



## **Release Notes for Cisco ASR 920 Series Aggregation Services Router, Cisco IOS XE 17.15.x**

**First Published:** 2024-08-14

### **Americas Headquarters**

Cisco Systems, Inc.  
170 West Tasman Drive  
San Jose, CA 95134-1706  
USA  
<http://www.cisco.com>  
Tel: 408 526-4000  
800 553-NETS (6387)  
Fax: 408 527-0883





## CONTENTS

---

### CHAPTER 1

#### **Introduction 1**

- Cisco ASR 920 Series Routers Overview 2
- Feature Navigator 2
- Feature Matrix 2
- Software Licensing Overview 2
- Determining the Software Version 3
- Upgrading to a New Software Release 4
- Supported HoFPGA and ROMMON Versions 4
- Restrictions and Limitations 9
- Additional References 11

---

### CHAPTER 2

#### **What's New in Cisco IOS XE 17.15.x 13**

- What's New in Hardware for Cisco IOS XE 17.15.1 13
- What's New in Software for Cisco IOS XE 17.15.1 13

---

### CHAPTER 3

#### **Caveats 15**

- Resolved Caveats – Cisco IOS XE 17.15.1 15
- Open Caveats–Cisco IOS XE 17.15.1 16
- Cisco Bug Search Tool 16





# CHAPTER 1

## Introduction

---

This release notes contain information about the Cisco ASR 920 Series Aggregation Services Routers, provides new and changed information for these routers, hardware support, limitations and restrictions, and caveats.

This release notes provides information for these variants of the Cisco ASR 920 Series Routers:

- ASR-920-12CZ-A
- ASR-920-12CZ-D
- ASR-920-4SZ-A
- ASR-920-4SZ-D
- ASR-920-10SZ-PD
- ASR-920-24SZ-IM
- ASR-920-24SZ-M
- ASR-920-24TZ-M
- ASR-920-12SZ-IM
- ASR-920-12SZ-A
- ASR-920-12SZ-D
- ASR 920-8S4Z-PD
  
- [Cisco ASR 920 Series Routers Overview, on page 2](#)
- [Feature Navigator, on page 2](#)
- [Feature Matrix, on page 2](#)
- [Software Licensing Overview, on page 2](#)
- [Determining the Software Version, on page 3](#)
- [Upgrading to a New Software Release, on page 4](#)
- [Supported HoFPGA and ROMMON Versions, on page 4](#)
- [Restrictions and Limitations, on page 9](#)
- [Additional References, on page 11](#)

# Cisco ASR 920 Series Routers Overview

The Cisco ASR 920 Series Aggregation Services Routers provide a comprehensive and scalable set of Layer 2 and Layer 3 VPN services in a compact package. They are temperature-hardened, small form factor, with high throughput and low power consumption ideal for mobile backhaul, business services and residential voice, video, and data ("triple-play") applications.

## Feature Navigator

Use the Cisco Feature Navigator to find information about feature, platform, and software image support. To access the Cisco Feature Navigator, go to <http://www.cisco.com/go/cfn>. An account on cisco.com is not required.

## Feature Matrix

The feature matrix lists the features supported for each platform. For more information, see the [Cisco ASR 920 Series Aggregation Services Routers Feature Compatibility Matrix](#).

## Software Licensing Overview

Starting with Cisco IOS XE Cupertino 17.7.1, PAK licenses are no longer available. When you purchase the Cisco IOS XE Cupertino 17.7.1 release or later, Smart Licensing is enabled by default. We recommend that you move to Smart Licensing before upgrading to Cisco IOS XE Cupertino 17.7.1 or a higher release, for a seamless experience.

If you are using Cisco IOS XE Bengaluru 17.6.1 or an earlier release version, Smart Licensing is not enabled by default. To enable Smart Licensing, see [Software Activation Configuration Guide \(Cisco IOS XE ASR 920 Routers\)](#).

The router offers the following base licenses:

- Metro Services
- Metro IP Services
- Advanced Metro IP access
  - SDM Video Template

**Table 1: Cisco ASR 920 Software Licenses Feature Set**

Metro Services	Metro IP Services	Metro Aggregation Services
—	Includes all features in Metro Services	Includes all features in Metro IP Services
QoS, with deep buffers and hierarchical QoS (HQoS)	IP routing (RIP, OSPF, EIGRP, BGP, IS-IS)	MPLS (LDP and VPN)

Metro Services	Metro IP Services	Metro Aggregation Services
Layer 2: 802.1d, 802.1q	PIM (SM, DM, SSM), SSM mapping	MPLS TE and FRR
Ethernet Virtual Circuit (EVC)	BFD	MPLS OAM
Ethernet OAM (802.1ag, 802.3ah)	Multi-VRF CE (VRF lite) with service awareness (ARP, ping, SNMP, syslog, trace-route, FTP, TFTP)	MPLS-TP
Multiple Spanning Tree (MST) and Resilient Ethernet Protocol (REP)	IEEE 1588-2008 Ordinary Slave Clock and Transparent Clock	Pseudowire emulation (EoMPLS, CESoPSN, and SAToP)
Synchronous Ethernet	—	VPLS and HVPLS
IPv4 and IPv6 host connectivity	—	Pseudowire redundancy
—	—	MR-APS and mLACP

The router offers the following additional feature licenses:

- ATM
- IEEE 1588-2008 Boundary Clock/Master Clock
- OC-x Port License

## Determining the Software Version

Use the following commands to verify your software version:

- Consolidated Package— **show version**

**Table 2: ROMMON Version**

PIDs	ROMMON
ASR-920-12SZ-A , ASR-920-12SZ-D	15.6(54r)S
ASR-920-12SZ-IM	15.6(54r)S
ASR-920-12CZ-A, ASR-920-12CZ-D, ASR-920-4SZ-A, ASR-920-4SZ-D, ASR-920-10SZ-PD,ASR-920-24SZ-IM, ASR-920-24SZ-M, ASR-920-24TZ-M, and ASR920-8S4Z-PD	15.6(56r)S

## Upgrading to a New Software Release

Only the latest consolidated packages can be downloaded from Cisco.com; users who want to run the router using individual subpackages must first download the image from Cisco.com and extract the individual subpackages from the consolidated package.

For information about upgrading to a new software release, see the [Upgrading the Software on the Cisco ASR 920 Series Routers](#).

### Upgrading the FPD Firmware

FPD Firmware packages are bundled with the software package. FPD upgrade is automatically performed on the router.

If you like to manually change the FPD Firmware software, use the **upgrade hw-module subslot 0/0 fpd bundle** to perform FPD firmware upgrade.

## Supported HoFPGA and ROMMON Versions

The tables below list the HoFPGA and ROMMON version of the software releases.

**Table 3: HoFPGA and ROMMON Versions for the Cisco ASR-920-12CZ-A, ASR-920-12CZ-D, ASR-920-4SZ-A, ASR-920-4SZ-D, ASR-920-10SZ-PD, and ASR 920-8S4Z-PD**

Release	HoFPGA Version	ROMMON Version
Cisco IOS XE Amsterdam 17.1.x	0X00040043 (BFD/default template) 0x00020009 (Netflow template)	15.6(32r)S
Cisco IOS XE Amsterdam 17.3.1	0X00020009	15.6(43r)S
Cisco IOS XE Amsterdam 17.3.2	0X00020009	15.6(43r)S
Cisco IOS XE Bengaluru 17.4.1	0X00040044 (BFD/default template)	15.6(44r)S
Cisco IOS XE Bengaluru 17.5.1	0X00040044 (BFD/default template)	15.6(44r)S
Cisco IOS XE Bengaluru 17.6.1	0X00040044	15.6(48r)S
Cisco IOS XE Bengaluru 17.6.2	0X00040044	15.6(48r)S
Cisco IOS XE Cupertino 17.7.1	0X00040044	15.6(48r)S
Cisco IOS XE Cupertino 17.8.1	0X00040044	15.6(48r)S
Cisco IOS XE Dublin 17.10.1	0X00040044	15.6(56r)S
Cisco IOS XE Dublin 17.11.1a	0X00040044	15.6(56r)S



Release	HoFPGA Version	ROMMON Version
Cisco IOS XE Dublin 17.12.1	0X00040044	15.6(56r)S
Cisco IOS XE Dublin 17.12.2a	0X00040044	15.6(56r)S
Cisco IOS XE 17.13.1	0X00040044	15.6(56r)S
Cisco IOS XE 17.15.1	0X00040044	15.6(56r)S

**Table 4: HoFPGA and ROMMON Versions for the Cisco ASR-920-24SZ-IM, ASR-920-24SZ-M, and ASR-920-24TZ-M**

Release	HoFPGA Version	ROMMON Version
Cisco IOS XE Amsterdam 17.1.x	0x00030014 (BFD/default template) 0x00030014 (Netflow template)	15.6(32r)S
Cisco IOS XE Amsterdam 17.3.1	0X00030014	15.6(43r)S
Cisco IOS XE Amsterdam 17.3.2	0X00030014	15.6(43r)S
Cisco IOS XE Bengaluru 17.4.1	0X00030016	15.6(44r)S
Cisco IOS XE Bengaluru 17.5.1	0X00040019	15.6(44r)S
Cisco IOS XE Bengaluru 17.6.1	0X0004001b	15.6(48r)S
Cisco IOS XE Bengaluru 17.6.2	0X0004001b	15.6(48r)S
Cisco IOS XE Cupertino 17.7.1	0X0004001b	15.6(48r)S
Cisco IOS XE Cupertino 17.8.1	0X0004001b	15.6(48r)S
Cisco IOS XE Dublin 17.10.1	0X0004001b	15.6(56r)S
Cisco IOS XE Dublin 17.11.1a	0X0004001b	15.6(56r)S
Cisco IOS XE Dublin 17.12.1	0X0004001b	15.6(56r)S
Cisco IOS XE Dublin 17.12.2a	0X0004001b	15.6(56r)S
Cisco IOS XE 17.13.1	0X0004001b	15.6(56r)S
Cisco IOS XE 17.15.1	0X0004001b	15.6(56r)S

**Table 5: HoFPGA and ROMMON Versions for the Cisco ASR-920-12SZ-IM**

Release	HoFPGA Version	ROMMON Version
Cisco IOS XE Amsterdam 17.1.x	0x0003001B (BFD/default template) 0x00020008 (Netflow template)	15.6(24r)S

Release	HoFPGA Version	ROMMON Version
Cisco IOS XE Amsterdam 17.3.1	0X0003001b	15.6(43r)S
Cisco IOS XE Amsterdam 17.3.2	0X0003001b	15.6(43r)S
Cisco IOS XE Bengaluru 17.4.1	0X0003001e	15.6(43r)S
Cisco IOS XE Bengaluru 17.5.1	0X0003001e	15.6(43r)S
Cisco IOS XE Bengaluru 17.6.1	0X0003001e	15.6(46r)S
Cisco IOS XE Bengaluru 17.6.2	0X0003001e	15.6(46r)S
Cisco IOS XE Cupertino 17.7.1	0x0003001e	15.6(46r)S
Cisco IOS XE Cupertino 17.8.1	0x0003001e	15.6(46r)S
Cisco IOS XE Dublin 17.10.1	0X0003001e	15.6(54r)S
Cisco IOS XE Dublin 17.11.1a	0X0003001e	15.6(54r)S
Cisco IOS XE Dublin 17.12.1	0X0003001e	15.6(54r)S
Cisco IOS XE Dublin 17.12.2a	0X0003001e	15.6(54r)S
Cisco IOS XE 17.13.1	0X0003001e	15.6(54r)S
Cisco IOS XE 17.15.1	0X0003001e	15.6(54r)S

**Table 6: HoFPGA and ROMMON Versions for the Cisco ASR-920-12SZ-A and ASR-920-12SZ-D**

Release	HoFPGA Version	ROMMON Version
Cisco IOS XE Amsterdam 17.1.x	0x00010039 (BFD/default template) 0x10000007 (Netflow template)	15.6(29r)S
Cisco IOS XE Amsterdam 17.3.1	0X10000008	15.6(43r)S
Cisco IOS XE Amsterdam 17.3.2	0X10000008	15.6(43r)S
Cisco IOS XE Bengaluru 17.4.1	0X00010040 (BFD/default template)	15.6(43r)S
Cisco IOS XE Bengaluru 17.5.1	0X10000008	15.6(43r)S
Cisco IOS XE Bengaluru 17.6.1	0X10000008	15.6(46r)S
Cisco IOS XE Bengaluru 17.6.2	0X00020043	15.6(46r)S
Cisco IOS XE Cupertino 17.7.1	0X00020043	15.6(46r)S
Cisco IOS XE Cupertino 17.8.1	0X00020043	15.6(46r)S

Release	HoFPGA Version	ROMMON Version
Cisco IOS XE Dublin 17.10.1	0X00020043	15.6(54r)S
Cisco IOS XE Dublin 17.11.1a	0X00020043	15.6(54r)S
Cisco IOS XE Dublin 17.12.1	0X00020043	15.6(54r)S
Cisco IOS XE Dublin 17.12.2a	0X00020043	15.6(54r)S
Cisco IOS XE 17.13.1	0X00020043	15.6(54r)S
Cisco IOS XE 17.15.1	0X00020043	15.6(54r)S

**Table 7: IM FPGA Versions for the Cisco ASR-920-24SZ-IM**

Release	Gigabit Ethernet Interface Module (Phase 1) FPGA	Gigabit Ethernet Interface Module (Phase2) FPGA	8 T1/E1	16 T1/E1	32 T1/E1
Cisco IOS XE Amsterdam 17.1.x	0.49	69.24	0.54	0.54	0.46
Cisco IOS XE Amsterdam 17.3.1	0.49	69.24	0.54	0.54	0.46
Cisco IOS XE Amsterdam 17.3.2	0.75	N/A	N/A	0.54	0.46
Cisco IOS XE Bengaluru 17.4.1	0.75	N/A	N/A	0.54	0.46
Cisco IOS XE Bengaluru 17.5.1	0.75	N/A	N/A	0.54	0.46
Cisco IOS XE Bengaluru 17.6.1	0.75	69.24	0.54	0.54	0.46
Cisco IOS XE Bengaluru 17.6.2	0.75	69.24	0.54	0.54	0.46
Cisco IOS XE Cupertino 17.7.1	0.75	69.24	0.54	0.54	0.46
Cisco IOS XE Cupertino 17.8.1	0.75	69.24	0.54	0.54	0.46

Release	Gigabit Ethernet Interface Module (Phase 1) FPGA	Gigabit Ethernet Interface Module (Phase2) FPGA	8 T1/E1	16 T1/E1	32 T1/E1
Cisco IOS XE Dublin 17.10.1	0.75	69.24	0.54	0.54	0.46
Cisco IOS XE Dublin 17.11.1a	0.75	69.24	0.54	0.54	0.46
Cisco IOS XE Dublin 17.12.1	0.75	69.24	0.54	0.54	0.46
Cisco IOS XE Dublin 17.12.2a	0.75	69.24	0.54	0.54	0.46
Cisco IOS XE 17.13.1	0.75	69.24	0.54	0.54	0.46
Cisco IOS XE 17.15.1	0.75	69.24	0.54	0.54	0.46

**Table 8: IM FPGA Versions for the Cisco ASR-920-12SZ-IM**

Release	Gigabit Ethernet Interface Module (Phase 1) FPGA	Gigabit Ethernet Interface Module (Phase2) FPGA	8 T1/E1	16 T1/E1	32 T1/E1
Cisco IOS XE Amsterdam 17.1.x	0.49	69.24	0.54	0.54	0.46
Cisco IOS XE Amsterdam 17.3.1	0.49	69.24	0.54	0.54	0.46
Cisco IOS XE Amsterdam 17.3.2	0.75	N/A	N/A	0.54	0.46
Cisco IOS XE Bengaluru 17.4.1	0.75	N/A	N/A	0.54	0.46
Cisco IOS XE Bengaluru 17.5.1	0.75	N/A	N/A	0.54	0.46
Cisco IOS XE Bengaluru 17.6.1	0.75	69.24	0.54	0.54	0.46

Release	Gigabit Ethernet Interface Module (Phase 1) FPGA	Gigabit Ethernet Interface Module (Phase2) FPGA	8 T1/E1	16 T1/E1	32 T1/E1
Cisco IOS XE Bengaluru 17.6.2	0.75	69.24	0.54	0.54	0.46
Cisco IOS XE Cupertino 17.7.1	0.75	69.24	0.54	0.54	0.46
Cisco IOS XE Cupertino 17.8.1	0.75	69.24	0.54	0.54	0.46
Cisco IOS XE Dublin 17.10.1	0.75	69.24	0.54	0.54	0.46
Cisco IOS XE Dublin 17.11.1a	0.75	69.24	0.54	0.54	0.46
Cisco IOS XE Dublin 17.12.1	0.75	69.24	0.54	0.54	0.46
Cisco IOS XE Dublin 17.12.2a	0.75	69.24	0.54	0.54	0.46
Cisco IOS XE 17.13.1	0.75	69.24	0.54	0.54	0.46
Cisco IOS XE 17.15.1	0.75	69.24	0.54	0.54	0.46

## Restrictions and Limitations



**Note** The error message "PLATFORM-1-NOSPACE: SD bootflash : no space alarm assert" may occur in the following scenarios:

- Any sector of SD Card gets corrupted
- Improper shut down of router
- power outage.

This issue is observed on platforms which use EXT2 file systems.

We recommend performing a reload of the router. As a result, above alarm will not be seen during the next reload due to FSCK(file systems check) execution.

However, If the error persists after a router reload, we recommend to format the bootflash or FSCK manually from IOS.

- Embedded Packet Capture (EPC) is not supported on ASR 920 routers.
- The **default** *command-name* command is used to default the parameters under that interface. However, when speed is configured on the interface, the following error is displayed:  

```
Speed is configured. Remove speed configuration before enabling auto-negotiation
```
- For VCoP, only SFP-T3F-SATOP-I is supported.
- Adding or deleting the Trunk Ethernet flow points (TEFPs) with scaled bridge-domain, without delay causes the Cisco ASR 920 Series router to crash.
- Virtual services should be deactivated and uninstalled before performing replace operations.
- The Cisco ASR920 Series Routers no longer support the controller and nid-controller commands for the Cisco ME1200 switch.
- The following interface modules (IMs) do not require the activation command for IM boot up, provided no other IM is activated in subslot 0/1 before.

However, if an IM was activated in the system earlier, deactivate the previously-activated IM before inserting a new IM in system.

- 16-Port T1/E1 Interface Module
  - 32-Port T1/E1 Interface Module
  - 8-Port T1/E1 Interface Module
  - 4-port OC3/STM-1 (OC-3) or 1-port OC12/STM-4 (OC-12) Interface Module
  - 14-Port Serial Interface Module
  - 6-Port E and M Interface Module
  - 4-Port C37.94 Interface Module
- RS422 works on ports from 0 to 7 only.
  - The frame drops may occur for packets with packet size of less than 100 bytes, when there is a line rate of traffic over all 1G or 10G interfaces available in the system. This restriction is applicable only on RSP2 module and ASR 920 platform, and is not applicable for RSP3 module.
  - MPLS VC label packet with time-to-live (TTL) value of 2 is dropped at egress MPLS PE device due to ASIC limitations. During PHP process, MPLS TTL value for the VC label is decremented by one with implicit-null. The VC label-related TTL value is set to 255 while imposing the VC label due to multiple VC switching scenarios.  
 Use the **no mpls ip propagate-ttl** command as the Short Pipe mode for the required label.
  - Interface naming is from right to left. For more information, see the Cisco ASR 920 Software Configuration Guide .
  - Packet size greater than 1460 is not supported over IPsec Tunnel.
  - Minimal traffic drop might be seen for a moment when higher rate traffic is sent through the IPsec tunnels for the first time.
  - One Ternary Content-Addressable Memory (TCAM) entry is utilized for Segment Routing Performance Measurement. This is required for the hardware timestamping to function.

- While performing an auto upgrade of ROMMON, only primary partition is upgraded. Use the **upgrade rom-mon filename** command to upgrade the secondary partition of the ROMMON. However, the router can be reloaded during the next planned reload to complete the secondary ROMMON upgrade.
- Some router models are not fully compliant with all IETF guidelines as exemplified by running the pyang tool with the lintflag. The errors and warnings exhibited by running the pyang tool with the lint flag are currently non-critical as they do not impact the semantic of the models or prevent the models from being used as part of the toolchains. A script is provided, **check-models.sh**, which runs pyang with lint validation enabled, but ignoring certain errors. This allows the developer to determine what issues may be present.
- If IPv6 Global IP is configured as the BFD peer, and if the interface goes down, a VRRP flap may occur. This may occur because, VRRP works on the basis of Link-local IP and not global IP. As a result, VRRP flaps on the previously backed up device and prints a DAD message.

## Additional References

### Product Information

- [Cisco ASR 920 Series Aggregation Services Router Data Sheets](#)

### Hardware Installation Guides

- [Cisco ASR 920 Series Aggregation Services Router Hardware Guides](#)

### Software Configuration Guides

- [Cisco ASR 920 Series Aggregation Services Router Configuration Guides](#)

### Regulatory Compliance and Safety Information

- [Regulatory Compliance and Safety Information for the Cisco ASR 920 Series Aggregation Services Routers](#)

### Field Notices and Bulletins

- Field Notices—We recommend that you view the field notices for this release to determine whether your software or hardware platforms are affected. You can find field notices at [http://www.cisco.com/en/US/support/tsd\\_products\\_field\\_notice\\_summary.html](http://www.cisco.com/en/US/support/tsd_products_field_notice_summary.html).
- Bulletins—You can find bulletins at [http://www.cisco.com/en/US/products/sw/iosswrel/ps5012/prod\\_literature.html](http://www.cisco.com/en/US/products/sw/iosswrel/ps5012/prod_literature.html).

### MIB Support

To view supported MIB, go to <http://tools.cisco.com/ITDIT/MIBS/MainServlet>.

### Accessibility Features in the Cisco ASR 920 Series Routers

For a list of accessibility features in Cisco ASR 920 Series Routers, see the [Voluntary Product Accessibility Template \(VPAT\)](#) on the Cisco website, or contact [accessibility@cisco.com](mailto:accessibility@cisco.com).

All product documents are accessible except for images, graphics, and some charts. If you would like to receive the product documentation in audio format, braille, or large print, contact [accessibility@cisco.com](mailto:accessibility@cisco.com).

**End-of-Life and End-of-Sale Notices**

For End-of-Life and End-of-Sale Notices for the Cisco ASR 920 Series Routers, see <http://www.cisco.com/c/en/us/products/routers/asr-920-series-aggregation-services-router/eos-eol-notice-listing.html>.





## CHAPTER 2

# What's New in Cisco IOS XE 17.15.x

- [What's New in Hardware for Cisco IOS XE 17.15.1, on page 13](#)
- [What's New in Software for Cisco IOS XE 17.15.1, on page 13](#)

## What's New in Hardware for Cisco IOS XE 17.15.1

Optics	Description
Management Port LED Status Indicators	<p>The right LED indicator for the management port on the router now displays the link status and activity of the management port. You can monitor and troubleshoot the status and activity of the management port more effectively when the LED indicator turns green or in the Off state.</p> <p>For more details on the link status and activity, see the CPU Management Port LED Indication table:</p> <ul style="list-style-type: none"> <li>• <a href="#">Cisco ASR-920-12SZ-IM and ASR-920U-12SZ-IM</a></li> <li>• <a href="#">Cisco ASR-920-24SZ-IM, Cisco ASR-920-24SZ-M, Cisco ASR-920-24TZ-M</a></li> </ul>

## What's New in Software for Cisco IOS XE 17.15.1

Feature	Description
<b>Alarm Configuring and Monitoring</b>	
<a href="#">SONET Alarms for APS</a>	<ul style="list-style-type: none"> <li>• With Automatic Protection Switching (APS), SONET alarms soaking as per the recommendation from GR-253.</li> <li>• Alarm is raised or cleared during APS manual, force, and lock out switch actions.</li> <li>• When traffic is switched to an alternate link in the APS group, the severity of the alarms is affected based on service impact.</li> </ul>

Feature	Description
<a href="#">SD-BER and SF-BER Alarms for T1/E1 and T3/E3 services</a>	<p>Signal Failure-Bit Error Rate (SF-BER) and Signal Degrade-BER (SD-BER) alarms are declared when there is a signal failure or signal degradation that happens in the traffic.</p> <p>These alarms may be raised when the error rate of a given entity exceeds the user-configured BER threshold value.</p> <p>This helps the administrator to take corrective actions.</p>
<b>CEM OCx</b>	
<a href="#">DDS DS0 Remote Latching Loopback</a>	<p>DS0 loopback is used for testing and troubleshooting the T1 or E1, T3 or E3, and OCx channel over PSN. You can configure DS0 loopback on these controllers for remote devices.</p>
<a href="#">Protection Switching Count for Protected SONET Interface</a>	<p>In SONET with redundancy, an Automatic protection switching (APS) occurs between working and standby protection networks due to reasons like a circuit failure. Whenever the switching happens, the switching count is tracked using a Protection Switching Count (PSC) parameter.</p> <p>Depending on the PSC count, you can debug the network to identify the reason for extensive switching and work on the corrective actions.</p>
<b>Performance Routing</b>	
TCAM and NFT Commands	<p>New commands have been introduced for the Ternary Content-Addressable Memory (TCAM) and NFT.</p> <p><b>TCAM</b></p> <p>You can now view the Ternary Content-Addressable Memory (TCAM) utilization for each control plane TCAM entry.</p> <p>Command: <a href="#">show platform hardware pp active tcam utilization control-plane-sessions</a></p> <p><b>NFT</b></p> <ul style="list-style-type: none"> <li>• You can now enable the collection of the packets punted to the CPU from the NFT hash table.</li> </ul> <p>Command: <a href="#">platform nft-summarization enable</a></p> <ul style="list-style-type: none"> <li>• Once the above command is enabled, you can use a timer to clean up the NFT hash table.</li> </ul> <p>Command: <a href="#">platform nft-summarization timer-value</a></p> <ul style="list-style-type: none"> <li>• You can view a summary of the packets punted to the CPU from the NFT hash table.</li> </ul> <p>Command: <a href="#">show platform hardware pp active infrastructure pi nft summary</a></p>



## CHAPTER 3

# Caveats

This chapter describes open and resolved severity 1 and 2 caveats and select severity 3 caveats:

- The “Open Caveats” sections list open caveats that apply to the current release and may apply to previous releases. A caveat that is open for a prior release and is still unresolved applies to all future releases until it is resolved.
- The “Resolved Caveats” sections list caveats resolved in a specific release, but open in previous releases.

The bug IDs are sorted alphanumerically.



**Note** The Caveats section includes the bug ID and a short description of the bug. For details on the symptoms, conditions, and workaround for a specific caveat you must use the Bug Search Tool.

- [Resolved Caveats – Cisco IOS XE 17.15.1, on page 15](#)
- [Open Caveats–Cisco IOS XE 17.15.1, on page 16](#)
- [Cisco Bug Search Tool, on page 16](#)

## Resolved Caveats – Cisco IOS XE 17.15.1

Identifier	Headline
<a href="#">CSCwi76112</a>	Message to be displayed for M13 framing when configured with clear-channel
<a href="#">CSCwi60730</a>	Speed LED status is not correct when sonet/sdh mode is configured
<a href="#">CSCwi33111</a>	T1: Sev changes back from major to minor after IM OIR.
<a href="#">CSCwj06370</a>	Serial cease traffic when configuring module other port
<a href="#">CSCwj05647</a>	3GMS Serial interface protocol down with specific Modem
<a href="#">CSCwj12451</a>	Update 2^20-O151 QRSS bert help string with QRSS Keyword
<a href="#">CSCwj44502</a>	DCR clocking fails to get acquired on the with sts1-E mode
<a href="#">CSCwj99522</a>	Need to support dtr not-used CLI in RS232 transparent mode

Identifier	Headline
<a href="#">CSCwi92203</a>	Channelized DS3: RAI is propagating to all DS1's when DS3 RAI is asserted

## Open Caveats–Cisco IOS XE 17.15.1

Identifier	Headline
<a href="#">CSCwk46171</a>	Enabling T1/E1 TPoP causes latency for control plane packets
<a href="#">CSCwk58917</a>	L-bit propagation not enabled for LOF alarm after framing change with framed SAToP
<a href="#">CSCwk02087</a>	BFD stuck in INIT state for interface Te0/0/0 & Te0/4/3
<a href="#">CSCwh75614</a>	Increased CPU after upgrading router to 17.6.3 from 16.9.4 when 1000 SLM/DMM sessions are configured
<a href="#">CSCwj60760</a>	Confd process not in Started State in 5 mins after netconf-yang config is done
<a href="#">CSCwk27810</a>	After reconfiguring second sync source the QL-failed for that source interface and ranking also 254

## Cisco Bug Search Tool

[Cisco Bug Search Tool](#) (BST), the online successor to Bug Toolkit, is designed to improve effectiveness in network risk management and device troubleshooting. You can search for bugs based on product, release, and keyword, and aggregates key data such as bug details, product, and version. For more details on the tool, see the help page located at <http://www.cisco.com/web/applicat/cbsshelp/help.html>