco IOS XE Fuji 16.9.2, on page 3](#)
- [New Software Features in Cisco IOS XE Fuji 16.9.2, on page 3](#)
- [New Hardware Features in Cisco IOS XE Fuji 16.9.1a, on page 3](#)
- [New Software Features in Cisco IOS XE Fuji 16.9.1a, on page 4](#)

### **New Hardware Features in Cisco IOS XE Fuji 16.9.7**

There are no new hardware features in this release.

### **New Software Features in Cisco IOS XE Fuji 16.9.7**

There are no new software features in this release.

### **New Hardware Features in Cisco IOS XE Fuji 16.9.6**

There are no new hardware features in this release.

## New Software Features in Cisco IOS XE Fuji 16.9.6

There are no new software features in this release.

## New Hardware Features in Cisco IOS XE Fuji 16.9.5

There are no new hardware features in this release.

## New Software Features in Cisco IOS XE Fuji 16.9.5

There are no new software features in this release.

## New Hardware Features in Cisco IOS XE Fuji 16.9.4c

- **Cisco ASR-920-8S4Z-PD Router**

The Cisco ASR-920-8S4Z-PD Router is a fixed port router that enables 4X10 Gigabit Ethernet ports and 8X1 Gigabit Ethernet ports for an uplink.

For more information, see the [Cisco ASR 920-10SZ-PD and Cisco ASR-920-8S4Z-PD Aggregation Services Router Hardware Installation Guide](#).

## New Software Features in Cisco IOS XE Fuji 16.9.4c

- **Licensing Information for Cisco ASR-920-8S4Z-PD Router**

This release includes the licensing information for Cisco ASR-920-8S4Z-PD.

For more information, see the [Software Activation Configuration Guide \(Cisco ASR 920 Routers\)](#).

## New Hardware Features in Cisco IOS XE Fuji 16.9.4

There are no new features that are introduced for Cisco IOS XE Fuji 16.9.4.

## New Software Features in Cisco IOS XE Fuji 16.9.4

- **SNMP Dying Gasp Support**

The SNMP Dying Gasp is now supported on the following routers through FPGA:

- Cisco ASR-920-24SZ-IM
- Cisco ASR-920-24SZ-M

- Cisco ASR-920-24TZ-M

The maximum number of supported SNMP servers for SNMP Dying Gasp is 2 and the maximum number of supported Link-OAM Dying Gasp is 6.

For more information, see the [Cisco ASR 920 Series Aggregation Services Router Configuration Guide, Cisco IOS XE Fuji 16.9.x](#).

## New Hardware Features in Cisco IOS XE Fuji 16.9.3

There are no new features introduced for Cisco IOS XE Fuji 16.9.3.

## New Software Features in Cisco IOS XE Fuji 16.9.3

- **Control Plane Policing**

The IPv4 control packets are punted into the respective CPU queues instead of host queues, if MPLS explicit NULL labels are tagged. Use the **platform qos-feature copp-mpls enable** command, to enable CoPP on the device for MPLS explicit null scenario.

For more information, see the [QoS: Policing and Shaping Configuration Guide, Cisco IOS XE Fuji 16.9.x \(Cisco ASR 920 Series\)](#).

## New Hardware Features in Cisco IOS XE Fuji 16.9.2

There are no new features introduced for Cisco IOS XE Fuji 16.9.2.

## New Software Features in Cisco IOS XE Fuji 16.9.2

There are no new features introduced for Cisco IOS XE Fuji 16.9.2.

## New Hardware Features in Cisco IOS XE Fuji 16.9.1a

- **Cisco ASR-920-12SZ-A and Cisco ASR-920-12SZ-D Routers**

These new routers, an addition to the Cisco ASR 920 Series Aggregation Services Routers family, are Class B Timing Compliance Routers for the Mobile Backhaul for 5G markets. For more information, see the:

- [Cisco ASR 920 Series Aggregation Services Class B Timing Compliance Routers Data Sheet](#)
- [Cisco ASR-920-12SZ and Cisco ASR-920-12SZ-D Routers Hardware Installation Guide](#)

## New Software Features in Cisco IOS XE Fuji 16.9.1a

- **IPv6 Qos ACL L4 classification with expansion approach on IPv6 QoS SDM Template**

Maximum IPv6 QoS template supports a maximum number of Layer 4 source and destination matches per interface.

For more information, see the [Cisco ASR 900 Router Series Configuration Guide, Cisco IOS XE Fuji 16.9.x](#).

- **MPLS TE and BGP PIC Edge**

MPLS TE Load balancing, BGP PIC Edge, and RFC 3107 are now supported over TE-FRR.

For more information on the feature, see the [IP Routing: BGP Configuration Guide, Cisco IOS XE Fuji 16.9.x](#).

- **Programmability Support**

- **Model-Driven Telemetry**—Model-driven telemetry allows network devices to continuously stream real time configuration and operating state information to subscribers.
- **Candidate Configuration**—A temporary configuration that can be modified without changing running configuration. You can then choose when to update the device's configuration with the candidate configuration, by committing and confirming the candidate configuration.

For more information, see the [Programmability Configuration Guide, Cisco IOS XE Fuji 16.9.x](#).

- **RS232 Sync**

The serial interface module now supports pseudowire transport over MPLS and raw socket for Sync traffic. Out of 14 ports, 6 ports support sync interfaces. RS232 Sync data is carried over Raw Socket.

For more information, see the [Cisco ASR 920 Series Aggregation Services Router Configuration Guide, Cisco IOS XE Fuji 16.9.x](#).

- **Support for STS1e**

3GSM-DS3 ports can now be configured in STS-1e mode.

For more information, see the [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 Configuration Guide, Cisco IOS XE Fuji 16.9.x](#).

- **VRRPv3 SNMP MIB**

SNMP MIBs are now supported for Virtual Router Redundancy Protocol (VRRP) version 3.

For more information on the supported MIBs, see the [First Hop Redundancy Protocols Configuration Guide, Cisco IOS XE Fuji 16.9.x](#).

- **Ear and Mouth Type Transmission Only**

The Ear and Mouth (ENM) Transmission Only (TO) mode configuration supports CESoP without CAS configuration to transport voice data using T1 or E1 CESoP pseudowire. When TYPE TO is configured on the port, the port is always on OFF-HOOK state.

The CESoP is configured without signaling.