



# Restrictions and Caveats in Cisco IOS XE 3.9S Releases

This chapter provides information about restrictions and caveats in Cisco IOS XE 3.9 releases.



**Note**

We recommend that you view the field notices for the current release to determine whether your software or hardware platforms are affected. You can access 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).

This chapter contains the following sections:

- [Limitations and Restrictions, page 1](#)
- [Caveats in Cisco IOS XE 3.9S Releases, page 5](#)

## Limitations and Restrictions

The following limitations apply to the Cisco ASR 903 Router in IOS XE Release 3.9(0)S and later:

### TDM Limitation

- The **configure replace** command is not supported for TDM interfaces.

### ATM IMA Limitation

- You can create a maximum of 16 IMA groups on each T1/E1 interface module.

### Bidirectional Forwarding Detection Limitations

- The minimum supported timer value for software-based BFD sessions is 200 ms x 3 (using a multiplier of 3). The router supports up to 64 offloaded BFD sessions using a 200 ms x 3 timer.
- The Cisco ASR 903 Router supports hardware offloading of BFD echo mode packets for up to 255 sessions. The router handles additional BFD echo mode sessions in software.



**Note**

You cannot convert more than 255 normal BFD sessions to echo mode BFD sessions; the router reaches the offload limit and you must remove and reconfigure the remaining sessions.

- The minimum supported timer value for offloaded BFD echo mode sessions is 3.3 ms.

- In Release 3.9, the router keeps hardware and software-handled BFD echo mode sessions active during ISSU. Releases prior to 3.9 do not maintain hardware-offloaded BFD echo mode sessions during ISSU.
- If you downgrade from 3.9 to a prior release with a BFD echo mode configuration, you must increase the timer to 200ms or greater.

#### Bridge Domain Interface Limitation

- The **mtu** command is not supported on BDI interfaces; however the **ip mtu** command is supported.

#### Clocking and Timing Limitations

- Only a single clocking input source can be configured within each group of eight ports (0-7 and 8-15) on the T1/E1 interface module using the network-clock input-source command.
- Synchronous Ethernet clock sources are not supported with PTP. Conversely, PTP clock sources are not supported with synchronous Ethernet. However, you can use hybrid clocking to allow the router to obtain frequency using Synchronous Ethernet and phase using PTP.
- PTP over Ethernet is not supported in multicast mode; only unicast mode is supported
- G.8265.1 telecom profile is not supported for PTP over Ethernet.
- The Cisco ASR 903 Router does not support a mix of IPv4 and Ethernet clock-ports when acting as a transparent clock or boundary clock.
- Out-of-band clocking and the **recovered-clock** command are not supported.
- The Synchronization Status Message (SSM) is not currently on OC-3 and OC-12 interfaces.
- End-to-end Transparent Clock is not supported for PTP over Ethernet.

#### Dying Gasp Limitations

The Cisco ASR 903 Router supports dying gasp under the following scenarios:

- Ethernet OAM is disabled
- Interface is shut down
- Interface enters error-disabled state
- Router reload
- Dying Gasp is not supported in the event of a power failure.

#### EFP Limitations

- Trunk EFPs are not supported on port channel interfaces.
- Up to 1000 VLANs are supported for trunk EFP over etherchannel traffic.

#### Ethernet IM Limitations

- The Cisco ASR 903 Router does not support the Facilities Data Link (FDL) on Ethernet interfaces.
- The Cisco ASR 903 Router does not support the **mac-address** command on Gigabit Ethernet interface modules.
- 10 Gigabit Ethernet interface modules are not supported in slots 4 and 5.
- When you install a Gigabit Ethernet IM in the topmost interface module slot (slot 5), the last interface (interface GigabitEthernet0/5/0) is not operational; the port is reserved for internal communication.

- When you configure the copper and SFP Gigabit Ethernet interface modules on a router with redundant RSPs, the **speed** and **duplex** commands are not visible in interface configuration mode until you apply a **shutdown/no shutdown** to the interface.
- Fragmentation is not supported with Multicast traffic.
- The SFP-GE-T module supports only 100 Mbps and 1000 Mbps speeds.
- Load balancing using an odd number of port-channel member links is not supported.

#### IP Multicast Limitation

- Bandwidth-Based Call Admission Control (CAC) feature is not supported.

#### IPv6 Limitations

The following limitation applies when using IPv6 on the Cisco ASR 903 Router:

- IPv6 Neighbor Discovery (ND) cache timer expiry is 4 hours. To prevent the neighbour adjacency from being deleted after the timer expires:
  - configure hardware based BFD sessions with the neighbours, or
  - configure static IPv6 neighbours, or
  - configure the **ipv6 nd cache expire timer refresh** command.

#### IS-IS Limitations

- IS-IS over IPv6 is not supported on VRF instances.
- Only one IS-IS process is permitted when you configure IS-IS with the **address-family ipv6** and **bfd-all-interfaces** commands.
- The IS-IS total and per-stream convergence time increases as the number of prefixes increases.
- The Cisco ASR 903 Router supports up to 3000 IS-IS nodes.

#### MLPPP Limitations

The following limitations apply when using MLPPP on the Cisco ASR 903 Router:

- All links in an MLPPP bundle must be on the same interface module.
- All links in an MLPPP bundle must be of the same bandwidth.
- The Cisco ASR 903 Router supports a maximum of 16 links per bundle
- To change the MLPPP bundle fragmentation mode between enabled and disabled, perform a **shutdown/no shutdown** on the bundle.
- LFI is not supported
- Multiclass MLP is not supported
- The Cisco ASR 903 Router supports MLPPP statistics with the following limitations:
  - Packet counters on the bundle display the number of fragments rather than packets.
  - Control packets are accounted on the bundle.
- If you increase the maximum transmission unit (MTU) size on an MLPPP interface to a value higher than the maximum received reconstructed unit (MRRU) value on the peer interface, this can bring the MLPPP tunnel down. To restore the tunnel, perform a shutdown/no shutdown on the interface.

### MPLS VPN Limitation

- MPLS VPN (L3VPN) Fragmentation does not function properly if an access interface has a higher MTU value than a core interface. To ensure that fragmentation functions correctly, configure the core interface MTU with a value that exceeds the access interface MTU and relevant headers.

### OC-3 IM Limitations

- The **configure replace** command is not supported on the OC-3 IMs.
- MPLS-TP is not supported over POS interfaces.
- Multicast is not supported on OC-12 interfaces.
- DS0 channelization is not currently supported.
- MPLS is supported only on PoS interfaces; MPLS on T1/E1 links is not supported.
- IP-FRR and BFD-triggered FRR are not supported on MPLS over POS links.
- Fragmentation is not supported with Multicast traffic on PoS interfaces.
- QoS is not supported for Multicast traffic on PoS interfaces.
- QoS is supported on POS interfaces on optical interface module.
- Three-level QoS policies are not supported on OC-3/OC-12 serial, MLPPP, and PoS interfaces. You can only apply two-level QoS policies.
- The Synchronization Status Message (SSM) is not currently on OC-3 and OC-12 interfaces.

### Pseudowire/AToM Limitation

- The Cisco ASR 903 Router supports ATM over MPLS N-to-one cell mode for a single ATM Virtual Channel Connections (VCCs) or Permanent Virtual Circuits (PVCs) to a pseudowire, but does not support mapping to multiple VCCs or PVCs.
- The Cisco ASR 903 Router does not support ATM over MPLS one-to-one cell mode.
- The Cisco ASR 903 Router supports pseudowire ping using the CW method; pseudowire ping using the TTL method is not supported.
- The Cisco ASR 903 Router supports a maximum of 2000 pseudowires in any combination.
- The following features are not currently supported on pseudowire connections:
  - Ethernet VLAN to Ethernet VLAN L2VPN interworking (bridged and routed modes)
  - Ethernet VLAN to ATM AAL5 L2VPN Interworking (bridged and routed modes)

The following pseudowire (PW) features are not supported over MPLS-TP connections:

- ATM OAM Cell Emulation for ATM AAL5 over MPLS on PVC and in VC Class.
- BFD / VCCV over ATM AC over MPLS TP
- Ethernet port to ATM AAL5 PVC L2VPN Interworking (bridged and routed modes)
- MIB support including PW-TDM-MIB, PW-ATM-MIB, and PW-CESOPSN-MIB
- N:1 PVC Mapping with non-unique VPI (N>1)

### QoS Limitations

For a description of QoS features and limitations on the Cisco ASR 903 Router in Release 3.9S, see <http://www.cisco.com/en/US/docs/routers/asr903/software/guide/chassis/Release3.9.0S/ASR903-Chassis-SW-39.html>

**Software Upgrade Limitation**

We recommend you set the **interface-module-delay** value to 150 or greater in order to ensure sufficient time for IM software upgrades.

**Subinterfaces Limitation**

The Cisco ASR 903 Router does not support subinterface configurations except on ATM interfaces. You can configure similar functionality using multiple Ethernet Virtual Connections on an interface. For more information, see [Configuring Ethernet Virtual Connections on the Cisco ASR 903 Router](#).

**T1/E1 IM Limitations**

- Inverting data on the T1/E1 interface is not supported—Inverting the data stream using the invert data interface command is not supported.
- Bit error rate test (BERT) patterns have limited support—Currently, only the 2<sup>11</sup>, 2<sup>15</sup>, 2<sup>20</sup>-O153, and 2<sup>20</sup>-QRSS patterns are supported for BERT.
- If you issue the **no card type** command on the controller, you must reload the router in order to configure a new **card type** value.

## Caveats in Cisco IOS XE 3.9S Releases

Caveats describe unexpected behavior. Severity 1 caveats are the most serious caveats. Severity 2 caveats are less serious. Severity 3 caveats are moderate caveats and only select severity 3 caveats are included in this chapter.

This section describes caveats in Cisco IOS XE 3.9S releases. The following information is provided for each caveat:

- Symptom—A description of what is observed when the caveat occurs.
- Conditions—The conditions under which the caveat has been known to occur.
- Workaround—Solutions, if available, to counteract the caveat.

**Note**

If you have an account on Cisco.com, you can also use the Bug Toolkit to find select caveats of any severity. To reach the Bug Toolkit, log in to Cisco.com and go to [http://www.cisco.com/cgi-bin/Support/Bugtool/launch\\_bugtool.pl](http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl). (If the defect that you have requested cannot be displayed, this may be due to one or more of the following reasons: the defect number does not exist, the defect does not have a customer-visible description yet, or the defect has been marked Cisco Confidential.)

The *Dictionary of Internetworking Terms and Acronyms* contains definitions of acronyms that are not defined in this document:

[http://docwiki.cisco.com/wiki/Category:Internetworking\\_Terms\\_and\\_Acronyms\\_\(ITA\)](http://docwiki.cisco.com/wiki/Category:Internetworking_Terms_and_Acronyms_(ITA))

The following sections describe the open and resolved caveats in 3.9S Releases:

- [Open Caveats—Cisco IOS XE Release 3.9\(2\)S, page 6](#)
- [Resolved Caveats—Cisco IOS XE Release 3.9\(2\)S, page 6](#)
- [Open Caveats—Cisco IOS XE Release 3.9\(1a\)S, page 14](#)
- [Resolved Caveats—Cisco IOS XE Release 3.9\(1a\)S, page 18](#)
- [Open Caveats—Cisco IOS XE Release 3.9\(0\)S, page 27](#)

- [Resolved Caveats—Cisco IOS XE Release 3.9\(0\)S, page 31](#)

## Open Caveats—Cisco IOS XE Release 3.9(2)S

This section documents the unexpected behavior that might be seen with the Cisco ASR 903 Router in Cisco IOS XE Release 3.9.2S.

- CSCue20035  
**Symptom:** Virtual circuit (VC) status goes down after reload.  
**Conditions:** This issue occurs when reloading the core side trunk EFP BDI with port channel using cross connect. LDP comes up but VC status goes down.  
**Workaround:** On core side, use EVC bridge-domain BDI with port channel instead of trunk EFP BDI with port channel.
- CSCue67267  
**Symptom:** High traffic drop on Stateful Switchover (SSO). Double dip on SSO.  
**Conditions:** This issue occurs occasionally (one in five iterations) on Cisco ASR 903 Router with MVPN scale setup.  
**Workaround:** There is no workaround.
- CSCuf89283  
**Symptom:** Connectivity Fault Management (CFM) sessions configured on pseudowire continue to flap.  
**Conditions:** This issue occurs when route flaps quick enough to prevent bringing down of the pseudowire.  
**Workaround:** Bring down the pseudowire and bring it back up again.
- CSCuh94841  
**Symptom:** 10 Gigabit Ethernet interface flaps without trigger causing traffic to switch to protected label-switched path (LSP).  
**Conditions:** This issue occurs when the script is run for continuous SSO.  
**Workaround:** There is no workaround.

## Resolved Caveats—Cisco IOS XE Release 3.9(2)S

This section documents the issues that have been resolved in Cisco IOS XE Release 3.9.2S.

- CSCud61551  
**Symptom:** Serial Number of the RSP in slot 1 does not display in the **show inventory** command output.  
**Conditions:** This issue occurs under unknown conditions.  
**Workaround:** Reload the router.
- CSCue29865  
**Symptom:** Values do not display for OC-12 mode after shutting the IM bay.  
**Conditions:** This issue occurs after shutting the IM bay. Values are not displayed for OC-12 mode, but the values are displayed for the Gigabit Ethernet card.

- Workaround:** There is no workaround.
- CSCue32016
 

**Symptom:** On IM online insertion and removal (OIR) or Router reload with shutdown on CE controller, Ethernet (core) does not transmit any packets.

**Conditions:** This issue occurs when remote peer does not assert alarm indication signal (AIS) downstream.

**Workaround:** There is no workaround.
  - CSCue44876
 

**Symptom:**

    - Packet-over-SONET (PoS) interface on the high availability (HA) system continues flapping
    - Complete traffic is dropped
    - PoS interface of the remote Cisco ASR 903 Router remains in up or down state.

**Conditions:** This issue occurs on activating SSO after an IM OIR when configuring PoS interface in OC-12 mode.

**Workaround:** There is no workaround.

**More Info:** This issue is not seen in OC-3 mode.
  - CSCue61850
 

**Symptom:** Maintenance End Points (MEPs) start flapping when **no shutdown** command is issued on EVC bridge-domain (BD) or port channel interface running CFM.

**Conditions:** This issue occurs when more than 256 CFM sessions are configured.

**Workaround:** Configure fewer CFM sessions (50 to 100).
  - CSCue67835
 

**Symptom:** OSPF flaps when you set the dead interval timer as 6 seconds and hello interval as 2 seconds.

**Conditions:** This issue is observed when you perform an SSO.

**Workaround:** Use the default OSPF hello timers.
  - CSCue69818
 

**Symptom:** The **show inventory** command displays a wrong serial number.

**Conditions:** Inventory is managed by the "main serial number". However, when using the **show inventory** command for Redundant Power System (RPS) and IM, "PCB serial number" is displayed instead of the "main serial number".

**Workaround:** Use the **show diag all eeprom detail** command to list the correct serial number.
  - CSCue75372
 

**Symptom:** Time-Hog traceback seen after router or IM reloads.

**Conditions:** This issue occurs on bootup of IM or router.

**Workaround:** There is no workaround.
  - CSCue97180
 

**Symptom:** The Cisco ASR 903 Router sometimes crashes when used as a multicast VPN (mVPN) Encap PE Router.

**Conditions:** This issue occurs in an mVPN network on exceeding core multicast distribution tree (MDT) scale of 1K with more than 20 virtual routing and forwarding (VRFs) on a flap access interface of a PE Router.

**Workaround:** Do not exceed more than 1K core MDT scale Work around for a crash is unavailable.

- CSCuf02007

**Symptom:** Continuous SEMHOG is seen on the router console with incremental sync failure and IOMD crashes on OC-3 IM.

**Conditions:** Router receives continuous SEMHOG for multiple processes.

**Workaround:** There is no workaround.

- CSCuf06001

**Symptom:** When TCAM limit is reached, statistics do not work accurately.

**Conditions:** This issue occurs when the TCAM entries exceed the limit during dynamic modification of service-policy.

**Workaround:** There is no workaround.

- CSCuf43992

**Symptom:** The router crashes if you configure local span.

**Conditions:** This issue is observed when you configure local span on the router.

**Workaround:** Use another Encapsulated Remote Switched Port Analyzer (ERSPAN) configuration to work as local span with source and destination ERSPAN session configured in one router.

- CSCuf45656

**Symptom:** Cisco ASR 903 Router crashes with segmentation fault.

**Conditions:** This issue occurs during multicast convergence on EFP's configured with split horizon.

**Workaround:** There is no workaround.

- CSCuf53527

**Symptom:** Class of Service (CoS) inner value gets copied into the CoS value.

**Conditions:** This issue occurs when configuring Q-in-Q without rewrite service instance.

**Workaround:** To ensure CoS inner value does not get copied, apply QoS policy-map.

- CSCuf65301

**Symptom:** Micro flaps observed on the router.

**Conditions:** This issue is seen when system is kept idle for hours.

**Workaround:** There is no workaround.

- CSCuf79397

**Symptom:** F1 is stuck in init state after the standby RSP reloads.

**Conditions:** This issue occurs on a reload or OIR of the standby RSP.

**Workaround:** Reload the standby RSP again.

- CSCuf81085

**Symptom:** After you use the **shutdown** and **no shutdown** commands on the controller of PE, IMA VCs go down.

**Conditions:** This issue is observed after using the **shutdown** and **no shutdown** commands on the OC3 controller on PE routers.



**Workaround:** Use the **shutdown** and **no shutdown** commands on the controller.

- CSCuf89767

**Symptom:** When IGMP snooping is enabled, multicast traffic is not accurately filtered. Layer 3 multicast traffic floods all ports of the bridge-domain.

**Conditions:** This issue occurs when start-up configuration includes port channels along with TEFP/EFP as part of the bridge-domain.

**Workaround:** There is no workaround.

- CSCug05239
 

**Symptom:** Traffic drops on the router.

**Conditions:** This issue occurs when configuring multichassis Link Aggregation Control Protocol (MLACP) switchover with Ethernet over Multiprotocol Label Switching (EOMPLS).

**Workaround:** Configure port channel with EOMPLS.
- CSCug10116
 

**Symptom:** Traffic and ping do not flow through ATM interfaces on multiple controllers.

**Conditions:** Series of **shutdown** and **no shutdown** commands on the controller or interface lead to the failure.

**Workaround:** There is no workaround. To recover from failure, perform an IM OIR.
- CSCug18185
 

**Symptom:** When the interfaces comes up after bootup, traffic received on the Cisco ASR 903 Router serial interfaces are not switched to the BDI connected to Ixia.

**Conditions:** This issue occurs when ARP resolution of the Ixia connected interface IP address fails.

**Workaround:** Ping the Ixia port connected to the Cisco ASR 903 Router from another router connected to the Cisco ASR 903 Router using Gigabit Ethernet interface.
- CSCug18630
 

**Symptom:** When you perform an OIR on the standby and active RSPs, CMAND crashes.

**Conditions:** This issue is observed after performing multiple standby OIRs and bringing the standby machine up.

**Workaround:** There is no workaround.
- CSCug21145
 

**Symptom:** When system crashes, sometimes core files are generated with CRC errors.

**Conditions:** This issue occurs when the system crashes under stress conditions.

**Workaround:** There is no workaround.
- CSCug27073
 

**Symptom:** Multicast replication is improper when 255 outgoing interfaces (OIF's) are configured.

**Conditions:** This issue occurs when:

  - Perfuming IM OIR (soft/hard)
  - Clearing MRoutes (sometimes)
  - Enabling/disabling IGMP Snooping

**Workaround:** There is no workaround.
- CSCug31414
 

**Symptom:** Multicast traffic drops on changing interface configuration from TEFP to VPLS over port channel (PoCH).

**Conditions:** This issue occurs when converting a layer 2 interface to layer 3; and then configuring IP PIM and IP address in quick succession.

**Workaround:** Use **shutdown** and **no shutdown** command on the interface.

**More Info:** The problem occurs only when the adjacency create notification is received earlier than the convert to layer 3 notification.

- CSCug44762  
**Symptom:** The POS interface stays down after using the **shutdown** and **no shutdown** commands.  
**Conditions:** This issue is observed when you use the **shutdown** and **no shutdown** commands on the POS interface.  
**Workaround:** Use the **shutdown** and **no shutdown** commands on the controller.
- CSCug61357  
**Symptom:** ISIS adjacency and BFD stay down after using the **shutdown** and **no shutdown** commands.  
**Conditions:** This issue is observed in R-LFA configurations.  
**Workaround:** Use the **shutdown** and **no shutdown** commands again.
- CSCug63862  
**Symptom:** When configured, SATOP interfaces does not come up.  
**Conditions:** This issue occurs on configuring SATOP on the router.  
**Workaround:** Use IM OIR.
- CSCug74071  
**Symptom:** When scaling up MPLS-TE tunnels to full scale (512), sometimes the following message is displayed: "%FMFP-3-OBJ\_DWNLD\_TO\_CPP\_FAILED: SIP1: fman\_fp\_image: adj 0x9fdd, Flags Incomplete download to CPP failed".  
**Conditions:** This issue occurs when MPLS-TE tunnels are scaled to full scale (512) on the router in a single instance.  
**Workaround:** There is no workaround.
- CSCug83807  
**Symptom:** Multicast traffic is dropped as TCAM entries are encountered.  
**Conditions:** This issue occurs when TCAM entries are encountered.  
**Workaround:** There is no workaround.
- CSCug83842  
**Symptom:** ATM/IMA path level controllers go down with alarms LP-AIS and T15 LOMF in the Cisco ASR 903 Router.  
**Conditions:** This issue occurs on either on bootup of the router or OIR of the IM. Along with these alarms, B1/B2 alarms are reported at the controller level. As B1/B2 alarms are high priority alarms, the path level controllers stays down.  
**Workaround:** Reload IM or use the **shutdown** and **no shutdown** command on the main controllers.
- CSCug84544  
**Symptom:** POS interface output displays wrong counter values.  
**Conditions:** This issue occurs when using PPP encapsulation.  
**Workaround:** There is no workaround.
- CSCug86963  
**Symptom:** Bidirectional Forwarding Detection (BFD) is unable to resolve neighbor Address Resolution Protocol (ARP).

**Conditions:** This issue occurs when software BFD is configured with static client; and IM OIR or reload is performed.

**Workaround:** Use manual ping.

- CSCug91295

**Symptom:** UDP based ACLs do not work after a router reload.

**Conditions:** This issue occurs after reload.

**Workaround:** Remove and add the ACL.

- CSCug96958

**Symptom:** Inverse Multiplexing for ATM (IMA) interfaces stay up even when you use the **shutdown** command to shut down the controller.

**Conditions:** This issue is observed when you use the **shutdown** command on the OC-3 controller.

**Workaround:** Use the **no shutdown** command bring up the controller and interfaces.

- CSCug97639

**Symptom:** IPv4 VRF ping fails when disabling IPv6 unicast-routing globally.

**Conditions:** This issue occurs when IPv6 unicast-routing is disabled.

**Workaround:** Enable IPv6 unicast-routing

- CSCug99750

**Symptom:** The Cisco ASR 903 Router crashes when it accesses unpopulated data structures.

**Conditions:** This issue is observed when you perform an IM OIR and use the **shutdown** and **no shutdown** commands.

**Workaround:** There is no workaround.

- CSCuh00343

**Symptom:** Node runs out of memory if node has more 1K pseudowires. Pseudowire can be either Ethernet over MPLS (EoMPLS) or Virtual Private LAN Services (VPLS).

**Conditions:** Access instability cause these memory leaks. If network is stable then chances of observing this issue is minimal.

**Workaround:** There is no workaround.

- CSCuh06740

**Symptom:** Router gets reloaded after performing a soft OIR.

**Conditions:** This issue is observed after you perform a soft OIR or subsequent SSOs.

**Workaround:** There is no workaround.

- CSCuh16011

**Symptom:** FMAN-FP crashes when you perform ab IM OIR.

**Conditions:** This issue is observed when you perform multiple IM OIRs with around 65 BFD sessions.

**Workaround:** Reload the router.

- CSCuh18073

**Symptom:** In a domain with 2 BGP exit points acting in Active or Repair mode, traffic would be exiting the domain through Repair path BGP PE instead of exiting through Active path BGP PE.

**Conditions:** This issue occurs in the following conditions:

- Environment has 2 BGP exit points
- A change in one of the core links to the primary BGP exit point results in Repair BGP PE becoming Active BGP PE and vice versa

In this scenario, even after BGP convergence, data packets would traverse through previous primary BGP PE (now repair path PE).

**Workaround:** There is no workaround.

- CSCuh18503

**Symptom:** BFD IPv6 sessions may not come up between Cisco ASR 9000 and Cisco ASR 903 Routers.

**Conditions:** This issue is observed when the packets sent from Cisco ASR 903 Router have invalid UDP checksums.

**Workaround:** There is no workaround.

- CSCuh27117

**Symptom:** Traffic loss of about six to eight seconds is observed when you perform an SSO.

**Conditions:** This issue is observed when you perform the switchover before IM OIR or the interface flaps.

**Workaround:** There is no workaround.

- CSCuh33255

**Symptom:** Traffic does not flow through most multilink PPP (MLP) interfaces post In-Service Software Upgrade (ISSU).

**Conditions:** This issue occurs on HA system performing ISSU or killing IOMD process followed by switchover.

**Workaround:** Use **shutdown** and **no shutdown** command on MLP interface to recover the traffic.

- CSCuh59723

**Symptom:** On removing one out of the two member links from the MLP bundle, traffic and ping fail.

**Conditions:** This issue occurs with T1E1/OC-3 IM when using **shutdown** and **no shutdown** command or when removing cable from one of the member serial interface.

**Workaround:** Reload the router.

- CSCuh65426

**Symptom:** Circuit emulation (CEM) packets use class default after **shutdown** and **no shutdown** on CEM circuit, with or without QoS policy

**Conditions:** After removing and adding QoS policy on CEM circuits, followed by CEM interface flap, CEM packets neither exit with default EXP marking of 5 nor exit with the marking specified in ingress qos policy. This occurs after reloading the router with policies intact on CEM interface and only in the presence of Hot-Standby Psuedo Wires (HSPW).

**Workaround:** There is no workaround.

- CSCuh77595  
**Symptom:** On using **configure replace** command, the standby router crashes.  
**Conditions:** This issue occurs when replacing the TE tunnel configuration with Startup configuration using **configure replace** command.  
**Workaround:** There is no workaround.
- CSCuh77762  
**Symptom:** The TenGigabitEthernet port operates at one gigabit speeds in WAN-PHY mode on Cisco ASR 903 Routers. This leads to a huge amount of output drop.  
**Conditions:** This issue is observed if a QoS policy is configured on the TenGigabitEthernet interface.  
**Workaround:** There is no workaround.
- CSCuh86102  
**Symptom:** The interface stops forwarding traffic.  
**Conditions:** This issue is observed when the TenGigabitEthernet interface is in WAN-PHY mode and R0 is active.  
**Workaround:** Use R1.
- CSCuh99117  
**Symptom:** Cisco ASR903 Router packets drop for some of the prefixes in MPLS network.  
**Conditions:** This issue occurs when MPLS L3 VPN is configured on Cisco ASR903 Router with MVPN template.  
**Workaround:** There is no workaround.
- CSCui08269  
**Symptom:** Error objects are seen and traffic does not flow through HSPW VC's.  
**Conditions:** This issue occurs on using **do clear mpls ldp ne** command when more than 100 HSPW VC's are configured.  
**Workaround:** Remove and add the EFP.
- CSCui16418  
**Symptom:** After SSO, 10 Gigabit Ethernet interface flaps and traffic is dropped.  
**Conditions:** This issue occurs during SSO switchover on the 10 Gigabit Ethernet interface of a HA system.  
**Workaround:** There is no workaround.

## Open Caveats—Cisco IOS XE Release 3.9(1a)S

This section documents the unexpected behavior that might be seen with the Cisco ASR 903 Router in Cisco IOS XE Release 3.9(1a)S.

- CSCuc33798  
**Symptom:** IMA links goes down with over subscription traffic.  
**Conditions:** This issue is seen with over subscription traffic  
**Workaround:** Use line rate.

- CSCuc42085
 

**Symptoms:** The 1PPS output from the ASR 903 is out of range when compared to the 1PPS output of the PTP master clock.

**Conditions:** This issue occurs when the router is configured as a hybrid clock (ordinary/boundary) and there are intermediate hops between the router and the PTP master clock.

**Workaround:** There is no workaround.
- CSCue29809
 

**Symptom:** Mismatch in the MIB object entSensorThresholdEvaluation value for CiscoEntitySensorMIB.

```
entSensorThresholdEvaluation.1086.1 = false(2) (value should be true)
entSensorThresholdEvaluation.1086.2 = false(2) (value should be true)
```

**Conditions:** This issue occurs in normal working conditions.

**Workaround:** There is no workaround.
- CSCue29865
 

**Symptom:** Values do not display for OC-12 mode after shutting the IM bay.

**Conditions:** This issue after shutting the IM bay. Values are not displayed for OC-12 mode, but the values are displayed for the Gigabit Ethernet card.

**Workaround:** There is no workaround.
- CSCue35103
 

**Symptom:** CPU goes high on executing **show mac-address-table** command.

**Conditions:** Scaled MAC entries are learned over BD.

**Workaround:** Execute the command with reduced term length.
- CSCue42139
 

**Symptom:** The Precision Time Protocol (PTP) state is stuck in acquiring state.

**Conditions:** This issue occurs when the active RSP is removed and the T3 time-stamping is stuck and the PTP stays in acquiring state.

**Workaround:** Reload the IM or unconfigure and configure the PTP.
- CSCue63229
 

**Symptom:** IMA interfaces flap frequently every 1530 minutes. The issue does not occur on member links.

**Conditions:** This issue occurs when you increase the number of member links in the IMA group to 16.

**Workaround:** There is no workaround.
- CSCue67835
 

**Symptom:** OSPF flap with aggressive timers (2sec hello interval, 6sec dead interval).

**Conditions:** This issue occurs after performing an SSO.

**Workaround:** Use the default OSPF hello timers.

- CSCue75372  
Symptom: Time-Hog traceback seen after router or IM reloads.  
Conditions: This issue occurs on bootup of IM or router.  
Workaround: There is no workaround.
- CSCue87629  
**Symptom:** INFRA-6-PROCPATH\_CLIENT\_HOG: IOS shim client “iosd-nile” messages may appear on the console.  
**Conditions:** This issue occurs when a **shutdown** followed by a **no shutdown** command is executed on the G8032 ring interface of a peer or local device.  
**Workaround:** There is no workaround.
- CSCue92393  
Symptom: CEM SatoP circuits with the router in Core remain in down state after initial configuration. The **show cem circuit** command output on ASR903 shows that the circuits are down.  
Conditions: This issue occurs when the CEM SatoP circuits are configured using script via tcl and tftp\_config. This forces a lot of configuration dump on router console simultaneously. The issue may also be seen after router reload with saved CEM Satop configurations.  
Workaround: Perform a controller **shutdown** followed by a **no shutdown** on OC-3 IM on the router.
- CSCuf05090  
**Symptom:** Standby IM resets continuously with running configuration synchronization failure.  
**Conditions:** This issue occurs after a downgrade of all IMs and the IMS are removed from the slot and an upgrade is performed.  
**Workaround:** Reload the router completely.
- CSCuf35542  
**Symptom:** PFM is fails for about 5minutes after OIR on the master.  
**Conditions:** This issue occurs after OIR is performed two times on the master  
**Workaround:** Wait for 5-6 minutes after the OIR.
- CSCuf79397  
Symptom: F1 is stuck in init state after the standby RSP reloads.  
Conditions: This issue occurs on a reload or OIR of the standby RSP.  
Workaround: Reload the standby RSP again.
- CSCug05491  
**Symptom:** The router drops traffic on VPLS circuits.  
**Conditions:** This issue occurs when you take the following actions:
  - Configure REP with VLAN load balancing
  - Configure VPLS VFI on the VLANs
  - Issue an stateful switchover (SSO)**Workaround:** There is no workaround.



- CSCug14420  
**Symptom:** Traceback observed while performing OIR of IM.  
**Conditions:** This issue occurs while performing OIR T1E1 IM  
**Workaround:** There is no workaround.
- CSCug21352  
**Symptom:** The convergence time is more than 2secs on the router.  
**Conditions:** This issue occurs when convergence time is more than expected. It takes around 2.5 seconds to converge from Active to backup path with 450 CEM interfaces.  
**Workaround:** There is no workaround.
- CSCug70182  
**Symptom:** ASR903 -IMA8S port stays up without inserting a fiber.  
**Conditions:** This issue is observed when GLC-FE-100FX optic is used  
**Workaround:** There is no workaround.
- CSCug77786  
**Symptom:** The router develops false notifications, syslog messages and cefcFRUInserted traps when performing RP card switchover. The false notifications create false alarms in Prime Network.  
**Conditions:** This issue occurs after RP card switchover on the router.  
**Workaround:** There is no workaround.
- CSCug81561  
**Symptom:** Convergence time is more than 50ms with EoMPLS after SSO.  
**Conditions:** This issue occurs when port channel and BDI configurations exist on the router and SSO convergence time is more than 50ms.  
**Workaround:** There is no workaround.
- CSCug83807  
**Symptom:** Multicast traffic is dropped as TCAM entries are encountered.  
**Conditions:** This issue occurs when TCAM entries are encountered.  
**Workaround:** There is no workaround.
- CSCug91295  
**Symptom:** UDP based ACLs do not work after a router reload.  
**Conditions:** This issue occurs after reload.  
**Workaround:** Remove and add the ACL.
- CSCug94257  
**Symptom:** The **show ptp port running detail** command shows the wrong stream id.  
**Conditions:** This issue occurs under normal working conditions.  
**Workaround:** Use the **show plat soft ptp** command get the correct stream id.

## Resolved Caveats—Cisco IOS XE Release 3.9(1a)S

This section documents the issues that have been resolved in Cisco IOS XE Release 3.9(1a)S.

- CSCtw76473
 

**Symptom:** The router displays packet drops on some VPLS pseudowire virtual circuits (VCs) on the disposition side.

**Conditions:** Occurs under the following conditions:

  - The core network is running MPLS-TP tunnels
  - There is an SSO switchover on the remote end or an LDP neighbor reset on the peer end.

**Workaround:** There is no workaround.
- CSCud09142
 

**Symptom:** Fp active error messages seen when interface tunnel TP is removed when HA is configured.

**Conditions:** This issue is seen after removing tunnel TP interface.

**Workaround:** There is no workaround.
- CSCud30554
 

**Symptom:** Object download failure messages are displayed on console during object cleanup. This may cause a possible leak in the hardware resource if the objects are not cleaned up.

**Conditions:** This issue is seen during the Virtual Circuit deletion.

**Workaround:** There is no workaround.
- CSCud42914
 

**Symptom:** Object download messages are observed when default values are set on the MPLS core interface.

**Conditions:** This issue occurs when default values are set on the MPLS core interface.

**Workaround:** There is no workaround.
- CSCud59242
 

**Symptom:** Traffic stops forwarding for 10-20 groups out of 1000 groups when IGMP snooping is enabled.

**Conditions:** This issue occurs when outgoing Layer 2 interface flaps very quickly. This issue occurs when executing the **shutdown** command followed by a **no shutdown** command.

**Workaround:** Disable IGMP snooping.
- CSCue10037
 

**Symptom:** After executing the **shutdown** command followed by a **no shutdown** the member link crashes

**Conditions:** This issue occurs when CFM Trunk EFP with 256 sessions with an interval of 3.3ms is configured and **shutdown** command followed by a **no shutdown** command is executed.

**Workaround:** Configure 50-100 CFM sessions.
- CSCue13187
 

**Symptom:** Duplicate multicast traffic is received after replacing the bridge-domain ID with new bridge-domain ID.

**Conditions:** This issue occurs when the bridge-domain ID is changed from an existing bridge-domain ID to a new bridge-domain ID.

**Workaround:** If the bridge-domain needs to be changed, remove the old service instance and configure new service instance with new bridge-domain.

- CSCue15570

**Symptom:** Traffic does not resume on a POS interface.

**Conditions:** This issue is seen after the router reloads with POS configurations.

**Workaround:** Perform the following:

- Shutdown the interface and then execute a **no shutdown** on the TDM interface
- Shutdown the controller then execute a **no shutdown** on the TDM controller
- Soft OIR the OC3 IM.

- CSCue19836

**Symptom:** Controller flaps are observed on CE routers with Multirouter Automatic Protection Switching (MR-APS) configured on PE routers with CEM circuits.

**Conditions:** This issue occurs when controllers on CE routers flaps when is MR-APS configured on PEs having CEM circuits.

**Workaround:** There is no workaround.

- CSCue20607

**Symptom:** Port-channel load balances traffic on member-links which are in hot-standby or down state also resulting in traffic blackholes.

**Conditions:** This issue is seen when there are redundant member-links which are in hot-standby or down state.

**Workaround:** There is no workaround.

- CSCue24854

**Symptom:** 70 msec loss is observed after performing an IM OIR in a remote LFA ring.

**Conditions:** This issue occurs when doing soft OIR.

**Workaround:** Perform a hard OIR for a less than 50 msec loss.

- CSCue34781

**Symptom:** The policer in the parent policy-map of an hqos policy attached to an interface stops working after the child policy policer is dynamically modified.

**Conditions:** The policy-map attached to the interface is a hierarchical policing policy. Both the child and the parent policy-map have policing actions in their classes. It is seen that the policing in the parent class does not work correctly after the policing action in the child policy is modified dynamically

**Workaround:** Remove and re-attach the policy-map on the interface

- CSCue50128

**Symptom:** FMFP download failure occurs on reaching 1980 odd number even though 2000 ternary content addressable memory (TCAM) space is allocated for ACLs in the IP template.

**Conditions:** This issue occurs in normal conditions when the scale reaches 1980.

**Workaround:** There is no workaround.

- CSCue51682
 

**Symptom:** The REP protocol flaps, as indicated by the following error messages:

```
*Feb  8 06:51:38.857: %REP-4-LINKSTATUS: GigabitEthernet0/0/1 (segment 10) is
non-operational due to neighbor not responding
*Feb  8 06:51:39.096: %REP-4-LINKSTATUS: GigabitEthernet0/0/1 (segment 10) is
operational.
```

**Conditions:** Occurs under the following conditions:

  - The router is sending traffic using the incremental MAC address table
  - Fast LSL is configured using a 200ms timer.
  - The router is configured with more than 2000 MAC addresses.

**Workaround:** Remove fast LSL from the REP configuration.
- CSCue54649
 

**Symptom:** Traceback is seen on new active RSP console after performing a SSO.

**Conditions:** This issue is seen when OC-3 IM is configured on OC-12 mode. The POS and serial interfaces mayor may not be configured.

**Workaround:** There is no workaround.
- CSCue61803
 

**Symptom:** IMs do not get powered off when router is reloaded.

**Conditions:** This issue is seen occasionally on reload.

**Workaround:** There is no workaround.
- CSCue65149
 

**Symptom:** OBJ messages are observed when changing the interval in EVC BD offload cases (scale).

**Conditions:** This issue occurs when 3.3ms session interval and MEPS is configured on the router and then the MEPS and domain configuration is removed and a session interval of 10ms interval is configured.

**Workaround:** Configure a low session interval.
- CSCue66137
 

**Symptom:** The IOMD crashes with CPU hog messages.

**Conditions:** This issue occurs with OC-3 interface module and traffic is sent over a multilink bundle with packet size greater than 600 byte.

**Workaround:** There is no workaround.
- CSCue73478
 

**Symptom:** Standby RSP Sync LED become holdover after switchover.

**Conditions:** This issue occurs after a switchover.

**Workaround:** There is no workaround.
- CSCue77596
 

**Symptom:** Cos value gets wrongly marked for a QinQ packet

**Conditions:** This issue occurs on a service instance with dot1q encapsulation and no rewrite is configured on the interface.The policy map attached in the ingress has marking in it.

**Workaround:** There is no workaround.

- CSCue81082  
**Symptom:** FMAN OBJ download failure seen for (\*,G/m) entries on ACL change.  
**Conditions:** This issue occurs when ACL is configured on the RP and the ACL is deleted or added.  
**Workaround:** There is no workaround.
- CSCue83621  
**Symptom:** Policy-map stops working on removing class default class dynamically.  
**Conditions:** This issue occurs when policy-map is attached to target and class-default of top level is deleted dynamically.  
**Workaround:** Detach and reattach the policy-map on target.
- CSCue88974  
**Symptom:** Standby RSP appears as UNKNOWN in **show inventory** command and alarm is raised. The **show facility-alarm** command status reports the alarm.  
**Conditions:** This issue occurs after OIR is performed on the standby RSP.  
**Workaround:** There is no workaround.
- CSCue89503  
**Symptom:** Power supply status become “CRITICAL” after removing or inserting of the power supply.  
**Conditions:** This issue is seen after multiple OIRs.  
**Workaround:** There is no workaround.
- CSCue90867  
**Symptom:** Machine check errors and kernel crash was seen on SSO.  
**Conditions:** This issue occurs after performing SSO.  
**Workaround:** There is no workaround.
- CSCue91533  
**Symptom:** Traffic through VPLS pseudowire is flooded due to MAC aging.  
**Conditions:** This symptom is observed when bridge descriptor index (internal index) assigned to MAC address exceeds 20480.  
**Workaround:** There is no workaround.
- CSCue93989  
**Symptom:** Less traffic received then expected rate for IMA link.  
**Conditions:** This issue occurs when IMA group is configured with 16 OC-3 T1 links. 888 pvcs are created and traffic is sent to only one pvc.  
**Workaround:** There is no workaround.
- CSCue94811  
**Symptom:** Process crash on standby does not generate a core file.  
**Conditions:** This issue occurs on normal conditions.  
**Workaround:** There is no workaround.
- CSCuf02518  
**Symptom:** IPv4 Traffic gets affected on IPv6 ACL applied interface.

**Condition:** This issue occurs if IPv4 ACLs and IPv6 ACLs in the system share the same label. The IPv4 traffic on the interface on which IPv6 ACL is applied is impacted.

**Workaround:** There is no workaround.

- CSCuf05039

**Symptom:** I2C\_WRITE and MDIO\_READ/WRITE error messages are seen on the router.

**Conditions:** This issue occurs on IM hard or soft OIR.

**Workaround:** There is no workaround.

- CSCuf07508

**Symptom:** The Gigabit Ethernet port on IMA8S may not come up after reload at times.

**Conditions:** This issue occurs when the router is reloaded multiple times.

**Workaround:** Perform an IM OIR.

- CSCuf42166

**Symptom:** BERT Errors and Path Code Violations counter keeps incrementing.

**Conditions:** This issue occurs when connected to E1E1 IM or the second PHY.

**Workaround:** Connect to first PHY.

- CSCuf43275

**Symptom:** The router does not detect or support traffic through GLC-FE-100EX and GLC-FE-100ZX transceivers.

**Conditions:** This issue occurs under normal conditions.

**Workaround:** There is no workaround.

- CSCuf48156

**Symptom:** Local fault is seen on a 10 Gigabit Ethernet port.

**Conditions:** This issue occurs when the interface is not shut and fibre is not connected.

**Workaround:** Shutdown the interface

- CSCuf51429

**Symptom:** Fast-Reroute FMFP-3-OBJ\_DWNLD\_TO\_CPP\_FAILED message seen on the console.

**Conditions:** This issue occurs on shutting the link between the routers.

**Workaround:** There is no workaround.

- CSCuf51462

**Symptom:** Remote maintenance end points (MEP)s do not learn Port MEP on PC member links.

**Conditions:** This issue occurs when port MEPs in PC member links are configured and remote MEPs do not learn it.

**Workaround:** Configure Ethernet Virtual Connections (EVC) bridge domain and MEP PC member links.

- CSCuf51509

**Symptom:** WRED counters for CS0 do not display in **show policy-map interface** command.

**Conditions:** This issue is observed when **show policy-map interface** command is executed.

**Workaround:** There is no workaround.

- CSCuf61365

**Symptom:** VC Counters do not increment On IM OIR followed by SSO.

**Conditions:** This is seen on HA system when IM OIR is followed by SSO switchover is performed.

**Workaround:** There is no workaround.

- CSCuf64704

**Symptom:** “%MPLS-3-OUT\_OF\_LABEL3\_SPACE: SIP0: nile\_mgr: Out of resource to create” labels errors are seen on the console.

**Conditions:** This issue is seen with scaled configurations, when LDP peer goes down and recovers.

**Workaround:** Reduce the scale.

- CSCuf65040

**Symptom:** The 1G or 10G IM may go in out of service state after a hard OIR of the IM.

**Conditions:** This issue occurs after a hard OIR is performed.

**Workaround:** Perform a another hard OIR or a SSO switchover followed by a soft OIR.

- CSCuf66022

**Symptom:** The 10 Gigabit Ethernet interface status goes down on one side.

**Conditions:** This issue occurs after shutting down the Ten Gigabit Ethernet interface and SSO is performed.

**Workaround:** Perform a **shutdown** followed by a **no shutdown** 10 Gigabit Ethernet interface

- CSCuf74072

**Symptom:** Seeing CRC errors on SFP IM with CU SFP.

**Conditions:** This issue occurs when the CU SFP is configured with 100Mbps speed.

**Workaround:** There is no workaround.

- CSCuf83316

**Symptom:** Traffic loss of more than 1sec was observed during router reload.

**Conditions:** This issue occurs on issuing **reload** command in middle router with R-LFA in RING topology.

**Workaround:** There is no workaround.

- CSCuf83453

**Symptom:** The **show ethernet service instance stats** command displays "0" at Egress stats counters.

**Conditions:** This issue is seen after using **show platform hardware pp active ASIC stats** command.

**Workaround:** Reload the router.

- CSCuf83886

**Symptom:** Label exhaust message is seen even on valid case if policy is configured before xconnect is configured on scaled configuration.

**Conditions:** This issue occurs when a service-policy is configured before configuring xconnect on the router that has consumed close to max labels.

**Workaround:** First configure xconnect and then configure service-policy

- CSCuf93174  
**Symptom:** Packet Over SONET (POS) interfaces counters do not display correctly.  
**Conditions:** This issue occurs after SSO is performed. The issue is observed on the standby router.  
**Workaround:** There is no workaround.
- CSCug05647  
**Symptom:** Interface counters not getting updated with IP traffic.  
**Conditions:** This issue occurs when pinging back to back connected interfaces; the interface counters stay at 0.  
**Workaround:** Reload the device.
- CSCug07795  
**Symptom:** NQATM errors seen while adding new entries to ACL control region.  
**Conditions:** This issue occurs on bootup. The last 2 ACL control entries fail to get programmed.  
**Workaround:** There is no workaround.
- CSCug10134  
**Symptom:** Traffic is not flooded on port-channel by default, as IGMP does not support port-channel traffic.  
**Conditions:** This issue occurs when the incoming port is a Layer3 and outgoing is port is a BDI.  
**Workaround:** There is no workaround.
- CSCug16244  
**Symptom:** Traffic will not flow through few EoMPLS VCs.  
**Conditions:** This issue is seen with scaled EoMPLS configurations.  
**Workaround:** There is no workaround.
- CSCug22122  
**Symptom:** IOMD crash is seen for any IM on the router.  
**Conditions:** The IOMD crash is seen when **show platform software agent iomd 0/1 driver stats** command is executed to verify driver statistics.  
**Workaround:** There is no workaround.
- CSCug23372  
**Symptom:** Manager process crash occurs while configuration replace operation is performed.  
**Conditions:** This issue occurs while moving from REP to G8032.  
**Workaround:** Avoid performing a configuration replace.
- CSCug26991  
**Symptom:** OSPF session goes down after applying the policy on EC main interface, EC EVC and EC Trunk EFP.  
**Conditions:** This issue occurs after applying the policy EC main interface which has OSPF session enabled. The OSPF session goes down after application of Egress policy.  
**Workaround:** Apply policy directly on EC member links.
- CSCug40852  
**Symptom:** Link failure in L3VPN core takes a long time to converge with BGP PIC configuration.



- Conditions:** This issue occurs when BGP PIC core and PIC edge is configured and there are more than one ECMP core paths to reach backup BGP peer.
- Workaround:** Configure only one core path to reach both primary and repair BGP Peers in a BGP PIC Core and Edge configuration. If there are more than one equal cost physical paths to reach BGP peers, then adjust the configuration by increasing the distance for all paths except one.
- CSCug44908
 

**Symptom:** Traffic goes down after applying policy-map without ingress classification.

**Conditions:** This issue occurs when without classifying the traffic in the Ingress, this policy map is applied in the egress port.

**Workaround:** Edit the policy map by changing the bandwidth percentage number.
  - CSCug45557
 

**Symptom:** Ingress marking does not work when Egress marking has a match on qos-group.

**Conditions:** This issue occurs when ingress marking is not working when Egress marking matches on qos-group.

**Workaround:** There is no workaround.
  - CSCug45618
 

**Symptom:** OSPF does not come up with policy map having 2 different EFP classes and configured on 2 different interfaces.

**Conditions:** This issue is observed only when same policy map is applied on 2 interfaces with one EFP in the policy map.

**Workaround:** Remove the policy map from one of the interfaces to bring up the OSPF.
  - CSCug46010
 

**Symptom:** The non IP packets get classified under the second class instead of class-default when two class-maps one having match on L4 ACL and other having match on L3 ACL with permit ip any any is configured.

**Conditions:** This issue occurs when two class-maps one matching on L3 ACL match and another matching on TCP or UDP are configured.

**Workaround:** There is no workaround.
  - CSCug46157
 

**Symptom:** When an existing policer is deleted and added back, the policer fails to take effect.

**Conditions:** This issue occurs when the policing was dynamically deleted and added.

**Workaround:** Remove the policy-map and re-apply on the interface or EFP.
  - CSCug57503
 

**Symptom:** ESP crash observed on the router.

**Conditions:** This issue occurs after executing the **show platform hardware qfp** command on the active feature packet-trace configuration.

**Workaround:** Do not execute unsupported command.
  - CSCug61357
 

**Symptom:** The ISIS router fails to come up after issuing a **shutdown** followed by a **no shutdown** command.

**Conditions:** This issue occurs when RLFA and BFD configurations exist on the router.

**Workaround:** Issue a **shutdown** followed by a **no shutdown** command again.

- CSCug61508
 

**Symptom:** Classification based on ACL in the child does not work

**Conditions:** This issue occurs when the parent classification is EFP.

**Workaround:** There is no workaround.
- CSCuf65301
 

**Symptom:** Micro flaps observed on the router.

**Conditions:** This issue is seen when system is kept idle for hours.

**Workaround:** There is no workaround.
- CSCug67955
 

**Symptom:** The standby FP is stuck in init state.

**Conditions:** This issue occurs after ISSU is performed.

**Workaround:** There is no workaround.
- CSCug71853
 

**Symptom:** BFD flaps are observed on the router.

**Conditions:** This issue is seen when traffic flows at line rate.

**Workaround:** Keep traffic at around 90% line rate.
- CSCug72785
 

**Symptom:** OSPF flap observed on the router.

**Conditions:** This issue occurs after IM OIR followed by SSO.

**Workaround:** There is no workaround.
- CSCug73776
 

**Symptom:** The standby router crashes on bootup when highly scaled configurations and when L2VPN and multicast are configured.

**Conditions:** This issue occurs on reloading the router 3-4 times with highly scaled configurations and L2VPN and multicast are configured.

**Workaround:** There is no workaround.
- CSCuh18073
 

**Symptom:** In a domain with 2 BGP exit points acting in Active or Repair mode, traffic would be exiting the domain through Repair path BGP PE instead of exiting through Active path BGP PE.

**Conditions:** This issue occurs in the following conditions:

  - Environment has 2 BGP exit points
  - A change in one of the core links to the primary BGP exit point results in Repair BGP PE becoming Active BGP PE and vice versa

In this scenario, even after BGP convergence, data packets would traverse through previous primary BGP PE(now repair path PE).

**Workaround:** There is no workaround.

## Open Caveats—Cisco IOS XE Release 3.9(0)S

This section documents the unexpected behavior that might be seen with the Cisco ASR 903 Router in Cisco IOS XE Release 3.9(0)S.

- CSCud06772

**Symptom:** IPv6 neighbor discovery does not function properly after stateful switchover (SSO); the router loses traffic and eventually recovers.

**Conditions:** Occurs with IPv6 traffic after stateful switchover (SSO).

**Workaround:** Configure software BFD sessions.

- CSCud29491

**Symptoms:** Simultaneous policy can be applied

**Conditions:** On physical interface (having efps) and on efps (on that physical interface)

**Workaround:** None. As it is an unsupported config.

- CSCud35732

**Symptoms:** The router does not apply egress CFM MIP filtering.

**Conditions:** Occurs when you overwrite a MIP configuration using the **ethernet cfm mip level** command.

**Workaround:** Instead of overwriting the MIP level configuration, remove and re-apply the configuration.

- CSCue34781

**Symptoms:** The policer in the parent policy-map of an hqos policy attached to an interface stops working after the child policy policer is dynamically modified.

**Conditions:** Occurs when the policy-map attached to the interface is a hierarchical policing policy and both the child and parent policy-map have policing actions in their classes. The policing in the parent class does not work correctly after you dynamically modify the policing action in the child policy.

**Workaround:** Remove and re-attach the policy-map on the interface

- CSCue41416

**Symptoms:** IOMD CPUHOG messages seen on ASR903

**Conditions:** Seen when ISSU upgrade is performed between two XE39 images

**Workaround:** None

- CSCue42139

**Symptoms:** The ptp state is stuck in acquiring state all the time.

**Conditions:** When pulled out the active RSP, the T3 time-stamping is stuck and the ptp state stays in acquiring state all the time.

**Workaround:** Reload the IM or unconfigure or configure the ptp.

- CSCue46274

**Symptoms:**

Traffic flow stops over a particular prefix configured on TDM interface and Crash while executing show platform prefix command for the same prefix

**Conditions:** Configure route via a TDM interface and reload the router once.

**Workaround:** No workaround

**Further Problem Description:** With only Gigabit Ethernet interfaces this problem is not seen. Only when we have TDM interface we see the problem.

- CSCue63229

**Symptoms:** IMA interfaces flap frequently every 15–30 minutes. The issue does not occur on member links.

**Conditions:** Occurs when you increase the number of member links in the IMA group to 16.

**Workaround:** There is no workaround.

- CSCue65149

**Symptoms:** When changing the interval in evc bd offload cases(scale) getting OBJ messages.

**Conditions:** First configure the 3.3ms interval and meps after that removed the meps,domain and configure 10ms interval and meps will hit this issue.

**Workaround:** Configure very less session

- CSCue66019

**Symptoms:** output errors will be seen on mlppp interfaces.

**Conditions:** With 90% and above Line rate traffic with mix MTU patterns (IMIX), output errors will be seen on the mlppp interface.

**Workaround:** No. The issue is seen for IMIX pattern traffic with 90% & above Line rate traffic.

- CSCue67245

**Symptoms:** MFIB counters for some of the (S,G) are not updated on ASR903

**Conditions:** Is seen when we scale the number of Sources. Issue is seen for 2000 sources joining 1 group. No impact to traffic

**Workaround:** There is no workaround.

- CSCue67267

**Symptoms:** High Traffic drop seen on SSO Double dip seen on SSO

**Conditions:** Issue is seen occassionally (one in 5 iterations) on ASR903 with MVPN scale setup.

**Workaround:** There is no workaround.

- CSCue67995

**Symptoms:** Nile manager crashes while flapping mpls enabled interface on the peer end nodes.

**Conditions:** 6K routes L3VPN routes and 600 L2VPN sessions with flaps can crash nile manager of ASR903 at uea\_untyped\_dqueue\_remove\_elem

**Workaround:** No workaround

- CSCue70575

**Symptoms:** Kernel crash is observed

**Conditions:** On reload kernel crash is seen

**Workaround:** There is no workaround.

- CSCue72481

**Symptoms:** IP address and Meps accepting in the same interface

**Conditions:** configured the IP address and Port mep accepting in the same interface.

- Workaround:** There is no workaround.
- CSCue75775
 

**Symptoms:** fman fp crash causes router to crash with scale of 16000 queues on rsp1b

**Conditions:** large scale qos configurations

**Workaround:** There is no workaround.
  - CSCue76109
 

**Symptoms:** DMM reports delay of 0ns.

**Conditions:** Have Y1731 DMM sessions with CFMoXconnect and MPLS TE tunnels in the core.

**Workaround:** No Workaround. Having a single path between the 2 MEPs can avoid this.
  - CSCue77596
 

**Symptoms:** cos vlaue gets wrongly marked for a qinq packet

**Conditions:** a service instance with dot1q encap and no rewrite is configured on the interface... the policy map attached in the ingress has marking in it... the packet should not be ,marked in this case... but on asr903 its getting marked wrongly

**Workaround:** There is no workaround.
  - CSCue86047
 

**Symptoms:** Pkts Not Classified On Removing/Re-applying Marking action dynamically

**Conditions:** A class-default policy with marking action is applied and nn removing/re-applying exp marking action of the class-default, packets are not hitting the class-default and policy-map counters do not increment. This issue is seen on any type of interface.

**Workaround:** Instead of removing & adding marking action alone, detach the policy itself from the interface, modify the marking action and re-attach the policy to the interface.
  - CSCue87175
 

**Symptoms:** BFD sessions may flap on an ASR903 router.

**Conditions:** With around 2000 global IPv4 prefixes and with traffic running, when a core-facing interface is shutdown on a router in the ring, BFD flaps may be seen on another router in the ring.

**Workaround:** There is no work-around known as yet.
  - CSCue87629
 

**Symptoms:** INFRA-6-PROCPATH\_CLIENT\_HOG: IOS shim client 'iosd-nile' messages may appear on the console. **Conditions:** When a shut/no shut of G8032 ring interface of Peer or local device is done.

**Workaround:** No workaround.
  - CSCue90720
 

**Symptoms:** IPCP state mismatch and member link state mismatch in ppp multilink on back to back to connection. Traffic will get dropped

**Conditions:** Bundle having maximum links in it and perform a SSO. find steps to repro

**Workaround:** none
  - CSCue96512
 

**Symptoms:** RP crashes if punt/inject keepalives are missed.

- Conditions:** Punt/inject keepalives are missed and we are not holding a TTY while writing to punt/inject log file.
- Workaround:** none
- CSCue96886
 

**Symptoms:** Complete MAC Address space is not available on the RSP

**Conditions:** Removing the Service instance with the MAC Addresses learnt on the BD.

**Workaround:** Reload the Router is only workaround.
  - CSCue97114
 

**Symptoms:** Shut down the trunk efp in core side, meps are learnt for UP MEP

**Conditions:** Configured UP Mep evc bd (core side trunk efp) when i shut the trunk efp in core remote meps are learnt for UP MEP.

**Workaround:** Configure evc bd in core side
  - CSCuf05090
 

**Symptoms:** Standby will be resetting continuously with running config sync failure.

**Conditions:**

Downgrade all IMs and take the IMS out of slot.After booting up with XE39 image , insert IMs one by one. While upgrade was happening , this issue happened.Im got crashed and stanby was resetting continuously with SYNc failed.

**Workaround:** Reload the box completely.
  - CSCuf20275
 

**Symptoms:** On interoperating with an ASR901 router, BFD sessions may flap as the ASR903 router may some times not send BFD control messages.

**Conditions:** With around 200 global IPv4 prefixes, BFD session running in software with echo OFF and seen even without any data traffic.

**Workaround:** There is no work-around known as yet.
  - CSCuf44077
 

**Symptoms:** show interface output is showing wrong speed values after sso

**Conditions:** when we use the 100M SFP's

**Workaround:** There is no functionality impact because of this. HW module reset will resolve this.
  - CSCuf56723
 

**Symptoms:** Interface LED glows green with shut.

**Conditions:** After SSO

**Workaround:** No workaround.
  - CSCuf60346
 

**Symptoms:** IOMd Crash On Performing SSO Switchover With Interfaces Shut

**Conditions:** Have ATM/IMA interfaces shut. Perform switchover and notice IOMd crash on new Active

**Workaround:** No workaround
  - CSCuf64404

**Symptoms:** IOMD crash will be seen when flap is performed on remote router. The flap can be by shut/no shut or IM oir.

**Conditions:** IOMD crash seen on multiple mlp bundle flap becoz of memory leaks in wintegra.

**Workaround:** None.

- CSCuf64625

**Symptoms:** CRC Errors reported on RevD IM

**Conditions:** IM OIR or SSO

**Workaround:** No workaround.

- CSCuf64695

**Symptoms:** Error message seen on PE ASR903 :- \*Mar 22 11:51:35.929 IST:  
%FMFP-3-OBJ\_DWNLD\_TO\_CPP\_FAILED: SIP1: fman\_fp\_image: atom\_xconnect xid  
0x1004013, ifh 16793619, dirty 0x1, state 0x2 download to CPP failed

**Conditions:** CEM configs on OC3IM and/or T1E1IM. Reported with CESOP circuits and scale of about 88. Seen with less scale also. Seems to be a non-function impacting message.

**Workaround:** None.

- CSCuf64811

**Symptoms:** Serial Links on CEs are in up/down state, when configured with CEM CeSop circuits on PEs.

**Conditions:** Configure CEM cesop circuits over MPLS core. Note that the serial interfaces on CE routers are UP/UP. Perform a SSO on PE2 router.

**Workaround:** Perform another SSO on PE2 router and issue is solved.

- CSCuf65012

**Symptoms:** Seeing syslog for the port 0/5/0 saying it is down which is used for HFPGA

**Conditions:** IM oir of Slot 4 or Slot 5

**Workaround:** No Functionality impact and no workaround.

- CSCuf74072

**Symptoms:** Seeing CRC errors on SFP IM with CU SFP.

**Conditions:** When the CU SFP is configured with 100Mbps speed.

**Workaround:** No workaround.

## Resolved Caveats—Cisco IOS XE Release 3.9(0)S

This section documents the issues that have been resolved in Cisco IOS XE Release 3.9(0)S.

- CSCts14725

**Symptoms:** mep does not come up sometimes, error messages always.

**Conditions:** change cc interval on the fly.

**Workaround:** None.

- CSCts95896

**Symptoms:** The router stops passing traffic on EVC interfaces.

**Conditions:** Occurs when you issue the default interface command and immediately restore the configuration. The issue occurs with configurations containing either a large number of EFPs or features that impact EFP programming at a lesser scale, such as QoS.

**Workaround:** Wait for the router to clear the old EFP configuration before adding a new configuration.

- CSCtu39377

**Symptoms:** "sh running" , "sh romvar" in exec mode and "set" command in rommon mode, displays multiple entries for the license being used.

**Conditions:** ASr903 with appropriate license and boot level set.

**Workaround:** No workaround.

- CSCtx44513

**Symptoms:** The router stops passing traffic on an interface

**Conditions:** Occurs when you remove all classes from a QoS policy-map attached to an interface.

**Workaround:** Remove and re-attach the policy-map.

- CSCtx44688

**Symptoms:** Cannot configure policing and marking together in the same class of the egress policy-map.

**Conditions:** Set and police statements together in the same class of a policy is rejected at the CLI.

**Workaround:** In order to achieve marking and policing at the ingress we can use a conditional policer but this is not supported at the egress.

- CSCtx70302

**Symptoms:** Traceback and Log message seen on performing a multilink bundle shut on ASR903 as described in the summary.

**Conditions:** Traffic should be flowing over the multilink bundle. Multiple ways to trigger the same issue, but traffic and mlppp bundle remain common to each scenario.

**Workaround:** None. Harmless traceback.

- CSCty73682

**Symptoms:** A small percentage of IPv6 packets that should be blocked by an interface ACL is instead pass through

**Conditions:** In certain conditions, when an IPv6 ACL is applied to an interface, a small percentage of IPv6 packets that would otherwise be dropped, will instead bypass an ACL and get through.

**Workaround:** None

**PSIRT Evaluation:** The Cisco PSIRT has assigned this bug the following CVSS version 2 score. The Base and Temporal CVSS scores as of the time of evaluation are 5/4.8:

<https://intellishield.cisco.com/security/alertmanager/cvssCalculator.do?dispatch=1&version=2&vector=AV:N/AC:L/Au:N/C:P/I:N/A:N/E:F/RL:U/RC:C> CVE ID CVE-2012-3946 has been assigned to document this issue. Additional information on Cisco's security vulnerability policy can be found at the following URL:

[http://www.cisco.com/en/US/products/products\\_security\\_vulnerability\\_policy.html](http://www.cisco.com/en/US/products/products_security_vulnerability_policy.html)

- CSCtz20839

**Symptoms:** IMA functionality does not work properly.

**Conditions:** Occurs after an RSP switchover when the router is running an IMA configuration.



- Workaround:** Reload the interface module with the IMA configuration.
- CSCtz43467
 

**Symptoms:** Not All CLI's listed under the REP configuration modes are allowed. For e.g The following configurations are allowed but will not work. 1) REP does not work on BDI. 2) More than 1 source ports in a span session.

**Conditions:** Seen all the time.

**Workaround:** No workaround
  - CSCtz65778
 

**Symptom:** The control plane goes down with VPNv6 traffic.

**Conditions:** Occurs with 64-byte VPNv6 traffic. The issue only occurs for small, tunnelled packets.

**Workaround:** There is no workaround.
  - CSCtz87775
 

**Symptoms:** An interface on the OC-3 interface module does not become active.

**Conditions:** Occurs when you change the interface mapping between au-4 and au-3 when changing an interface between T1 and E1 operation.

**Workaround:** Perform a soft OIR on the interface module.
  - CSCua16492
 

**Symptoms:** Some IPv6 multi-hop BFD over BGP sessions flap.

**Conditions:** Occurs on port-channel interfaces running IPv6 multi-hop BFD over BGP sessions after you perform an SSO.

**Workaround:** There is no workaround.
  - CSCua35446
 

**Symptoms:** gig 0/5/0 interface displayed in PRIME software.

**Conditions:** System being up.

**Workaround:** No workaround.
  - CSCua37816
 

**Symptoms:** "DHCP\_SNOOP: Failed sending packet out of BD" errors on standby.

**Conditions:** DHCP snooping enabled with asr903 as relay with HA system.

**Workaround:** No workaround. Wont be seen on standalone system.
  - CSCua46443
 

**Symptoms:** Y1731 frames were received and forwarded by STP blocked port and hence database is corrupted.

**Conditions:** When 2 or more interfaces are there b/n the devices and only one is forwarding and remaining blocked by STP.

**Workaround:** None.
  - CSCua49623
 

**Symptoms:** CEM interface becomes inaccessible

**Conditions:** When same channel-group number and cem-group number is used for overlapping timeslots this issue is hit

**Workaround:** Use different timeslots, or make sure channel-group and cem-group numbers are different under the same controller

- CSCua57325

**Symptom:** The router displays an OIR SPA error.

**Conditions:** Occurs under the following conditions:

- The router is running offloaded CFM sessions over an xconnect (pseudowire) interface.
- The router is using a redundant hardware (dual RSP) configuration.
- The remote router is using a non-redundant (single RSP) hardware configuration.
- You reload the router.
- **Workaround:** There is no workaround.

- CSCua61934

**Symptoms:** When policy-map with priority in class-default is attached to interface its not getting rejected.

**Conditions:** Configure policy-map having priority in class-default. Attach the policy to interface it's not getting rejected.

- **Workaround:** None known at this time

- CSCua77688

**Symptom:** The router experiences remote CFM MEP flapping.

**Conditions:** Occurs when the router is connected via a CFM xconnect and the link is running a high traffic rate.

**Workaround:** Reduce the rate of traffic.

- CSCua90879

**Symptom:** QoS policies with a police statement on the class-default class do not take effect.

**Conditions:** Occurs when you apply a police statement to the class-default class within a QoS policy on an ingress EVC interface.

**Workaround:** Apply the police statement to a static class, such as class cos0.

- CSCub18160

**Symptom:** The router drops traffic on a link twice and displays a remote fault error message.

**Conditions:** Occurs when you issue an interface module reset (OIR) while the 10.000M XFP (DWDM Edge performance) or XFP10GER-192IR-L XFPs are plugged into the ten Gigabit Ethernet interface module and active.

Reloading the router also takes significantly longer when using these XFPs.

**Workaround:** There is no workaround.

- CSCub26877

**Symptoms:** When Bridge-domain of the efp is changed and the new bridge-domain is not accepted, the old bridge-domain gets rejected.

**Conditions:** EVC -BD configuration change.

**Workaround:** None

- CSCub33576

**Symptoms:** All IMA interfaces does not come up until OIR of IM.

- Conditions:** When IMA are configured.

**Workaround:** OIR.
- CSCub33664

**Symptoms:** High Delay values seen when using DMM Session on ASR903 post SSO.

**Conditions:** Delay values will be higher only after SSO on ASR903.

**Workaround:** Remove and reconfigure DMM sessions again post SSO on AR903.
- CSCub38619

**Symptoms:** System crashes when COS value for vlan under an EFP is modified.

**Conditions:** This happens only when a prior operator attempt to modify the COS value failed. This failure can be due to incompatible efp match conditions on the egress efp.

**Workaround:** None
- CSCub41772

**Symptom:** Router console is flooded with CPUHOG and EVENTLIB messages.

**Conditions:** The issue occurs rarely when you issue multiple interface module reset (OIRs), RSP switchovers (SSO), or reloads while using a configuration with a high number of T1 serial links on the OC-3 interface module.

**Workaround:** There is no workaround; however, the messages do not affect router functionality.
- CSCub48129

**Symptoms:** CFM CCM's were being sent out on egress interface with cfm disabled.

**Conditions:** Configure UP mep on EVC BD. Disable cfm on the egress interface.

**Workaround:** There is no workaround.
- CSCub49985

**Symptoms:** MPLS pseudowire ping from the peer to the Cisco ASR 903 fails if the peer is using TTL-based ping.

**Conditions:** This symptom occurs when the peer is using TTL-based ping.

**Workaround:** There is no workaround.
- CSCub50110

**Symptoms:** Tx timer table not programmed after shut/no shut for hardware offload BFD. It is not consistently seen.

**Conditions:** The issue is seen while we do shut/no shut on BDI/Physical interface which has BFD configured.

**Workaround:** None.
- CSCub50487

**Symptoms:** The router accepts a rewrite push statement on an EFP configured with QinQ encapsulation.

**Conditions:** Occurs when you configure an xconnect EFP with QinQ encapsulation and a rewrite push statement.

**Workaround:** There is no workaround.
- CSCub52571

**Symptoms:** Traceback seen on console. This traceback doesn't impact any functionality

**Conditions:** Traceback seen when BFD is enabled and flapped the interface where IPv6 BGP/OSPFv3/BFD is already UP.

**Workaround:** No Workaround. This ddt fixes the traceback occurrence.

- CSCub52657

**Symptoms:** CPP object download failure messages are seen while creating BDI interface.

**Conditions:** The problem is seen when the user tries to configure the BDI interfaces exceeding the platform limit. On asr903 RSP1A and RSP1B the maximum BDI interface limit is 256 and 1024 respectively. When user tries to exceed this limit the error message is seen as download failure on the console, this is not a bug.

**Workaround:** Not to exceed the BDI interface limit set for the platform

- CSCub55760

**Symptom:** The router displays a Delay Measurement Message (DMM) delay value of 0.

**Conditions:** Occurs under the following conditions:

- You configure an EVC down MEP on a port-channel interface.
- You dynamically add a member link to a port-channel interface.

**Workaround:** Configure PTP synchronization before scheduling DMM.

- CSCub59776

**Symptoms:** Router seems hang post removal of startup-config and reload

**Conditions:** Router has no startup config present.

**Workaround:** The following dialogue was missing to appear on the console.

--- System Configuration Dialog ---

Would you like to enter the initial configuration dialog? [yes/no]: % Please answer 'yes' or 'no'.

Just type no, and start the configuration dialogue later.

- CSCub60668

**Symptom:** The router is unable to establish an OSPF session.

**Conditions:** Occurs when you enable an OSPF session over an MPLS TP tunnel.

**Workaround:** There is no workaround.

- CSCub63072

**Symptom:** MPLS convergence can be slower than expected.

**Conditions:** Occurs when the router switches to a backup MPLS path in the event of a network failure.

**Workaround:** You can configure the following redundancy features to protect against network failures:

- IPv4 Loop Free Alternate Fast Reroute (LFA FRR)
- Border Gateway Protocol (BGP) Prefix-Independent Convergence (PIC)
- MPLS Traffic Engineering (TE)--Fast Reroute (FRR) Link and Node Protection

- CSCub63954

**Symptoms:** Speed configurations are rejected. Error message appears on active

**Conditions:** HA - Box. Speed configurations are rejected

- Workaround:** No Workaround.
- CSCub71578  
**Symptoms:** The router displays traceback and failure messages on the standby RSP.  
**Conditions:** Occurs after you issue an OIR on the T1/E1 interface module from the active RSP. The issue occurs in a redundant system.  
**Workaround:** There is no workaround.
  - CSCub74338  
**Symptoms:** The router crashes.  
**Conditions:** Occurs when you attach an ingress QoS policy-map to an EVC with a rewrite push configuration.  
**Workaround:** There is no workaround.
  - CSCub76908  
**Symptoms:** If Y1731(DMM or SLM) sessions are configured for UP MEP, where the core facing and access interfaces have different encaps, then Y1731 sessions will not come up  
**Conditions:** The condition will be same if the encaps are same and if rewrite ingress pop is configured  
**Workaround:** None
  - CSCub80685  
**Symptoms:** On BDI Shut, if routing traffic continues, it will be punted to the CPU which will flood out the CPU resulting in control plane loss  
**Conditions:** Ping failure and BFD/OSPF flaps on BDI shut while ipv4/v6 traffic is running while BDI is shut.  
Similar conditions occur on no EFP/BDI configured or no ip address configured.  
**Workaround:** Stop routing traffic into shut BDI port.
  - CSCub84828  
**Symptoms:** Iosd crash on standby when booting up  
**Conditions:** Boot up of standby  
**Workaround:** RSP has to be booted again.
  - CSCub85398  
**Symptoms:** On customer's setup the following error message is seen. Dec 2 15:41:40.970 JST: %NILE\_ASIC-2-TCAM\_PARITY\_ARRAY\_ERR: TCAM4 Parity Array Error at Asic: 1 TCAM Index: 0x306D Application: UCASTV4 Region UCAST\_32.  
**Conditions:** No specific condition. There are no any operation or network events at that time.  
**Workaround:** On reloading the box the message is disappeared.
  - CSCub88805  
**Symptoms:** When alarms are seen it displays as ASR1000 instead of ASR903, no functionality impact, only display issue.  
**Conditions:** On seeing alarms.  
**Workaround:** None.
  - CSCub88822

**Symptoms:** NULL\_DATA\_STRUCTURE traceback is seen on ASR903 console.

**Conditions:** Issue is seen when OC3IM is present on the box and IM OIR is done on this OC3IM. Usually seen when no configs are present on IM. Quite inconsistent, not always seen.

**Workaround:** None. The traceback does not affect any functionality.

- CSCuc00853

**Symptoms:** ARP requests are not flooded on bridge-domains

**Conditions:** Dynamic ARP inspection configured on bridge-domains

**Workaround:** None

- CSCuc07697

**Symptoms:** BIT-4-OUTOFRANGE: tracebacks flooded on the console.

**Conditions:** Configure CFMoTEFP and vlan load-balancing for the BDs part of REP segment. Tracebacks are seen only when there is an untagged efp on the interface and there is an AIS condition.

**Workaround:** Do not have BD with untagged EFP on the box.

- CSCuc07747

**Symptoms:** On entering "show debugging" command on ios prompt, the following extraneous messages are seen,

% Invalid input detected at '^' marker.

**Conditions:** Seen in all conditions.

**Workaround:** No workaround. Though this doesn't have any functionality impact. Only issue is the extra prints.

- CSCuc07759

**Symptoms:** ARP responses are dropped

**Conditions:** Dynamic arp inspection is configured on the router

**Workaround:** None

- CSCuc08098

**Symptoms:** Trap config for AAA-SERVER mib is missing.

**Conditions:** When a asr903 device is loaded with metroaggrservices license.

**Workaround:** None.

- CSCuc12681

**Symptoms:** Intermittent packet drops when doing MPLS ping

**Conditions:** MPLS ping Rate has to exceed 1Mbps. sweep ping with high range High number of frames with huge pkt size

This is not applicable to IP icmp ping. Only applicable for MPLS ping.

**Workaround:** Try a lower number of frames.

- CSCuc21610

**Symptoms:** The console displays a message indicating that offloading is not supported for BFD echo mode.

**Conditions:** Occurs when you configure a BFD session in echo mode.

**Workaround:** There is no workaround; however, the issue has no functionality impact.

- CSCuc25058
 

**Symptoms:** Forced QL value on BITS port gets overwritten when a new primary clock source with different QL value is selected.

**Conditions:**

Network clocking should be enabled in QL mode and with BITS port configured to output system clock with forced QL value.

**Workaround:** Reconfigured the forced Tx QL value on the BITS port after the system switches to clock source with different QL value than the current selected.

**Further Problem Description:** When the system selects a new primary clock source, it propagates the QL value of that primary clock source on all the timing ports, so that all timing ports reflect the system QL value. When this update is send the forced TX QL value configured on each port gets overwritten by the system QL Value.
- CSCuc34088
 

**Symptom:** The router passes lower traffic levels when you add links to an IMA bundle and perform IM OIR/router reload.

**Conditions:** Occurs when you send traffic above the E1 line rate on one link within an IMA bundle and reset (OIR) the interface module.

**Workaround:** Remove and re-apply the IMA interface configuration.
- CSCuc35618
 

**Symptoms:** REP session flaps post SSO and traffic is dropped until the session re-converges after the SSO.

**Conditions:** Upon SSO.

**Workaround:** None
- CSCuc36241
 

**Symptoms:** The router is unable to select a given PTP clock as a network clock source.

**Conditions:** Occurs when you configure PTP as an input network clock source while the slave clock is still in a holdover state. In the holdover state, the slave clock has not yet attempted to establish a frequency lock with a master clock.

**Workaround:** Wait for the PTP slave clock to lock to the master clock before configuring PTP as a network clock input source.
- CSCuc36381
 

**Symptoms:** CLI show satellite env and show satellite alarm not displaying any output.

**Conditions:** Show satellite env and show satellite alarm CLI is not supported in satellite mode in 4.3.0

**Workaround:** Can check the status in ASR9k.
- CSCuc41871
 

**Symptoms:** ATM interfaces stay down during normal operations

**Conditions:** 1. Post router reload 2. When peer interface cable is pulled out & put back

**Workaround:** Interface reset (shut/no shut)
- CSCuc42002
 

**Symptoms:** The router crashes when configuring the ATM interface, displaying a segmentation fault error.

**Conditions:** This symptom is observed when you move an OC-3 interface module with an ATM configuration to a different bay and configure an ATM interface on the new bay.

**Workaround:** There is no workaround.

- CSCuc42117

**Symptoms:** The router does not include 0xff03 flag leading bits within ppp fragment messages.

**Conditions:** Occurs when the router has not negotiated ACFC.

**Workaround:** There is no workaround. Most remote devices should ignore this behavior by design, but some devices may display unexpected behavior, such as for IPCP PROTREJ messages.

- CSCuc43719

**Symptoms:** ASR903 with dual RSP may crash.

**Conditions:** No specific trigger, but any configuration related to NBAR can make the box hit this issue.

**Workaround:** Do not have any NBAR configurations on the box as these are not supported on ASR903.

- CSCuc57130

**Symptom:** The router does not apply OC-3 interface module (IM) configurations.

**Conditions:** Occurs after an RSP switchover.

**Workaround:** There is no workaround.

- CSCuc59386

**Symptoms:** Continuous iomd crash on oc3im. Interfaces on oc3im not configurable, error message seen :- stand-by doesn't support this command

**Conditions:** Seen on a HA ASR903 setup with oc3im. Seen when a iomd crash happens on active rsp and then standby iomd session handle is not cleared.

**Workaround:** Reload the stand-by rsp.

- CSCuc60148

**Symptoms:** System is not shutting down upon temperature sensor reaching 'SHUTDOWN' threshold region.

**Conditions:** Temperature sensors reached shutdown threshold region

**Workaround:** IOS config command has to be explicitly configured to enable this system shutdown behavior. 'facility-alarm critical exceed-action shutdown'

- CSCuc62784

**Symptoms:** Traces @ nils\_if\_count\_initialize some times

**Conditions:** On performing Reload, Standby Reload, SSO

**Workaround:** No workaround. And these traces are displayed on the console and does not have any functionality impact to the system.

- CSCuc64509

**Symptom:** ASR903 as PTP master transmits clock class corresponding to holdover state on fresh bootup.

**Conditions:** ASR903 is not connected to any external frequency and Phase source and is using freerun internal clock to provide synchronization.

**Workaround:** ASR903 PTP master should be locked to external frequency and phase source.



**Further Problem Description:** ASR903 when locked to internal free-running clock, then ASR903 PTP master function transmits clockclass value 14 which corresponds to holdover state instead of 58 which corresponds to free-running clock.

- CSCuc64899

**Symptom:** The router does not learn remote Connectivity Fault Management (CFM) Maintenance Endpoint (MEPs).

**Conditions:** Occurs on interfaces with an xconnect statement after a reload on a peer device.

**Workaround:** Remove and re-apply the CFM configuration.

- CSCuc66393

**Symptom:** The router loses OC-3 interface configurations after an ISSU upgrade.

**Conditions:** Occurs on OC-3 serial and POS interfaces after an ISSU software upgrade.

**Workaround:** There is no workaround.

- CSCuc66895

**Symptom:** Layer 2 traffic loop seen in REP topology for a transient time, when the Cisco ASR 903 which is a part of the REP ring is reloaded.

**Conditions:** This symptom is observed when the Cisco ASR 903 is part of an REP ring, and the box is reloaded with saved REP configurations.

**Workaround:** Traffic loop is transient, once REP convergence looping is stopped.

- CSCuc68246

**Symptom:** The standby IOMD crashes on booting up the standby RSP.

**Conditions:** This symptom occurs when booting up the standby RSP with a configuration that is already present.

**Workaround:** Boot up the standby without any configurations and start configuration once the standby has reached STANDBY\_HOT state.

- CSCuc68462

**Symptom:** The router drops PTP traffic.

**Conditions:** The issue occurs occasionally when you configure PTP slave clock to receive VLAN-tagged traffic.

**Workaround:** There is no workaround.

- CSCuc70509

**Symptom:** Packet rate counters i.e. packets per second is not cleared to 0 when interface goes down.

**Conditions:** Applies to all TDM interfaces like serial , mlppp , POS , etc. Issue seen on controller shut etc, not seen on interface shut.

**Workaround:** None. Should be fixed now.

- CSCuc71410

**Symptoms:** Config sync failure but it doesn't have much of an impact on the service

**Conditions:** We have a mac limit configured with action as limit and when the configured limit is exceeded, the standby comes up after the limit is hit

**Workaround:** none

- CSCuc71723
 

**Symptom:** The router erroneously accepts a service-policy configuration on a CEM interface and displays it within the running configuration.

**Conditions:** Occurs when you configure a service-policy on a CEM interface.

**Workaround:** There is no workaround.
- CSCuc74205
 

**Symptoms:** Tracebacks displayed continuously on performing IM OIR

**Conditions:** Have CEM, ATM, IMA configured on a TDM IM. Now, on performing IM OIR, notice this traceback continuously on active RSP. This is noticed on performing OIR operation every 2 out of 5 times.

**Workaround:** No workaround
- CSCuc81334
 

**Symptom:** The router selects a clock source attached to standby RSP.

**Conditions:** Occurs after a stateful switchover (SSO).

**Workaround:** Remove and restore the clock source configuration.
- CSCuc81416
 

**Symptoms:** Traces may be seen on active with SNMP configuration

**Conditions:** Seen when Hard pull of Standby is done

**Workaround:** Do soft reset/ sso switchover
- CSCuc83088
 

**Symptom:** The router drops traffic during stateful switchover (SSO).

**Conditions:** Occurs when the router is running HSRP or VRRP; the issue only occurs when the destination MAC address is a virtual MAC (vMAC) address.

**Workaround:** Change the traffic priority and detour traffic prior to the SSO.
- CSCuc87791
 

**Symptom:** The router selects a network clock source before the wait-to-restore timer has expired.

**Conditions:** Occurs under the following conditions:

  - A clock source fails, triggering the wait-to-restore timer (which specifies how long the before including a restored clock source in the clock selection process.
  - The clock source becomes active and fails a second time before the wait-to-restore time has passed.

**Workaround:** There is no workaround; in some cases you can clear the issue by removing and restoring the clock source configuration.
- CSCuc91582
 

**Symptom:** Adding EFP to Bridge-Domain fails and errors are seen when reloading with Cisco IOS XE Release 3.7.1a.

**Conditions:** This symptom is observed when reloading the Cisco ASR 903 with Cisco IOS XE Release 3.7.1a, when EFP and PW are in the same Bridge-Domain.

**Workaround:** Post reload, remove the EFP configurations, and configure PW first and then EFP.

- CSCuc92953

**Symptom:** The RSP crashes.

**Conditions:** Occurs under the following conditions:

- You configure Protocol-Independent Multicast-Sparse Mode (PIM-SM) with a static rendezvous point (RP).
- You create an EVC port channel on the access side with one member link
- You create bridge domain interfaces (BDIs) with 1:1 mapping between EVCs and bridge-domains.
- You use the BDIs to send IGMP v2 static join messages to a single multicast group
- On the remote device, you create 150 EFPs and map them to the BDIs.
- You initiate multicast traffic.
- You set the EFPs to the default configuration and add them to the existing port-channel

The router crashes.

**Workaround:** There is no workaround.

- CSCuc93985

**Symptom:** The router initiates an Automatic Protection Switching (APS) switchover during a high availability (HA) stateful switchover (SSO).

**Conditions:** Occurs during an HA SSO with single router APS (SR-APS).

**Workaround:** There is no workaround.

- CSCuc95716

**Symptom:** FPGA software for the OC-3 interface module is not bundled with the XE 3.8 image.

**Conditions:** Occurs when upgrading FPGA on the OC-3 interface module.

**Workaround:** Manually upgrade the OC-3 FPGA.

- CSCud01855

**Symptoms:** APS switchover may occasionally lead to inconsistent/incorrect APS states with CEM config.

**Conditions:** Seen when APS is configured with CEM/ATM on IM-4OS on ASR903. Caused due to notifications not being correctly sent to CEM subsystem.

**Workaround:** No workaround.

- CSCud01908

**Symptom:** Debug commands show pending objects on the Forwarding Manager (FMAN) on the forwarding processor (FP), indicating a failure to download configurations from the Route Switch Processor (RSP) to the data plane (DP).

**Conditions:** Occurs when you apply a QoS shaping configuration at a high scale.

**Workaround:** Delete the QoS policies and remove the QoS configuration from the interface.

- CSCud04407

**Symptom:** The router displays the following console error message: `Error - packet with unsupported linktype 3`

**Conditions:** Occurs when the router is passing traffic over the OC-3 interface module.

**Workaround:** There is no workaround.

- CSCud07085  
**Symptom:** The serial interface on the OC-3 interface module remains in a down state.  
**Conditions:** Occurs when you migrate from T1 mode to E1 mode using the OC-3 interface module.  
**Workaround:** Issue an interface module reset (OIR) on the OC-3 interface module.
- CSCud07236  
**Symptoms:** Upon reload few harmless messages will seen.  
**Conditions:** Upon reload few harmless messages will seen.  
**Workaround:** No impact on device.
- CSCud07642  
**Symptom:** The ASR 903 is unable to pass traffic to the ASR 9000.  
**Conditions:** Occurs with a clear-channel ATM over MPLS configuration using AAL0 encapsulation.  
**Workaround:** Enable MPLS control-word on the ASR 9000.
- CSCud09813  
**Symptoms:** Timestamping not happening in CFM over xconnect down mep/PC  
**Conditions:** When we configured cfm over xconnect down mep/PC from Asr903-Me3600 timestamping not happening in ASR903.  
**Workaround:** No workaround.
- CSCud22601  
**Symptom:** MPLS-TP tunnels remain down after the standby RSP boots.  
**Conditions:** Occurs when you boot the standby RSP after applying an MPLS-TP configuration and performing an SSO. The issue occurs rarely.  
**Workaround:** Issue a shutdown/no shutdown on the MPLS-TP tunnel. A nonintrusive workaround is to cause a flap on the protect label switched path (LSP) by reconfiguring the path or physically shutting down and restoring the interface.
- CSCud23647  
**Symptom:** BDI adjacency fails on the standby RSP.  
**Conditions:** The issue can occur during an interface module (IM) reset or router reload.  
**Workaround:** There is no workaround.
- CSCud25764  
**Symptoms:** 903 part id to be populated in the discovery messages.  
**Conditions:** Currently it is being displayed as "cisco, asr903" against Vendor in host by executing this CLI "show nv satellite protocol discovery interface Bundle-Ether1000". This must be displayed as cisco, ASR-903. This is mainly used by ASR9K ACT tool for rendering 903 graphic on Act tool.  
**Workaround:** No workaround.
- CSCud26812  
**Symptom:** The router CLI does not display some SFP PIDs  
**Conditions:** Occurs when you install one of the following SFPs in the router:
  - ONS-SI-155-L2
  - ONS-SI-155-L1

- ONS-SI-155-I1

**Workaround:** There is no workaround.

- CSCud27333

**Symptom:** The router crashes continuously.

**Conditions:** Occurs when you issue an interface module reset (OIR) while the standby RSP is booting.

**Workaround:** Do not issue an interface module reset (OIR) while the standby RSP is booting.

- CSCud28982

**Symptom:** The router does not process egress CoS marking on an Ethernet service instance.

**Conditions:** Occurs when you configure QoS on an Ethernet service instance that is a member of a bridge-domain and uses dot1q encapsulation.

**Workaround:** There is no workaround.

- CSCud29479

**Symptom:** The router stops applying QoS configurations.

**Conditions:** Occurs under the following conditions:

- An Ethernet interface is configured with a single service instance
- A QoS policy is attached to the service instance
- The QoS policy contains a single class containing a **match efp** statement.
- You reset the interface to the default configuration.

**Workaround:** There is no workaround.

- CSCud30806

**Symptoms:** Policy with class map match-all with prec 1 and prec 2 is accepted for WRED.

**Conditions:** match-all should not accept 2 prec values class-map match-all prec1\_2 match precedence 1 match precedence 2

**Workaround:** N/A

- CSCud33298

**Symptom:** The router crashes.

**Conditions:** Occurs when the peer device shuts down.

**Workaround:** There is no workaround.

- CSCud33906

**Symptom:** Equal Cost Multipath (ECMP) loopback does not function properly.

**Conditions:** Occurs when a port-channel link dynamically assigned as an ECMP path.

**Workaround:** There is no workaround.

- CSCud34346

**Symptom:** Nile manager crashes with the ECMP path when IPv4 scale is exceeded.

**Conditions:** This symptom occurs when scale is exceeded with the ECMP path.

**Workaround:** Do not allow the user to exceed the supported IPv4 route scale with ECMP.

- CSCud34600

**Symptom:** Receive a event hog msg when advertise 21k to 25 k routes into MBGP and export from a PE to other PE.

**Conditions:** When the redistributing routes from range of 21k to 25k customer routes from ospf into MBGP and export from a PE to other PE.

**Workaround:** No workaround as of now.

- CSCud35689

**Symptoms:** Queue-limit configuration at parent level of a policy or in a Vlan class/ port level is accepted. It should be rejected

**Conditions:** When configuring queue limit on policy at parent level or in vlan class/ port level.

**Workaround:** None

- CSCud36014

**Symptoms:** Multiple entries are seen in configs

**Conditions:** while configuring licence in bootlevel

**Workaround:** -none-

- CSCud37927

**Symptoms:** The router does not learn remote Connectivity Fault Management (CFM) Maintenance Endpoint (MEPs).

**Conditions:** If we have REP or STP on core with one port as ALT or BLK state.

**Workaround:** None.

- CSCud38038

**Symptom:** The router records incorrect delay measurements after a reload.

**Conditions:** Occurs under the following conditions:

- You configure Delay Measurement Message (DMM) on a port-channel interface.
- The port-channel member links are on different interface modules (IMs).
- You reload the router.

**Workaround:** You can use the following workarounds:

- Remove the **ethernet cfm global** command and re-apply it after the port-channel member links recover.
- Configure PTP clock synchronization.

- CSCud38115

**Symptom:** OSPF connections flap and drop traffic for approximately 20 seconds

**Conditions:** Occurs during stateful switchover (SSO).

**Workaround:** There is no workaround.

- CSCud38433

**Symptom:** The router is unable to establish MPLS neighborhood or ping the destination loopback interface.

**Conditions:** Occurs when you configure two Equal Cost Multipath (ECMP) paths on a bridge domain interface (BDI) using static routes.

**Workaround:** The following workarounds exist:

- Use Interior Gateway Protocol (IGP) instead of static IP routes.

- Shut down one of the ECMP paths.
- CSCud38589
 

**Symptoms:** DMM Session Stops Working

**Conditions:** DMM configured on BD UP MEP, with redundant links on the Core side, which are in STP Fwding / Blocked state, Issue seen when the STP Fwd Port is shut.

**Workaround:** restart the IP SLA session or unshut the port and bring it FWD state
- CSCud38880
 

**Symptoms:** IPv6 traffic drop post SSO with MetroIP services license.

**Conditions:** 1. Start bidirectional IPv6 traffic on ASR903 with dual RSP and MetroIP services license, 3.7.1a. Put at least 3-4 streams each running at 10Mbps 2. Force switchover " redundancy force switchover" 3. IPv6 traffic will drop for 4-5 seconds. If you see drops in few milliseconds, then try adding more traffic. Issue is consistently recreatable.

**Workaround:** Upgrade the license to MetroAgg, add v6 static neighbor on the port facing test set and force switchover, now there will be no ipv6 traffic loss.
- CSCud41217
 

**Symptoms:** Multicast traffic dropped on 903.

**Conditions:** The following l2 configuration are there. There are 3 satellites connected in the setup, only 903 satellite interfaces are showed here. All interfaces are in the same bridge domain. When sent the mcast traffic from 2/4, it is expected that all the satellite interface would received the traffic. But the two 903 satellite interfaces didn't receive the traffic, the other interfaces from other satellite were fine.

```
2/4 -----gi0/3/0/11 PE1 gi400/0/2/1 -----3/2 gi400/0/3/1 -----7/4 ..... (901, 9000v satellite interfaces are omitted)
```

2/4 sent (225.1.1.1, 192.10.1.1) at the rate of 2000 pps.

**Workaround:** No workaround.
- CSCud44768
 

**Symptom:** Multilink bundles and member links flap when passing traffic.

**Conditions:** Occurs under the following conditions:

  - You configure more than 210 MLPPP bundles with one member link per bundle or 16 bundles with 16 member links each.
  - The line is operating at a 64 or 128 byte line rate

**Workaround:** There is no workaround.
- CSCud48356
 

**Symptoms:** Nile Manager crash seen while configuring service instance

**Conditions:** After applying mpls tp config on back to back consoles

**Workaround:** There is no workaround.
- CSCud50944
 

**Symptom:** The router drops traffic on an MLPPP bundle.

**Conditions:** Occurs following a reload while the router is passing traffic close to the line rate. The issue occurs less frequently with lower traffic rates.

**Workaround:** Issue a **shutdown/no shutdown** on multilink interface.

- CSCud55377  
**Symptom:** The router crashes.  
**Conditions:** Occurs when you configure offloaded CFM for xconnect sessions at a high scale.  
**Workaround:** There is no workaround.
- CSCud55695  
**Symptom:** When you apply an QoS policy with a port level class-default configuration containing a shaper value to a serial interface, the router applies the shaper value to the channel-level PIR for all serial interfaces on the IM.  
**Conditions:** Occurs when you apply QoS policy with a port level class-default configuration containing a shaper value to a serial interface.  
**Workaround:** Add a dummy class-default level at the top of the policy and apply the shaper as a child policy of this class.
- CSCud55799  
**Symptoms:** Multiple priority commands get accepted per policy  
**Conditions:**  
 Have a policy-map with priority configured in one of its classes, add another class with policer first and then with priority, this policy must be rejected.  
**Workaround:** none
- CSCud56262  
**Symptom:** The router stops passing traffic on virtual circuits.  
**Conditions:** Occurs an MPLS-TE/FRR configuration with L2VPN after you issue a stateful switchover (SSO).  
**Workaround:** Reload the router.
- CSCud56364  
**Symptoms:** Convergence time for POS links for rsp SSO is about 4-7 seconds.  
**Conditions:** All 4 POS links must be created on OC3IM. Issue not seen on port 0 of OC3IM.  
**Workaround:** None. Expected to be fixed.
- CSCud60410  
**Symptom:** The router drops EFP traffic.  
**Conditions:** Occurs when you add a new EFP to an existing bridge domain interface (BDI) while running L3 multicast.  
**Workaround:** Issue a **shutdown/no shutdown** on the Ethernet interface and issue the **clear ip mroute** command.
- CSCud64034  
**Symptoms:** Interfaces not coming up  
**Conditions:** 1) Configure t1 interfaces 2) Verify ping & they are coming up 3) Perform SSO 4) Verify Ping again & traffic 5) Unconfigure t1 interfaces .6) Reload the standby 7) Configure t1 interfaces 8) T1 interfaces are not coming up  
**Workaround:** IM OIR on box
- CSCud64129



**Symptoms:** Control-plane policing is not working on ASR903; despite CLI showing the options to do it: ASR903(config)#control-plane ASR903(config-cp)#service-policy ? input Assign policy-map to the input of an interface output Assign policy-map to the output of an interface

**Conditions:** Using traditional CoPP CLI to restrict CPU punted traffic

**Workaround:** This is not a supported feature on ASR903.

**Further Problem Description:** ASR903 has an implicit policer to protect different kinds of traffic destined to RP's CPU. By default, they are policed up to 1Mbps. This is tunable as well. For more details:

[http://www.cisco.com/en/US/docs/ios-xml/ios/qos\\_plcshp/configuration/xe-3s/qos-plcshp-punt-policer-monitor.html](http://www.cisco.com/en/US/docs/ios-xml/ios/qos_plcshp/configuration/xe-3s/qos-plcshp-punt-policer-monitor.html) This software defect is a means to get the unsupported CLI removed from the IOS-XE.

- CSCud64347

**Symptom:** The router creates a data loop when using a REP VLAN load balancing configuration.

**Conditions:** Occurs with a REP VLAN load balancing configuration when a bridge-domain is bound to a VPLS VC.

**Workaround:** None; remove the VLAN load balancing configuration.

- CSCud64436

**Symptom:** The router does not send the full line rate on POS interfaces.

**Conditions:** Occurs when you send traffic over a POS interface on the OC-3 interface module with a QoS configuration.

**Workaround:** There is no workaround.

- CSCud64923

**Symptom:** OSPF connections flap.

**Conditions:** Occurs when you configure OSPF between an EVC bridge domain interface (BDI) and a trunk EFP bridge domain interface (BDI) using a port-channel trunk.

**Workaround:** There is no workaround.

- CSCud65779

**Symptom:** The router does not update the Rx value for C2, J1, and S1S0 bytes.

**Conditions:** Occurs when you configure overhead bytes on OC-3 connections.

**Workaround:** There is no workaround.

- CSCud71286

**Symptoms:** Config Sync Failures seen with respect interface.

**Conditions:** when AutoNeg is disabled on the interface and configured with speed 100/1000

**Workaround:** There is no Functionality impact.No Workaround.

- CSCud71546

**Symptom:** The ten Gigabit Ethernet interface drops traffic for 7 seconds following a stateful switchover (SSO).

**Conditions:** Occurs when the configuration contains static routes to the destination.

**Workaround:** There is no workaround.

- CSCud74804  
**Symptoms:** Building of rudy\_satellite\_super image failed. **Conditions:** While building rudy\_satellite\_super image, not able to find some subsystem and build failed. **Workaround:** No Workaround.
- CSCud76209  
**Symptom:** The OC-3 interface module goes into an out of service state.  
**Conditions:** Occurs when you repeatedly perform an interface module reset (OIR) on the OC-3 interface module.  
**Workaround:** There is no workaround.
- CSCud76679  
**Symptom:** The router displays a serial interface in the mroute table but does not forward traffic over the assigned interface.  
**Conditions:** Occurs when you enable multicast traffic on the OC-3 interface module.  
**Workaround:** There is no workaround.
- CSCud76770  
**Symptoms:** Convergence time for FRR link/node protection is more than 2 seconds.  
**Conditions:** NNHOP backup tunnels configured in a ring topology.  
**Workaround:** No workaround.
- CSCud78168  
**Symptoms:** Higher convergence (>5 seconds) is observed for 3107 label imposition prefixes.  
**Conditions:** With 3107 label imposition configured.  
**Workaround:** No workaround
- CSCud83069  
**Symptom:** End-to-end traffic does not flow for ATM PVP Mode.  
**Conditions:** Occurs when you enable ATM PVP Mode.  
**Workaround:** There is no workaround.
- CSCud83698  
**Symptom:** Links on the Gigabit Ethernet interface do not become active.  
**Conditions:** Occurs on the Gigabit Ethernet interface when the local interface is configured for autonegotiation and the remote interface is configured for a speed of 10 Mbps or 100 Mbps.  
**Workaround:** Toggle the auto-negotiation configuration on the Gigabit Ethernet interface.
- CSCud89451  
**Symptom:** The router crashes with an error message showing nmpls\_label\_populate\_flow\_data.  
**Conditions:** Occurs when you reset a core interface while the ASR 903 is acting as a PE router and running a configuration with L2VPN and L3VPN.  
**Workaround:** There is no workaround.
- CSCud90362  
**Symptoms:** PTP master (OC/BC) on ASR903, the SYNC packets might go out quite irregularly.  
**Conditions:** This is seen with ASR903 is configured as PTP master.

- Workaround:** There is no workaround.
- Further Description:** This depends a lot on the slave and its tolerance levels with respect to SYNC packets reception and processing. With most of the vendors and Test tools it works today except few.
- CSCud90890
 

**Symptoms:** Routing over Trunk EFP over Port-channel doesn't work on member ports associated with Asic #1

**Conditions:** If a Trunk EFP on Port-channel has members on asic#1, routing traffic won't egress on those ports

**Workaround:** None
  - CSCud92915
 

**Symptoms:** Enable BFD support for IPFRR in 3.8.1

**Conditions:** BFD with IPFRR

**Workaround:** There is no workaround.
  - CSCud95359
 

**Symptom:** The show policy map command displays an incorrect number of total dropped packets (total drops).

**Conditions:** Occurs when you issue the show policy-map command to display dropped packets on an interface.

**Workaround:** There is no workaround.
  - CSCud96604
 

**Symptoms:** On system reset/reload, all traffic on certain EFPs will not egress

**Conditions:** Complete traffic stoppage on certain EFPs

**Workaround:** Delete and reconfigure EFPs
  - CSCud96962
 

**Symptoms:** After shut/noshut the mem link interface getting tracebacks - IM Flapping

**Conditions:** Configured cfm trunk efp pc -256 session -3.3ms interval after that shut/no shut the traffic sending interface will hit this issue

**Workaround:** Configure very less session 50-100 cfm session
  - CSCud98985
 

**Symptoms:** on executing show tech-support, invalid command errors were detected for a few commands

**Conditions:** on executing show tech-support, invalid command errors were detected for a few commands

**Workaround:** There is no workaround.
  - CSCud99183
 

**Symptoms:** Ctrl protocols stay down, pings fail on booting with scaled ACE/ACL, (ACL configurations are failing)

**Conditions:** it occurs only on reload time

**Workaround:** There is no workaround.
  - CSCue00049

**Symptoms:** classification not works properly with non-matching traffic when IP acl is used.

**Conditions:** This occurs only if we have classes based on acl match. only acl class will classify properly and other classes based on dscp or class-default wont work

**Workaround:** No known workaround

- CSCue00332

**Symptom:** BFD connections flap, bringing down IGP.

**Conditions:** Occurs when you enable BFD on an interface that is flapping.

**Workaround:** There is no workaround.

- CSCue01419

**Symptoms:** EIGRP neighborship is lost on OC3IM / OC12 IM interfaces configured on port 0.

**Conditions:** Seen only for interfaces which are configured on port 0 of OC3IM or OC12 IM. Not seen on ports 1,2 or 3.

**Workaround:** Perform a shut/no shut on interfaces configured on port 0. Alternatively remove EIGRP and configure again.

- CSCue01919

**Symptoms:** Enhancement to L2 protocol tunnelling feature to forward/drop more protocols and reserved mac addresses that are under IEEE wellknown mac address range (0180C2000002-0F) as a part of CE2.0 certification.

**Conditions:** This the L2 protocol tunnelling enhancement for CE2.0 certification.

**Workaround:** There is no workaround.

- CSCue03418

**Symptoms:** The router displays OSPF protocol flaps causing a 20–30 second traffic loss.

**Conditions:** The issue occurs very intermittently on a HA system with a 6 second dead-interval value when you issue the **redundancy force-switchover** command;

**Workaround:** Increase the dead-interval value.

- CSCue05962

**Symptoms:** Cos/Vlan Classification doesn't work on port channel member links

**Conditions:** Apply a Cos based Qos policy on port-channel member links. All the packets will start flowing through class default instead of getting classified on the interface. Look at the attached console logs for configs details.

**Workaround:** None

- CSCue07849

**Symptoms:** Link failure in L3VPN core takes a long time (in 10s of seconds) to converge even with BGP PIC enabled.

**Conditions:** BGP PIC core and PIC edge is configured and there are more than one ECMP core paths to reach backup BGP peer.

**Workaround:** Configure only one core path to reach both primary and repair BGP Peers in a BGP PIC Core + Edge configuration. If these are more than one equal cost physical paths to reach BGP peers, then adjust the configuration by increasing the distance for all paths except one.

Post fix caveat: With the fix for this issue, there are following limitations on the scale of prefixes:  
 1. Global labeled BGP prefix scale: 3200  
 2. VPN (with or without labeled-BGP nexthop) prefix scale: 4000  
 3. Combination of Global labeled BGP and VPN prefix: less than 3200 depending on number of VPN and number of labeled BGP prefixes.

- CSCue11444

**Symptoms:** Split horizon configurations doesn't work on nile 1 with L2 multicast packets

**Conditions:** EFPs with split-horizon configured on nile 1 doesn't honor SH conditions (remain just using deja vu)

**Workaround:** shut/no shut. Configure EFP first before moving into split-horizon group.

- CSCue16617

**Symptoms:** QoS classification not working in core

**Conditions:** When Output policy applied to interface having the BDI as core interface.

**Workaround:** Enable "mpls ldp explicit null" on all the Routers.

- CSCue16828

**Symptoms:** b2b ping is not working - core side trunk efp PC with BDI

**Conditions:** when we have core side trunk efp pc with BDI and changed the port channel in core side b2b ping is not working.

**Workaround:** Don't change the PC in core side.

- CSCue17123

**Symptoms:** ATM/IMA Ping Fails From 2nd Interface Post SSO In xe39 nightly.

**Conditions:** This is seen when you have multiple ATM interfaces and issue switchover. Traffic doesn't flow from 2nd interface after switchover.

**Workaround:** No workaround

- CSCue18015

**Symptoms:** No S,G created. Forwarding based on (\*,G).

**Conditions:** Happens with IGP change leading to RPF change of the (\*,G).

**Workaround:** Clearing th (\*,G) and recreating should help fixing the problem.

**Further Problem Description:** Timing issue and hence chances of landing into the problem depends on the events getting triggered.

- CSCue19898

**Symptoms:** (\*,G) based forwarding can be seen with IIF change. IGP patch change to the source might lead to this problem.

**Conditions:** If the IGP change, the RPF change notification comes. In that case we miss adding the cpuq to the (\*G).

**Workaround:** Timeout the (\*,G) entry and recreating it again either by clear ip mroute or stopping the joins.

- CSCue20022

**Symptoms:** -Core (S, G) entries will software switch with-out any hardware forwarding

**Conditions:** -IIF is PIM enabled BDI interface. -Scale EVCs configured under single port -Scale BDIs as IIFs -Trigger: Flap main interface having EFPs

- Workaround:** -Clear Multicast Routes for failing (S, G) -Soft IM OIR for failing IIF interface having scale EVCs
- CSCue24621

**Symptoms:** when we do shut on one of the efp, traffic gets stop for other evcs also

**Conditions:** Where there are multiple qinq efp with same outer vlan tag on one interface.

**Workaround:** None.
- CSCue25267

**Symptoms:** Stand-by rsp reloads on IM OIR on OC3IM on active rsp. Nile manager crash seen but core file incompletely generated.

**Conditions:** Seen when active rsp is booted up first, then standby rsp is booted. With serial links and APS configs on ASR903, perform IM OIR.

**Workaround:** None.
- CSCue25567

**Symptoms:** quack authentication failure msg seen on console.

**Conditions:** It is seen randomly.

**Workaround:** Reload the router.
- CSCue26927

**Symptoms:** Alarms are not forwarded in CEM.

**Conditions:** Alarms are not forwarded when AC goes down.

**Workaround:** No Workaround.
- CSCue27652

**Symptoms:** ATM interfaces getting deleted on SSO

**Conditions:** ATM Interfaces are deleted on standby after IM OIR

**Workaround:** No Workaround.
- CSCue27922

**Symptoms:** Syslog showing Object download for the prefix and traffic will not flow for the particular prefix.

**Conditions:** Issue is seen during multiple interface flap with 4K prefix and rLFA enabled.

**Workaround:** Reload the router
- CSCue30481

**Symptoms:** The router does not lock to the syncE clock source after reload. It will be in QI-failed state.

**Conditions:** Reload the router with saved syncE configuration.

**Workaround:** Unconfigure and configure the clock source.
- CSCue32753

**Symptoms:** While performing ISSU, the OC3IM interfaces are lost on ISSU completion. This is followed with config mismatch errors on router console. When new stand-by reaches standby-hot state, continuous iomd crash messages are seen at regular intervals.

**Conditions:** Seen when ISSU is performed from older label images to XE39 image.

- Workaround:** None. Unconfigure controller level OC3 configs and configure again. To stop continuous iomd crash, reload the standby rsp once. If IM went into inserted or out of service state, then a HARD OIR or process kill might be required.
- CSCue34597
 

**Symptoms:** CHAP authentication process timed out. PPP interface and multilink bundle doesn't come up.

**Conditions:** When PPP or MLPPP is configured and PPP authentication is enabled.

**Workaround:** remove CHAP authentication from interface
  - CSCue34618
 

**Symptoms:** Traffic stops flowing with combination of BRR and policer: in different class-maps under a policy.

**Conditions:** When the BW remaining ratio is configured in combination of police with cir (total brr and police cir equal to 1000M):

**Workaround:** Configuring total of BRR and police cir <1000M works fine: Ex: class A Police cir 100m and class B BRR 90% fails but BRR 89% works fine
  - CSCue35356
 

**Symptoms:** Policy-map attached on the PC interface stops working after service instance is removed and re-configured.

**Conditions:** A policy-map is attached to the main interface of the port-channel. The policy stops working when the service instance from the interface is deleted dynamically and then re-configured.

**Workaround:** Remove and re-attach the policy-map on the PC interface
  - CSCue36239
 

**Symptoms:** Match EFP policy on PC stops working after one of the policy on the member links is removed.

**Conditions:** Attach policy to all the memberlinks on the PC. Then remove it from one of the member links from which traffic was flowing. The traffic gets redirected but the QoS is no longer working

**Workaround:** Remove policy from all the member links and then reattach
  - CSCue43205
 

**Symptoms:** The router drops traffic when you set an interface to the default configuration.

**Conditions:** Occurs when you set an interface with QoS configurations to the default configuration. The issue occurs most often with the Ten Gigabit Ethernet interface using a full global configuration.

**Workaround:** There is no workaround.
  - CSCue42315
 

**Symptoms:** CPU Hogs messages and IOMD Crash seen

**Conditions:** With OC3 IM on doing shut/no shut of Multilink Bundle when traffic sent with packet size greater than 1500 byte

**Workaround:** none
  - CSCue42341
 

**Symptoms:** Backup path will be used to carry traffic instead of Primary path after reopt

**Conditions:** R-LFA + BFD needs to be configured together

- Workaround:** Flap the backup path interface
- CSCue43250

**Symptoms:** IMA config won't be parsed correctly after router reload when the A903-IM40S is inserted in Bay4/Bay5 of the ASR903 router

**Conditions:** when the IMA and ATM interfaces are adjacent. happens only for IM inserted on Bay 4 or above.

**Workaround:** insert the IM in bay 0 bay 3 if you want the IMA and ATM parsing to work. or reconfigure the ATM and IMA interfaces, it would work.
- CSCue45306

**Symptoms:** CEM circuits configured over TDM IM go down after SSO.

**Conditions:** on SSO, CEM circuits configured over TDM IM are down.

**Workaround:** Router reload.
- CSCue45498

**Symptoms:** CPU goes high when sending traffic with varying source mac addresses for multiple streams for BD.

**Conditions:** port-channel is configured as efp for the BD and mac-limit is configured to 0 for that BD.

**Workaround:** N/A
- CSCue47317

**Symptoms:** Builds and ISSU may get impacted due to sync damage in latest throttles with respect to CCO data.

**Conditions:** Modification in implementation of TDL structures.

**Workaround:** Sync with CCO data will be committed shortly.
- CSCue52774

**Symptoms:** observed with A900-IMA40S IM in ASR903 box. only when the port above 0 is used for clock-source, the clocking is not received by the system correctly.

**Conditions:** when the port above 0 is used for the clock source. issue is seen due to wrong conversion.

**Workaround:** 1. use port 0 for clock-sync 2. or insert the SFP in the odd port(protect ones) adjacent to actual port and using a optical splitter, the cable can be fed to this odd port which can recover the proper clocking for the given port.
- CSCue52968

**Symptoms:** Ping fails and traffic stops through Multilink bundle when CHAP authentication is enabled

**Conditions:** This is seen when PFC and ACFC is configured.

**Workaround:** None, in case PFC and ACFC is configured.
- CSCue57670

**Symptoms:** After SSO without any network-clock config new Active RSP Sync LED reflects Holdover state.

**Conditions:**

**Workaround:** Reload This is a cosmetic issue.



- CSCue57671  
**Symptoms:** Router Crashes while running with REP configurations **Conditions:** Crash seen while removing REP configuration from interface. **Workaround:** None
- CSCue59544  
**Symptoms:** Once path is once available for TE tunnel, it doesn't comes up **Conditions:** If A900-IMA16D is also present on router, it generates storm which prevent RSVP processing and TE tunnel doesn't up once TE path is available again  
**Workaround:** None
- CSCue77612  
**Symptoms:** The mac sync can happen on wrong lportid in the standby which can cause traffic forwarding to the wrong port after switchover.  
**Conditions:** The traffic impact will be seen only after the switchover.  
**Workaround:** clear mac-add after switchover.
- CSCue86696  
**Symptoms:** Noticed interface flap on one of the routers, during overnight soak run.  
**Conditions:** Seen during prolonged soak tests with SFP IM.  
**Workaround:** None
- CSCue87542  
**Symptoms:** On BDI delete, if routing traffic continues, it will be punted to the CPU which will flood out the CPU resulting in control plane loss  
**Conditions:** Ping failure and BFD/OSPF flaps on BDI delete while ipv4/v6 traffic is running.  
**Workaround:** The workaround is to delete the TEFP and then delete the BDI interfaces.
- CSCue89790  
**Symptoms:** IPv6 traffic outage after SSO when NSF timer expires.  
**Conditions:** Occurs when configuring IPv6 static routing or IPv6 OSPF routing.  
**Workaround:** For IPv6 SSO support, ensure the following:
  - IPv6 neighbor are configured statically.
  - For dynamic route or static route, you must run a hardware BFD between IPV6 neighbors.

