



Release Notes for Cisco ASR 920 Series Aggregation Services Router, Cisco IOS XE Everest 16.6.x

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CHAPTER 1

Introduction

This release notes contains information about the Cisco ASR 920 Series Aggregation Services Routers and provides new and changed information for these routers, hardware support, limitations and restrictions, and caveats for Cisco IOS XE Everest release 16.5.1. The Cisco IOS XE Everest 16.5.1 is the first supported release in the Release 16 Series.

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
-
- [Cisco ASR 920 Series Routers Overview, on page 2](#)
 - [Feature Navigator, on page 2](#)
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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.

Determining the Software Version

Use the following commands to verify your software version:

- Consolidated Package— **show version**

Table 1: ROMMON Version

PIDs	ROMMON
ASR-920-12SZ-A , ASR-920-12SZ-D	15.6(29r)S
ASR-920-12SZ-IM	15.6(24r)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, and ASR-920-24TZ-M	15.6(31r)S

Table 2: ROMMON Version for Cisco IOS XE Everest 16.6.8

PIDs	ROMMON
ASR-920-12SZ-IM	15.6(24r)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, and ASR-920-24TZ-M	15.6(32r)S

Supported HoFPGA Versions for Cisco IOS XE Everest 16.6.1

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

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

Release	HoFPGA Version
Cisco IOS XE Everest 16.6.1	0X0001001e

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

Release	HoFPGA Version	Gigabit Ethernet Interface Module (Phase 1) FPGA	Gigabit Ethernet Interface Module (Phase2) FPGA	8 T1/E1
Cisco IOS XE Everest 16.6.1	0X00030007	0.47	69.22	0.54 (0x36)

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

Release	HoFPGA Version	Gigabit Ethernet Interface Module (Phase 1) FPGA	Gigabit Ethernet Interface Module (Phase2) FPGA	8 T1/E1	32 T1/E1
Cisco IOS XE Everest 16.6.1	0x00010010	0.47	69.22	0.54 (0x36)	0.46

Supported HoFPGA Versions for Cisco IOS XE Everest 16.6.8

The tables below list the HoFPGA version of the Cisco IOS XE Everest 16.6.8 release.

Table 6: HoFPGA Versions for the Cisco ASR-920-12CZ-A, ASR-920-12CZ-D, ASR-920-4SZ-A, ASR-920-4SZ-D, and ASR-920-10SZ-PD

Release	HoFPGA Version
Cisco IOS XE Everest 16.6.8	0X00010021

Table 7: HoFPGA Versions for the Cisco ASR-920-24SZ-IM, ASR-920-24SZ-M, and ASR-920-24TZ-M

Release	HoFPGA Version
Cisco IOS XE Everest 16.6.8	0X000A000a

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

Release	HoFPGA Version	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 Everest 16.6.8	0X000A0012	0.49	69.24	0.54	0.54	0.46

Table 9: HoFPGA Versions for the Cisco ASR-920-24SZ-IM

Release	HoFPGA Version	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 Everest 16.6.8	0X000A000a	0.49	69.24	0.54	0.54	0.46

Supported HoFPGA Versions for Cisco IOS XE Everest 16.6.9

The tables below list the HoFPGA version of the Cisco IOS XE Everest 16.6.8 release.

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

Release	HoFPGA Version
Cisco IOS XE Everest 16.6.9	0X00010021

Table 11: HoFPGA Versions for the Cisco ASR-920-24SZ-IM, ASR-920-24SZ-M, and ASR-920-24TZ-M

Release	HoFPGA Version
Cisco IOS XE Everest 16.6.9	0X000A000a

Table 12: HoFPGA Versions for the Cisco ASR-920-12SZ-IM

Release	HoFPGA Version	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 Everest 16.6.9	0X000A0012	0.49	69.24	0.54	0.54	0.46

Table 13: HoFPGA Versions for the Cisco ASR-920-24SZ-IM

Release	HoFPGA Version	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 Everest 16.6.9	0X000A000a	0.49	69.24	0.54	0.54	0.46

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 14: 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)
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

Metro Services	Metro IP Services	Metro Aggregation Services
—	—	MR-APS and mLACP

The router offers the following additional feature licenses:

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

Limitations and Restrictions on the Cisco ASR 920 Series Routers

- The default interface 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
```
- 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 following restriction is applicable only to Cisco ASR-920-24SZ-IM, Cisco ASR-920-24SZ-M, and Cisco ASR-920-24TZ-M.
 - Traffic is dropped when packets of size 64 to 100 bytes are sent on 1G and 10G ports.
 - For 64-byte packets, traffic drop is seen at 70% and beyond of the line rate.
 - For 90-byte packets, traffic drop is seen at 90% and beyond of the line rate.

- For 95-byte packets, traffic drop is seen at 95% and beyond of the line rate.
- Traffic is dropped when:
 - Traffic is sent on a VRF interface.
 - Traffic is sent across layer 2 and layer 3.

However, traffic is not dropped when the packet size is greater than 100 bytes, even if the packets are sent bidirectionally at the line rate.

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.
- Bulletins—You can find bulletins at 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.

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.

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>.

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.
- Bulletins—You can find bulletins at 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.

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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

New Features

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 Everest 16.6.9, on page 9](#)
- [New Software Features in Cisco IOS XE Everest 16.6.9, on page 9](#)
- [New Hardware Features in Cisco IOS XE Everest 16.6.8, on page 10](#)
- [New Software Features in Cisco IOS XE Everest 16.6.8, on page 10](#)
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- [New Software Features in Cisco IOS XE Everest 16.6.7, on page 10](#)
- [New Hardware Features in Cisco IOS XE Everest 16.6.6, on page 10](#)
- [New Software Features in Cisco IOS XE Everest 16.6.6, on page 10](#)
- [New Hardware Features in Cisco IOS XE Everest 16.6.5, on page 10](#)
- [New Software Features in Cisco IOS XE Everest 16.6.5, on page 10](#)
- [New Hardware Features in Cisco IOS XE Everest 16.6.4, on page 10](#)
- [New Software Features in Cisco IOS XE Everest 16.6.4, on page 11](#)
- [New Hardware Features in Cisco IOS XE Everest Release 16.6.3, on page 11](#)
- [New Software Features in Cisco IOS XE Everest 16.6.3, on page 11](#)
- [New Hardware Features in Cisco IOS XE Everest Release 16.6.2, on page 11](#)
- [New Software Features in Cisco IOS XE Everest 16.6.2, on page 11](#)
- [New Hardware Features in Cisco IOS XE Everest Release 16.6.1, on page 11](#)
- [New Software Features in Cisco IOS XE Everest 16.6.1, on page 12](#)

New Hardware Features in Cisco IOS XE Everest 16.6.9

There are no new hardware features in this release.

New Software Features in Cisco IOS XE Everest 16.6.9

There are no new software features in this release.

New Hardware Features in Cisco IOS XE Everest 16.6.8

There are no new hardware features in this release.

New Software Features in Cisco IOS XE Everest 16.6.8

There are no new software features in this release.

New Hardware Features in Cisco IOS XE Everest 16.6.7

There are no new hardware features in this release.

New Software Features in Cisco IOS XE Everest 16.6.7

There are no new software features in this release.

New Hardware Features in Cisco IOS XE Everest 16.6.6

There are no new hardware features in this release.

New Software Features in Cisco IOS XE Everest 16.6.6

There are no new software features in this release.

New Hardware Features in Cisco IOS XE Everest 16.6.5

There are no new hardware features in this release.

New Software Features in Cisco IOS XE Everest 16.6.5

There are no new software features in this release.

New Hardware Features in Cisco IOS XE Everest 16.6.4

There are no new hardware features in this release.

New Software Features in Cisco IOS XE Everest 16.6.4

There are no new software features in this release.

New Hardware Features in Cisco IOS XE Everest Release 16.6.3

There are no new hardware features in this release.

New Software Features in Cisco IOS XE Everest 16.6.3

There are no new software features in this release.

New Hardware Features in Cisco IOS XE Everest Release 16.6.2

There are no new hardware features in this release.

New Software Features in Cisco IOS XE Everest 16.6.2

- **VLAN Behavior on Trunk EFP**

You can configure a new type of trunk EFP called Trunk EFP (TEFP) with encapsulation from bridge domain (BD). All the BDs configured on the switch are part of the VLAN list of the encapsulated TEFP. The TEFP is encapsulated using the **encapsulation dot1q from-bd** command. For more information, see [Trunk EFP Support](#).

New Hardware Features in Cisco IOS XE Everest Release 16.6.1

- **Support for Cisco ASR-920U-12SZ-IM Router**



Note All software features supported on the Cisco ASR-920-12SZ-IM Router are also supported on the Cisco ASR-920U-12SZ-IM Router.

The Cisco ASR-920U-12SZ-IM Router has four 10G SFP+ ports, four 1G SFP ports, eight 1G Copper ports and four 1G/10G Dual Rate ports, with redundant AC or DC power supplies.

The following interface modules are supported on the Cisco ASR-920U-12SZ-IM router:

- A900-IMA6EM (E&M)
- A900-IMASER14A/S (Serial IM)
- A900-IMA4C3794 (C37.94)

For more information, see the [Cisco ASR-920-12SZ-IM and Cisco ASR-920U-12SZ-IM Aggregation Services Router Hardware Installation Guide](#)

New Software Features in Cisco IOS XE Everest 16.6.1

• 1 PPS Pulse Width Configuration

On the Cisco ASR-920-12SZ-IM router, the 1 PPS pulse bandwidth can be changed from the default value of 500 milliseconds to up to 20 microseconds. For more information, see [Configuring Clocking and Timing](#).

• IP SLA Statistics UDP Jitter

Time stamping for sender (T1, T4) and receiver (T3, T2) is now performed by hardware, instead of software to improve the accuracy of jitter and latency measurements. For more information, see [IP SLAs Configuration Guide Cisco IOS XE Everest 16.6.1](#).

• IP Source Guard

An IP source guard filters a source IP address on a layer 2 port and prevents malicious hosts from impersonating a legitimate host. The feature uses dynamic DHCP snooping and static IP source binding to match IP addresses to hosts on untrusted layer 2 access ports. For more information, see [IP Addressing: DHCP Configuration Guide Cisco IOS XE Everest 16.6.1 \(Cisco ASR 920 Series\)](#)

• Microwave Adaptive Code Modulation Enhancement

A new ITU-T G.8031/Y.1731 Ethernet Bandwidth Notification Message (ETH-BNM) is used to notify the change of bandwidth of link from the microwave radio to the Ethernet switch. If the node receives the bandwidth information, it triggers the EEM script and takes action on the signal degradation to provide optimal bandwidth. For information, see the [Carrier Ethernet Configuration Guide Cisco IOS XE Everest 16.6.1 \(Cisco ASR 920 Series\)](#).

• PVST+/RPVST+

Cisco ASR routers can use the per-VLAN spanning-tree plus (PVST+) protocol based on the IEEE 802.1D standard and Cisco proprietary extensions, or the rapid per-VLAN spanning-tree plus (rapid-PVST+) protocol based on the IEEE 802.1w standard. For more information, see [LAN Switching Configuration Guide Cisco IOS XE Everest 16.6.1](#).

• Segment Routing Enhancement

Effective this release, Segment Routing feature is enhanced to include SR-TE On Demand LSP, SR-TE On Demand Next Hop, OAM Support, and Dynamic PCC. For more information, see [Segment Routing for Cisco IOS XE Everest 16.6.1](#).

• Segment Routing – Traffic Engineering

Segment Routing – Traffic Engineering (SR-TE) provides a simple, automated, and scalable architecture to engineer traffic flows in a network. For more information, see [Segment Routing for Cisco IOS XE Everest 16.6.1](#).



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.

- [Cisco Bug Search Tool, on page 14](#)
- [Open Caveats – Cisco IOS XE Everest 16.6.9, on page 14](#)
- [Open Caveats – Platform Independent, on page 14](#)
- [Resolved Caveats – Cisco IOS XE Everest 16.6.9, on page 14](#)
- [Resolved Caveats – PI Bugs, on page 14](#)
- [Open Caveats – Cisco IOS XE Everest 16.6.8, on page 15](#)
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- [Resolved Caveats – Cisco IOS XE Everest 16.6.6, on page 19](#)
- [Open Caveats – Cisco IOS XE Everest 16.6.5a, on page 19](#)
- [Resolved Caveats – Cisco IOS XE Everest 16.6.5a, on page 20](#)
- [Open Caveats – Cisco IOS XE Everest 16.6.4, on page 20](#)
- [Resolved Caveats – Cisco IOS XE Everest 16.6.4, on page 20](#)
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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>

Open Caveats – Cisco IOS XE Everest 16.6.9

Caveat ID Number	Description
CSCvr54918	MPLS MTU not correctly derived from interface MTU after reload
CSCvs19041	Traffic sent to the subnets routed over VRF, packets ends up in Default class - wrong classification

Open Caveats – Platform Independent

Caveat ID Number	Description
CSCvg75709	Unnecessary RIB updates when metric-style transition is configured.
CSCvs15808	VRRPv3 failing on port-channel sub-interface.
CSCvt08609	IOS-XE: secondary ip address invisible when interface configure with DHCP as primary ip address

Resolved Caveats – Cisco IOS XE Everest 16.6.9

There are no resolved caveats for this release.

Resolved Caveats – PI Bugs

Caveat ID Number	Description
CSCvr83128	Cisco IOS and IOS XE Software MP-BGP EVPN Denial of Service Vulnerability
CSCvt78186	Cisco IOS and IOS XE Software Split DNS Denial of Service Vulnerability

Caveat ID Number	Description
CSCvu18001	Segmentation fault observed in BGP - UNIX-EXT-SIGNAL: Segmentation fault(11), Process = BGP Scanner
CSCvu85572	Dynamic neighbor does not form when peer-group is shutdown in different vrf
CSCvv64633	BGP: advertised community list is malformed due to GSHUT community

Open Caveats – Cisco IOS XE Everest 16.6.8

Caveat ID Number	Description
CSCvn55871	T1 serial interface is down with encapsulation mode as PPP with remote loopback configuration as IBOC
CSCvr61610	RSP2A-64 and RSP2A-128 Kernel Crash observed with Core Port Shut/Un-shut
CSCvs03683	Support for NCS4200-1T8LR-PS in NCS4202-SA

Open Caveats – PI Bugs

No Open PI bugs for this release

Resolved Caveats – Cisco IOS XE Everest 16.6.8

Caveat ID Number	Description
CSCvr50508	ASR920: Router_RP_0_fman_rp crash on applying conditional crypto debug

Resolved Caveats – PI Bugs

No Resolved PI bugs for this release.

Open Caveats – Cisco IOS XE Everest 16.6.7

There are no open caveats for this release.

Open Caveats – PI Bugs

Caveat ID Number	Description
CSCve97825	Dying Gasp in Org Specific PDU is sent instead of Informational PDU
CSCvn22199	ISR4K fails to authenticate users via dot1x following interface flap
CSCvo58118	CTS Environment-data is not refreshed on the device
CSCvp66281	Default ip forward-protocol udp xx changes to no ip forward-protocol udp xx after rollback
CSCvq56114	Cat3k crash in IGMP code due to invalid source count in DNS lookup
CSCvq57996	RADIUS attribute 4 (NAS-IP-Address) is not honored
CSCvq69866	HSRPv2 crash is observed while retrieving group from received packet
CSCvq72298	Router crashes on running show policy-map interface output command
CSCvq75307	Router crashes due to watchdog after adding a prefix-list/ Route-map entry to existing route map
CSCvq78692	mGRE L3VPN is broken after reload
CSCvq89252	IP SLA for Path-Jitter returning a value is not defined by the MIB
CSCvq91789	When issuing ip helper-addresss x.x.x.x commands show run and show run all commands show differently
CSCvq97365	Two interfaces of client in different VRF connected to same vlan of server are not able to get IP via DHCP
CSCvr00183	AAA accounting issue occurs after router reload when mGRE and L3VPN are configured
CSCvr00344	ip access-list logging hash-generation command removes ACL statements after reload
CSCvr05406	LISP Map-cache is not updated correctly after wired Host-mobility
CSCvr08961	Switch stops responding to CoA
CSCvr10897	Adjacency SIDs are not detected in MPLS traffic-eng topology (interop issue)
CSCvr26105	ICMP Redirect Message sends incorrect next-hop in the gateway address
CSCvr26693	The order of cEigrpPeerAddrType value and cEigrpPeerAddr value does not follow SNMP Object Navigator
CSCvr31017	IP gratuitous ARP is not VRF aware
CSCvr32292	Router may crash due to segmentation fault after running EEM script

Resolved Caveats – Cisco IOS XE Everest 16.6.7

Caveat ID Number	Description
CSCvj00222	Intermittent packet drops for small size vrf ping (64-72)
CSCvp24919	ToD UBX Format - Incorrect header and checksum calculation
CSCvp67001	ASR920 CSDL: ASR-920-12SZ-IM Secure FPGA
CSCvp86314	ASR920 CSDL:[ASR-920-4SZ-A,ASR-920-4SZ-D,ASR-920-12CZ-A,ASR-920-12CZ-D, ASR-920-10SZ-PD] secure FPGA
CSCvp86329	ASR920 CSDL : [ASR-920-24SZ-M, ASR-920-24TZ-M, ASR-920-24SZ-IM] secure FPGA

Resolved Caveats – PI Bugs

Caveat ID Number	Description
CSCvd55092	C3650 traffic is not blocked although hit deny ACL entry
CSCvd67904	4500X does not run dot1x when a laptop wakes from sleep mode
CSCve57810	Amur failing over without fail next-method or no-response next method
CSCvg32153	show interface port channel command falsely reports output drops when there are no actual output drops
CSCvh26032	ICMP Redirect Message sends incorrect next-hop in the "gateway address"
CSCvh49874	FNF monitor download to DP fails after netflow record is changed
CSCvi22263	Crash is observed when IOS adapts shaping with Adaptive QoS over DMVPN configured
CSCvj41876	Prefixes are stuck indefinitely in the BGP pending-prefixes list
CSCvj76866	Partial Power Failure in Stack Causes Interfaces to Become "shutdown"
CSCvk51939	SSS Manager Traceback is observed when test MLPPP is performed
CSCvm10850	Crash is observed after CPUHOG in ISDN L2D SRQ Process
CSCvm47690	Addition or edits to numbered OG ACL using access-list command does not re-expand the ACL
CSCvn00104	Software crashes due to memory corruption after packet trace is enabled
CSCvn23906	DHCP Server sends Renew ACKs to Clients with 00:00:00:00:00:00 MAC in L2 frame

Caveat ID Number	Description
CSCvn45732	Device crashes if you unconfigure the NTP on the device
CSCvn78961	Subscribers cannot re-login due to CoA time-out (lite-sessions in routed mode)
CSCvo06817	Router crashes while executing show commands using (pipe) to filter the output
CSCvo10145	Memory overlay crashes when using include-cui
CSCvo10491	PnP Agent should detect image upgrade scenario and configure dialer to bring up cellular interface
CSCvo17287	Router crashes upon receiving Radius Access-Accept message
CSCvo21122	Memory leaks at hman process
CSCvo36031	WSMA crash formats show command output
CSCvo55194	After RSP switchover, label imposition is not programmed in Software on APS standby router
CSCvo58098	CTS PACS does not download to the devices
CSCvo65415	Router crashes by handling DHCP packet
CSCvo71721	When sending account-logon, ISG does not reply with ACK nor NACK
CSCvo87827	Crash is observed when polling IPForwarding MIB
CSCvo90060	Wrong label programming leads to traffic drop
CSCvp24981	When FQDN is used for APN, IOS DNS resolves FQDN to IP, but GTP stays in DNS pending and IP 0.0.0.0
CSCvp27220	Tail drops on IPSLA sender when using scaled udp-jitter probes
CSCvp38407	radius-server attribute 31 command is broken on LNS when LAC sends Remote-Id string
CSCvp70443	isdn cause-location command supports switch-type primary-ntt
CSCvp72379	ip dns primary command does not get removed
CSCvp74674	QoS fails to apply to tunnel2 when underlying tunnel1 reachability changes
CSCvp84831	name-ip_address mapping is bypassed when the ip domain command is configured on router
CSCvp87488	no login on-success log command does not persist across device reloads
CSCvq00263	Device crashes @ radius_io_stats_timer_handler due to dynamic-author
CSCvq04828	VRF aware reverse DNS lookup is not working

Caveat ID Number	Description
CSCvq04989	Ping between 2 Interfaces is not working; dialer interface is interfering in the ARP Process
CSCvq20005	SRMS tries to build a snapshot when there are no SIDs
CSCvq50202	Class-attributes are duplicated after EAP reauthentication in ISG radius proxy scenario
CSCvq58265	ASR1K BGP PIC Repair path is broken after link flap
CSCvq65283	VXLAN EVPN BGP NEXTHOP is not correctly changed with Route-map
CSCvq74066	DNAC 1.4: SW provisioning fails due to DNAC failure to push command

Open Caveats – Cisco IOS XE Everest 16.6.6

Caveat ID Number	Description
CSCvn55871	T1 serial interface goes down with encapsulation mode as PPP with remote loopback config as IBOC.

Resolved Caveats – Cisco IOS XE Everest 16.6.6

Caveat ID Number	Description
CSCvn63516	ASR-920: Ports not coming up after 12x1GE upgrade license installation

Open Caveats – Cisco IOS XE Everest 16.6.5a

Caveat ID Number	Description
CSCve53492	IOT: For Serial(with RS232) interface IfType comes as other instead of serial/RS232
CSCve78337	MLP MRAPS Convergence is high on Work-Active SSO node
CSCvf22580	IOT: For C3794 controller Listing type as VOICEEM(100) instead of VoiceEnCap(103)
CSCvi72770	Unpredictable asymmetry across the port on C37.94 IM
CSCvh05072	Cem Sys : LOF/AIS are set on T3 under STS in arrive but not asserted in IOS
CSCvi40742	Configuration change on E&M interface results in xconnect failure

Resolved Caveats – Cisco IOS XE Everest 16.6.5a

Caveat ID Number	Description
CSCve64323	RSP1:MPLS MTU programming fails on standby with latest image
CSCvg43968	CRETE:Cylon Mgr crash @ adjmgr_get_fid_index
CSCvg90393	ASR920 Platform-SCC: Act 2 authentication failed: 0xFB - ACT2_ERR_READ_FAILURE
CSCvi79409	ENM flaps/hangs on configuring CEM interface
CSCvk62834	16101:cylon_mgr crash@nile_cef_prefix_v4u_get_adj_info seen in soak run on 16th July Polaris image

Open Caveats – Cisco IOS XE Everest 16.6.4

Caveat ID Number	Description
CSCuy84775	Slow response when typing in CLI on telnet session
CSCve53492	IOT: For Serial(with RS232) interface IfType comes as other instead of serial/RS232
CSCvg70409	IOT: For Serial IM, flowcontrol is not applicable
CSCvh32219	Require Environmental Syslog message during Recovery of temperature and voltage Threshold Violation
CSCvi40742	Configuration change on E&M interface results in xconnect failure
CSCvi72770	Unpredictable asymmetry across the port on C37.94 IM
CSCvi79409	ENM flaps/hangs on configuring CEM interface
CSCvj05472	Running line rate traffic on an internal loopback impacts BFD session
CSCvj10722	CEM Pseudo wire flap on SSO
CSCvj22030	ACR fails with +/- 50 ppm tolerance
CSCuy78963	FNF CLIs are visible for templates other than netflow-video in Striker

Resolved Caveats – Cisco IOS XE Everest 16.6.4

Caveat ID Number	Description
CSCui87222	IP directed-broadcast functionality not working on RSP1/RSP2

Caveat ID Number	Description
CSCve73831	THS:After SSO/ISSU observed AIS Alarm in SYSTEM THS with XE318SP Image
CSCvg21899	Traffic forwarding not happening for VLANs added via "encap dot1q add" command in TEFP
CSCvh52244	Uni-directional communication failure with IOT Legacy IMs
CSCvh55384	Need to Accept User Configurable 4Wire E&M CEM Payload and Dejitte Buffer Values
CSCvh55399	T1 Service Latency is Asymmetric in a Simple Linear Topology
CSCvh76761	RSP3C-200-S RSP module crashes while MPLS TE tunnel interfaces comes up
CSCvi21134	C37.94 port change leads to controller flap
CSCvi25653	TDM-IOT: observing uni-directional traffic failure after replacing TDM IM with IOT IM
CSCvi32766	9400: entSensorThreshold traps are generated even when temperature threshold isn't crossed
CSCvi41087	E&M:Payload size other than multiple of 48 (96,192...) bytes never work in TO mode
CSCvi55229	ENM Type 3 doesnt work on port 4 , if port 0 is also configured for ENM Type TO
CSCvi70138	Adptive Clock Rec and master CEM is chosen automatically on the CEM circuit in IMA8D
CSCvi85693	Mac Flap Syslog Notification not working after reload
CSCvj43887	Type TO is not working for different payload sizes
CSCvj13676	ENM IM : remove signal command from Type TO mode

Open Caveats – Cisco IOS XE Everest 16.6.3

Caveat ID Number	Description
CSCvc27630	Tx Packets or Tx Bytes generated is always lesser than configured rate-steps
CSCve08311	CFM ping failing over dot1ad and xconnect interfaces
CSCve57054	IOS SHIM client iosd-spa took 4432 msec to process a ether_media_type message
CSCvg75829	ASR920: On Boot-up RSP2A-64 and RSP2A-128_Mgr Crash in L3 Adj EAID Allocation due to Invalid ASIC Index

Resolved Caveats – Cisco IOS XE Everest 16.6.3

Caveat ID Number	Description
CSCvd87285	ASR920 - Display issue - Egress i/f and L2 stats shows "unknown" and no packet drops
CSCvg08224	G8265.1: PTP flaps between Holdover and Locked with 64/64 packet rate and Hot Standby
CSCvg36200	IPv4 deny ACL applied in the BDI is blocking L2 switched traffic under certain conditions
CSCvg48170	ASR920: TCAM phase error message flood in RSP2A-64 and RSP2A-128 mgr log file
CSCvg53877	Egress QOS fails when speed is changed at interface via nego auto, speed CLI command

Open Caveats – Cisco IOS XE Everest 16.6.2

Caveat ID Number	Description
CSCvc59505	Member link of Port channel gets removed on doing a SSO on the peer end
CSCvd87285	ASR920 - Display issue - Egress i/f and L2 stats shows "unknown" and no packet drops
CSCve64341	ASR 920 : Mid Point LSP creation failure after reload with latest polaris Image
CSCve90690	L3 convergence for REP is more than 50ms, which is incorrect
CSCvg08224	G8265.1: PTP flaps between HoldOver and Locked with 64/64 packet rate and Hotstandby

Resolved Caveats – Cisco IOS XE Everest 16.6.2

Caveat ID Number	Description
CSCva27296	ASR920 : Enhance the show command to dump the DDR interrupt registers
CSCve04262	RSP2A-64 and RSP2A-128 _Mgr Crash in Adjacency Manager LoadBalance Get FID on Core Gigs Flaps SOAK
CSCve61214	G8275.1: Master disqualified even though packets are flowign fine
CSCve64336	RSP1-Continuous ESMC tracebacks observed after IMA8T OIR followed by SSO
CSCve66013	POE configuration should be disabled if PSU is 24V DC

Caveat ID Number	Description
CSCve82016	ASR-920-12CZ : SyncE input does not work on Copper AMS ports configured in auto media-detect mode
CSCve95009	DATA traffic getting wrongly classified in H-QoS
CSCve98223	RSP1-Continuous ESMC tracebacks observed after IMA8T OIR followed by SSO
CSCvf05616	Traffic drop, on reconfiguring l2vpn sessions after sso on peer
CSCvf10067	ASR920//15.6(2)S1//Broadcast Storm detected when interface is brought up.
CSCvf10783	Cisco IOS XE Software for Cisco ASR 920 Series Routers Arbitrary File Overwrite Vulnerability
CSCvf14556	VLAN based egress classification fails for incoming untagged frames; and for tagged frames with POP0
CSCvf52287	DOM not working for SFP-10G-LR from cisco-AVAGO vendor
CSCvf33489	ISIS FRR : FRR ReOpt Issue, FRR state pointing to Label backup even with primary link up

Open Caveats – Cisco IOS XE Everest 16.6.1

Caveat ID Number	Description
CSCvf10067	Broadcast Storm detected when interface is brought up.
CSCve39547	PTP PI counters were not shown properly
CSCve43404	PTP clock creation fails for specific sequence of triggers
CSCve58737	PTP hybrid BC failed as config applied before netsync locked REF alarm cleared
CSCve82016	SyncE input does not work on Copper AMS ports configured in auto media-detect mode
CSCve83541	IOSd Crash on deleting PTP loopbacks during ISSU SOAK
CSCvd06766	BC slave port stuck at Initializing state upon BC gets reconfigured
CSCve92481	After ASR9k PTP reconfiguration, slave 903 stuck in freq-lock state
CSCve61214	G8275.1: Master disqualified even though packets are flowign fine
CSCve99755	Crash due to DHCP snooping when a bridge domain is changed.
CSCve63177	Label mismatch and traffic black holing.
CSCvd85631	Egress interfacei/f and L2 "unknown" cause packet drops and traffic blackholing.

Caveat ID Number	Description
CSCve90172	rLFA repair path stays programmed in hardware even when primary is back UP.
CSCve96485	IGMP snooping: Packet drops due to IGMP leave scenario in different bridge domain.
CSCvd89120	IPsec offload for Data encryption is not supported on Cisco ASR-920-12SZ-IM.
CSCvfl1195	ASR-920-24SZ-IM bootflash flooding with pman message - ISR (slice-3) 'XGPCS_LINE_RX_RXINT
CSCvf09882	IOMD ERR logs on auto-negotiation is observed continuously, which leads to bootflash space exhaustion.
CSCve48949	Command Injection vulnerability in platform usb modem.
CSCve82016	ASR-920-12CZ: SyncE input does not work on Copper AMS ports configured in auto media-detect mode.

Resolved Caveats – Cisco IOS XE Everest 16.6.1

Caveat ID Number	Description
CSCvb27432	Power over Ethernet (PoE) is now supported in Cisco IOS XE Everest 16.6.1.
CSCvd49392	SETS introducing 1pps out value in 479ms as compared to input 1pps
CSCve09409	HBC Slave router doesnot choose best clock based on Clock Class
CSCvd07855	1 PPS under a virtual port remains down after SSO on RSP2.
CSCvd52872	IPv4 ACL is still active when deleted from interface configuration.
CSCvc52789	Cylon Manager Process crashes at bfd_oamengine_ui_get_tx_buffer_table_idx.
CSCvd03965	"MET ENTRYYS EXHAUSTED" caused router to crash.
CSCuz70566	Autonomic Networking: Layer 2 Channel creation failure on router
CSCvb32221	Layer 2: OSPF over untag BDI failed after switching from tagged BDI to untag.
CSCve27929	Not able to scale IPv4 Tunnels for MVPN GRE.
CSCvc26421	Throughput shows inaccurate values in SADT statistics for 1564.
CSCvc97815	Unable to configure BGP EVPN services on ASR-920-12SZ-IM.
CSCvc67487	System crash with MVPN GRE with SDM default template.
CSCve25677	cylon_mgr: ****MET ENTRYYS EXHAUSTED **** logs seen frequently
CSCvc77467	Out of order/duplicate packets received at the mutlicast receiver end.

Caveat ID Number	Description
CSCvc43885	Traffic drop seen for some multicast groups after interface flap in mpls P2MP setup.
CSCvc77898	BDI MTU config gets lost after reboot.
CSCuv11211	Temperature rise syslog message displays on console when PSU remove and insertion.
CSCvd48351	Configure/unconfigure "l2protocol peer cdp" tracebacks are seen.
CSCvd22452	Cylon manager crashes while defaulting the running SLA's interface.
CSCvc27889	Observing media type showing unknown on few reloads.
CSCvd12333	ISIS: FRR with unnumbered interface leads to traffic loss until TI-LFA repair path is removed.
CSCvc68648	Traffic drops are seen upon POA failover with PW-grouping.
CSCvd61748	EoMPLS: FRR backup path is not displayed for the PW's in the MPLS infrastructure CLI's.
CSCvd51482	Traffic loss seen in endpoint_sso_after_path_protection_trigger.

