



# Release Notes for Cisco ASR 901 Series Aggregation Services Router for Cisco IOS Release 15.4(1)S

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This release notes is for the Cisco ASR 901 Series Aggregation Services Router for Cisco IOS Release 15.4(1)S and contains the following sections:

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## Introduction

The Cisco ASR 901 Series Aggregation Services Router is a cell-site access platform specifically designed to aggregate and transport mixed-generation radio access network (RAN) traffic. The router is used at the cell site edge as a part of a 2G, 3G, or 4G RAN.

The Cisco ASR 901 router helps enable a variety of RAN solutions by extending IP connectivity to devices using Global System for Mobile Communications (GSM), General Packet Radio Service (GPRS), Node Bs using High Speed Packet Access (HSPA) or Long Term Evolution (LTE), base transceiver stations (BTSs) using Enhanced Data Rates for GSM Evolution (EDGE), Code Division Multiple Access (CDMA), CDMA-2000, EVDO, or WiMAX, and other cell-site equipment.



It transparently and efficiently transports cell-site voice, data, and signaling traffic over IP using traditional T1 and E1 circuits, as well as alternative backhaul networks such as Carrier Ethernet and DSL, Ethernet in the First Mile (EFM), and WiMAX. It also supports standards-based Internet Engineering Task Force (IETF) Internet protocols over the RAN transport network, including those standardized at the Third-Generation Partnership Project (3GPP) for IP RAN transport. Custom designed for the cell site, the Cisco ASR 901 router features a small form factor, extended operating temperature, and cell-site DC input voltages.

[Table 1](#) lists the Cisco ASR 901 router model versions.

**Table 1** Cisco ASR 901 Router Models

TDM + Ethernet Version	Ethernet Version
<ul style="list-style-type: none"> <li>A901-12C-FT-D<sup>1</sup></li> <li>A901-4C-FT-D<sup>1</sup></li> <li>A901-6CZ-FT-D<sup>1</sup></li> <li>A901-6CZ-FT-A<sup>2</sup></li> </ul>	<ul style="list-style-type: none"> <li>A901-12C-F-D<sup>1</sup></li> <li>A901-4C-F-D<sup>1</sup></li> <li>A901-6CZ-F-D<sup>1</sup></li> <li>A901-6CZ-F-A<sup>2</sup></li> </ul>

1. DC power

2. AC power



**Note**

Some of the Cisco ASR 901 models have port based licensing. For more details, see the [Licensing](#) chapter in Cisco ASR 901 Series Aggregation Services Router Software Configuration Guide.

## System Specifications

[Table 2](#) lists the supported system configurations for the Cisco ASR 901 router:

## Memory Details

[Table 2](#) lists the memory available for Cisco ASR 901 router.

**Table 2** Cisco IOS Release 15.4(1)S Memory Details

Platform	Software Image	Flash Memory	DRAM Memory	Runs From
Cisco ASR 901 Series Aggregation Services Router TDM version	asr901-universalk9-mz	128 MB	512 MB	RAM
Cisco ASR 901 Series Aggregation Services Router, Ethernet version	asr901-universalk9-mz	128 MB	512 MB	RAM

## Determining the Software Version

To determine the image and version of Cisco IOS software running on your Cisco ASR 901 router, log in to the router and enter the **show version** command in the EXEC mode:

```
Router> show version
Cisco IOS Software, 901 Software (ASR901-UNIVERSALK9-M), Version 15.4(1)S, RELEASE
SOFTWARE (fc2)
Technical Support: http://www.cisco.com/techsupport
Copyright (c) 1986-2013 by Cisco Systems, Inc.
Compiled Tue 19-Nov-13 23:59 by prod_rel_team

ROM: System Bootstrap, Version 15.2(2r)SNI, RELEASE SOFTWARE (fc1)
```

## New and Changed Information

- [New Hardware Features in Release 15.4\(1\)S, page 3](#)
- [New Software Features in Release 15.4\(1\)S, page 3](#)
- [Modified Software Features in Release 15.4\(1\)S, page 6](#)

## New Hardware Features in Release 15.4(1)S

There are no new hardware features in Cisco IOS Release 15.4(1)S.

## New Software Features in Release 15.4(1)S

The following features are supported from this release:

### 1588v2 Hybrid Clock

Effective with Cisco IOS Release 15.4(1)S, the PTP hybrid mode is supported for ordinary clock (in slave mode only) and boundary clock.

For more information about this feature, see *PTP Hybrid Clock* section of the Configuring Clocking feature guide at the following URL:

[http://www.cisco.com/en/US/docs/wireless/asr\\_901/Configuration/Guide/clocking.html](http://www.cisco.com/en/US/docs/wireless/asr_901/Configuration/Guide/clocking.html)

### Dual REP Edge No-Neighbor

Effective with Cisco IOS release 15.4(1)S, you can configure the non-REP switch facing ports on a single device as dual edge no-neighbor ports. These ports inherit all properties of edge ports, and overcome the limitation of not converging quickly during a failure.

For more information about this feature, see *Configuring Resilient Ethernet Protocol* feature guide at the following URL:

[http://www.cisco.com/en/US/docs/wireless/asr\\_901/Configuration/Guide/rep.html](http://www.cisco.com/en/US/docs/wireless/asr_901/Configuration/Guide/rep.html)

## EoMPLS/TDM Pseudowire Redundancy over FRR

Effective with Cisco IOS Release 15.4(1)S, support was added for EoMPLS/TDM pseudowire redundancy over FRR.

For more information about this feature, see *Remote Loop-Free Alternate - Fast Reroute* feature guide at the following URL:

[http://www.cisco.com/en/US/docs/wireless/asr\\_901/Configuration/Guide/remote\\_lfa-frr.html](http://www.cisco.com/en/US/docs/wireless/asr_901/Configuration/Guide/remote_lfa-frr.html)

## Ethernet Loopback - Internal Loopback on Bridge-Domain EFPs

Effective with Cisco IOS Release 15.4(1)S, the Cisco ASR 901 supports internal loopback on Bridge-domain EFPs.

For more information about this feature, see *Configuring Ethernet OAM* feature guide at the following URL:

[http://www.cisco.com/en/US/docs/wireless/asr\\_901/Configuration/Guide/oam.html](http://www.cisco.com/en/US/docs/wireless/asr_901/Configuration/Guide/oam.html)

## IPv4 Multicast

Effective with Cisco IOS Release 15.4(1), IPv4 multicast is supported on the Cisco ASR 901 series routers. The router supports up to 500 multicast IP address entries.

The following featurettes are supported:

- Source Specific Multicast
- Source Specific Multicast (SSM) Mapping
- IGMP Version 1
- IGMP Version 2
- IGMP Version 3

For more information about this feature, see *IPv4 Multicast on the Cisco ASR 901 Router* feature guide at the following URL:

[http://www.cisco.com/en/US/docs/wireless/asr\\_901/Configuration/Guide/ipv4\\_mcast.html](http://www.cisco.com/en/US/docs/wireless/asr_901/Configuration/Guide/ipv4_mcast.html)

## IPv6 Multicast

Effective with Cisco IOS Release 15.4(1), IPv6 multicast is supported on the Cisco ASR 901 series routers.

The following featurettes are supported:

- IPv6 Multicast: Multicast Listener Discovery (MLD) Protocol, Versions 1 and 2
- IPv6 Multicast: PIM Source-Specific Multicast (PIM-SSM)

For more information about this feature, see *IPv6 Multicast on the Cisco ASR 901 Router* feature guide at the following URL:

[http://www.cisco.com/en/US/docs/wireless/asr\\_901/Configuration/Guide/ipv6\\_mcast.html](http://www.cisco.com/en/US/docs/wireless/asr_901/Configuration/Guide/ipv6_mcast.html)

## Extending QoS over MLPPP Interface

Effective with Cisco IOS Release 15.4(1)S, the QoS functionality on the MLPPP interface is extended to support:

- QoS for MPLS over MLPPP
- QoS for CPU generated traffic

For more information about this feature, see *Configuring QoS* feature guide at the following URL:  
[http://www.cisco.com/en/US/docs/wireless/asr\\_901/Configuration/Guide/qos.html](http://www.cisco.com/en/US/docs/wireless/asr_901/Configuration/Guide/qos.html)

## Redundant PTP instances as per G.8265.1

PTP redundancy is an implementation on different clock nodes by which the PTP slave clock node interacts with multiple master ports such as grand master, boundary clock nodes, and so on.

A new servo mode is defined under PTP to support high PDV scenarios (when the PDVs exceed G.8261 standard profiles). You should use the servo mode high-jitter command to enable this mode on the PTP slave.

In servo mode, convergence time would be longer than usual, as this mode is meant only for frequency synchronization.

For more information about this feature, see *PTP Redundancy* section of the *Configuring Clocking* feature guide at the following URL:  
[http://www.cisco.com/en/US/docs/wireless/asr\\_901/Configuration/Guide/clocking.html](http://www.cisco.com/en/US/docs/wireless/asr_901/Configuration/Guide/clocking.html)

## REP over LAG

Effective with Cisco IOS Release 15.4(1)S, the Cisco ASR 901 supports REP over port-channel.

For more information about this feature, see *Configuring Resilient Ethernet Protocol* feature guide at the following URL:  
[http://www.cisco.com/en/US/docs/wireless/asr\\_901/Configuration/Guide/rep.html](http://www.cisco.com/en/US/docs/wireless/asr_901/Configuration/Guide/rep.html)

## SPAN

Local SPAN supports a SPAN session entirely within one switch. You can analyze network traffic passing through ports or VLANs by using SPAN to send a copy of the traffic to another port on the switch that has been connected to a network analyzer or other monitoring or security devices.

For more information about this feature, see *Configuring Switched Port Analyzer* feature guide at the following URL:  
[http://www.cisco.com/en/US/docs/wireless/asr\\_901/Configuration/Guide/span.html](http://www.cisco.com/en/US/docs/wireless/asr_901/Configuration/Guide/span.html)

## Y.1564 over EVC CrossConnect

Effective with Cisco IOS release 15.4.(01)S, traffic can be generated over cross connect interface.

For more information about this feature, see *Configuring Ethernet OAM* feature guide at the following URL:  
[http://www.cisco.com/en/US/docs/wireless/asr\\_901/Configuration/Guide/oam.html](http://www.cisco.com/en/US/docs/wireless/asr_901/Configuration/Guide/oam.html)

## Support for “no service password recovery” command

Effective with Cisco IOS release 15.4.(01)S, support was added for the “no service password recovery” command.

## Modified Software Features in Release 15.4(1)S

There are no modified features in Cisco IOS Release 15.4(1)S.

## Supported Hardware

[Table 3](#) and [Table 4](#) shows the SFP modules supported on the Cisco ASR 901 routers:

**Table 3 SFPs Supported on the Cisco ASR 901 1G and 10G Routers for 1G Mode**

<ul style="list-style-type: none"> <li>• CWDM-SFP-1470</li> <li>• CWDM-SFP-1490</li> <li>• CWDM-SFP-1510</li> <li>• CWDM-SFP-1530</li> <li>• CWDM-SFP-1550</li> <li>• CWDM-SFP-1570</li> <li>• CWDM-SFP-1590</li> <li>• CWDM-SFP-1610</li> <li>• DWDM-SFP-XXXX<sup>1</sup></li> <li>• GLC-BX-U and GLC-BX-D<sup>2</sup></li> <li>• GLC-EX-SMD</li> <li>• GLC-LH-SMD</li> </ul>	<ul style="list-style-type: none"> <li>• GLC-LX-SM-RGD</li> <li>• GLC-SX-MMD</li> <li>• GLC-SX-MM-RGD</li> <li>• GLC-T</li> <li>• GLC-ZX-SM</li> <li>• GLC-ZX-SMD</li> <li>• GLC-ZX-SM-RGD</li> <li>• SFP-GE-L</li> <li>• SFP-GE-S</li> <li>• SFP-GE-T</li> <li>• SFP-GE-Z</li> </ul>
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1. 40 wavelengths

2. These SFPs (GLC-BX-U and GLC-BX-D) should be connected back to back to bring the interface link up.

**Table 4 SFPs Supported on the Cisco ASR 901 10G Router for 10G Mode**

<ul style="list-style-type: none"> <li>• SFP-10G-ER</li> <li>• SFP-10G-LR</li> <li>• SFP-10G-LR-X</li> <li>• DWDM-SFP+</li> <li>• SFP-H10GB-CU1M</li> <li>• SFP-H10GB-CU3M</li> <li>• SFP-H10GB-CU5M</li> </ul>	<ul style="list-style-type: none"> <li>• SFP-10G-SR</li> <li>• SFP-10G-SR-X</li> <li>• SFP-10G-ZR</li> <li>• SFP-10G-LRM</li> <li>• SFP-H10GB-ACU7M</li> <li>• SFP-H10GB-ACU10M</li> </ul>
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**Note**

For information on how to configure SFPs, see the [Cisco ASR 901 Series Aggregation Services Router Software Configuration Guide](#).

## Supported MIBs

The Cisco ASR 901 router supports the following MIBs:

- BGP4-MIB
- BRIDGE-MIB
- CISCO-ACCESSENVMON-MIB
- CISCO-CAR-MIB
- CISCO-CDP-MIB
- CISCO-CEF-MIB
- CISCO-CLASS-BASED-QOS-MIB
- CISCO-CONFIG-COPY-MIB
- CISCO-CONFIG-MAN-MIB
- CISCO-DATA-COLLECTION-MIB
- CISCO-DOT3-OAM-MIB
- CISCO-EIGRP-MIB
- CISCO-ENHANCED-MEMPOOL-MIB
- CISCO-ENTITY-ASSET-MIB
- CISCO-ENTITY-VENDORTYPE-OID-MIB
- CISCO-ENVMON-MIB
- CISCO-FLASH-MIB
- CISCO-IETF-PW-MIB
- CISCO-IETF-PW-TC-MIB
- CISCO-IF-EXTENSION-MIB
- CISCO-IMAGE-MIB
- CISCO-STP-EXTENSIONS-MIB
- CISCO-SYSLOG-MIB
- CISCO-TC
- ENTITY-MIB
- ETHERLIKE-MIB
- HCNUM-TC
- IANAifType-MIB
- IEEE8021-CFM-MIB
- IF-MIB
- IMA-MIB
- INT-SERVE-MIB
- IP-FORWARD-MIB
- IP-MIB
- MPLS-LDP-MIB
- MPLS-LSR-MIB
- MPLS-VPN-MIB
- NOTIFICATION-LOG-MIB
- OLD-CISCO-CHASSIS-MIB
- OLD-CISCO-FLASH-MIB
- OLD-CISCO-INTERFACES-MIB
- OLD-CISCO-IP-MIB

- CISCO-IPSLA-ETHERNETMIB
- CISCO-MEMORY-POOL-MIB
- CISCO-NETSYNC-MIB
- CISCO-NTP-MIB
- CISCO-OSPF-MIB
- CISCO-PING-MIB
- CISCO-PROCESS-MIB
- CISCO-PRODUCTS-MIB
- CISCO-PTP-MIB
- CISCO-QUEUE-MIB
- CISCO-RESILIENT-ETHERNET-PROTOCOL-MIB
- CISCO-RTTMON-MIB
- CISCO-SENSOR-ENTITY-MIB
- CISCO-SMI-MIB
- CISCO-SNAPSHOT-MIB
- CISCO-SNMP-TARGET-EXT-MIB
- OLD-CISCO-SYS-MIB
- OLD-CISCO-TS-MIB
- OSPF-MIB
- OSPFv3-MIB
- PerfHist-TC-MIB
- RFC1213-MIB
- RMON2-MIB
- RMON-MIB
- SNMP-FRAMEWORKMIB
- SNMP-TARGET-MIB
- SNMPv2-MIB
- SNMPv2-SMI
- SNMPV2-TC
- TCP-MIB
- UDP-MIB

## Caveats

Caveats describe unexpected behavior in Cisco IOS software releases. Severity 1 caveats are the most serious caveats, severity 2 caveats are less serious, and severity 3 caveats are the least serious of these three severity levels. Only select severity 3 caveats are listed.

This section contains the following topics:

- [Bug Search Tool](#)
- [Open Caveats](#)
- [Resolved Caveats](#)



## Bug Search Tool

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

Use the following link to access the tool: <https://tools.cisco.com/bugsearch/search>

You will be prompted to log into Cisco.com. After successful login, the Bug Search Tool page opens. Use the Help link in the Bug Search Tool to obtain detailed help.

## Open Caveats

This section provides information about the open caveats for the Cisco ASR 901 router running Cisco IOS Release 15.4(1)S.

Bug ID	Description
<a href="#">CSCtn18900</a>	Service policy classification based on inner Virtual LAN p-bits is not working.
<a href="#">CSCtn71094</a>	The <b>no interface vlan 1</b> command deletes VLAN 1.
<a href="#">CSCtn79746</a>	The <b>show ethernet service instance statistics</b> command is not displaying any statistics.
<a href="#">CSCto96840</a>	A command restriction is required for Dual Rate Three Color (2R3C) on parent class in Hierarchical Quality of Service (HQoS).
<a href="#">CSCtq26793</a>	Some ports are not getting bundled with the port channel because of attribute mismatch, such as flow-control.
<a href="#">CSCtr05566</a>	The Multiprotocol Label Switching (MPLS) traffic fails when port channel encapsulation is not equal to the bridge domain on the core.
<a href="#">CSCtr70228</a>	High CPU utilization is observed while performing save or copy operation.
<a href="#">CSCts66081</a>	Ingress VLAN translation failure occurs when entries exceed 3000.
<a href="#">CSCts80090</a>	The reserved VLANs are not blocked on the router.
<a href="#">CSCts84679</a>	The circuit emulation (CEM) interface displays wrong configuration in the <b>show running-configuration</b> command output, when pw-class is configured.
<a href="#">CSCts85484</a>	Traceback occurs after executing <b>rep preempt segment segid</b> command.
<a href="#">CSCts92808</a>	Weighted Random Early Detection (WRED) counters are not working for discard class 0.
<a href="#">CSCtw52497</a>	The interface drops all ingress packets when you reload the router with write, erase, and copy the saved configuration to the running configuration.
<a href="#">CSCtw69021</a>	Maximum bandwidth guarantee for Multilink Point-to-Point Protocol (MLPPP) interface is not working for 64-byte size frames in Low Latency Queuing (LLQ).
<a href="#">CSCtx12366</a>	The servo is accepting more than 64PPS Sync in static unicast.
<a href="#">CSCtx22010</a>	SyncE is not supported for the Copper SFPs: GLC-T and SFP-GE-T

Bug ID	Description
<a href="#">CSCtx54735</a>	High CPU utilization and traceback is observed while doing copy and paste of 16 E1 controllers unconfigurations.
<a href="#">CSCtx77374</a>	Input errors are increasing when serial interface flaps. This issue is observed on a serial interface that is part of a multilink interface, when keepalive is disabled.
<a href="#">CSCty04070</a>	Traffic fails and continuous traceback is observed, when xconnect is configured on an untagged EVC in a port-channel.
<a href="#">CSCty95886</a>	The file copy function is not detecting errors properly.
<a href="#">CSCtz16522</a>	The Two-Way Active Measurement Protocol (TWAMP) session-reflector packet truncation fails.
<a href="#">CSCtz38207</a>	Router is rebooting continuously due to failed fans.
<a href="#">CSCtz48755</a>	The write operation triggers the flaps for Hot Standby Router Protocol (HSRP). We recommend the use of minimum 1 sec (or above) hello timer for HSRP and Virtual Redundancy Router Protocol (VRRP). With this configuration, we support a maximum of 50 sessions.
<a href="#">CSCtz69403</a>	IPv6 traffic is not getting dropped with link-local as source address.
<a href="#">CSCtz81384</a>	The Layer 2 ATM/IMA interface and its permanent virtual circuits (PVCs) are not coming up when operations, administration and maintenance (OAM) is configured.
<a href="#">CSCua19178</a>	Packet drops are seen with IPv6 fragmentation.
<a href="#">CSCua34320</a>	The OSPFv3 keeps old router-id even after changing the loopback address.
<a href="#">CSCua34389</a>	<p>Manual tunnel having MPLS configuration with dynamic option in the following sequence does not set up targeted ldp session resulting in tunnel staying down. shut/no shut of the tunnel brings back the targeted Label Distribution Protocol (LDP) session up.</p> <pre> interface Tunnel108 ip unnumbered Loopback0 mpls label protocol ldp mpls ip tunnel source Loopback0 tunnel destination 36.36.36.36 tunnel mode mpls traffic-eng tunnel mpls traffic-eng path-option 1 dynamic </pre> <p>The issue is not observed when tunnel mode is configured ahead of tunnel destination,</p>
<a href="#">CSCua40707</a>	<p>The commands related to MPLS and MPLS-TE/FRR are applicable only to SVI interfaces though they can be enabled globally.</p> <p>Thus configuring the MPLS commands on the GigabitEthernet interface or port-channel is not supported.</p>
<a href="#">CSCua49491</a>	The MPLS traffic engineering counters are not supported.
<a href="#">CSCua51628</a>	The OSPFv3 bidirectional forwarding detection (BFD) flaps after an interface is shut in a port-channel bundle.

Bug ID	Description
<a href="#">CSCua81678</a>	The following error message is displayed for /128 prefix: “Reached Maximum Number of IPv6 Hosts”.
<a href="#">CSCua82917</a>	In remote LFA FRR, the recovery takes more than 80 ms.
<a href="#">CSCua84571</a>	Load balancing is not working with different streams having symmetrical addresses.
<a href="#">CSCua88693</a>	The <b>verify</b> command is not supported for the USB flash in the Cisco ASR 901 10G router.
<a href="#">CSCua98165</a>	The IPv6 BFD packets should be mapped to Queue 6 on egress interface.
<a href="#">CSCua99910</a>	MAC address table (MAC learning) failures can be seen with more than 31000 MAC Addresses in certain conditions. So it is safe to assume the platform supports 31000 MAC addresses.
<a href="#">CSCub12715</a>	The “pura_cef_ipv6_route_create_update:Reached Maximum Number of Prefixes supported by platform.Additional Prefixes will not be programmed” message is displayed when the primary path is shut/unshut in a redundant convergent setup.
<a href="#">CSCub71746</a>	Alarm Indication Signal (AIS) is visible momentarily at T1 controller of CE1 while reverting back to primary.
<a href="#">CSCuc15639</a>	Connectivity Fault Management (CFM) is not supported with 100 ms interval.
<a href="#">CSCuc22630</a>	The router fails to recognize USB when its removed immediately after insertion.
<a href="#">CSCuc25878</a>	The UBR transmits at a lower rate when all five class of service (CoS) Private Virtual Circuits (PVCs) are configured.
<a href="#">CSCuc39560</a>	IPv6 traffic drop occurs globally when IPv4 VRF is configured on the same SVI with <b>ip vrf definition</b> .
<a href="#">CSCuc85033</a>	The untagged Ethernet Virtual Circuit (EVC) port is not supported for spanning tree.
<a href="#">CSCuc95900</a>	Traffic is receiving two VLAN tags, instead of three for QinQ with pop 2.
<a href="#">CSCud04703</a>	In Zero Touch Provisioning, the Cisco ASR 901 series router is not able to connect to the CE server using option-43 template, when source interface is passed as a parameter.
<a href="#">CSCud05125</a>	In traffic generator, the receiver (Rx) counter is incrementing even after the EVC mismatch.
<a href="#">CSCud14278</a>	Border Gateway Protocol (BGP) flap is observed between PEs when traffic from CE side is oversubscribed towards PE.
<a href="#">CSCud16558</a>	High convergence time is observed when “shut” operation is performed on fast re-route (FRR) configured with port channels. This issue can be resolved with BFD.
<a href="#">CSCud20997</a>	The Ethernet Over MPLS (EoMPLS) pseudowire redundancy fails when backup pseudowire is active in TE-FRR backup path.
<a href="#">CSCud21775</a>	In Zero Touch Provisioning, the Cisco ASR 901 10G router is using wrong Unique Device Identifier (UDI) event-id to make connection to the CE.

Bug ID	Description
<a href="#">CSCud24655</a>	CPU hog is observed when primary path is “shut” in an LFA FRR set up with 1000 prefixes.
<a href="#">CSCud29184</a>	The <b>show version</b> command is not giving the image name when the boot system variable is set as: <b>boot system flash image-name</b> .
<a href="#">CSCud32961</a>	Error occurs when any label entry is crossing the 3500 range.
<a href="#">CSCud33913</a>	In Zero Touch Provisioning, the VLAN discovery is not supported for encapsulation dot1ad.
<a href="#">CSCud37655</a>	The xconnect MTU is not used for traffic filtering.
<a href="#">CSCud71334</a>	The mac-address flap control is putting all ports into “err-disabled” state, in some cases.
<a href="#">CSCud74577</a>	The CPU process for IP SLA continues to run even after stopping the traffic generator.
<a href="#">CSCud75293</a>	The <b>show rom-monitor</b> command is not showing upgraded ROMMON version in IOS mode.
<a href="#">CSCud79202</a>	The <b>show inventory</b> command is displaying the PID of SFP-SX-MM as GLC-SX-MM.
<a href="#">CSCud89083</a>	The router displays “soc_counter_sync: counter thread not responding” error, under heavy CPU usage.
<a href="#">CSCue11410</a>	The incremental-SPF configuration is causing micro loops during convergence, in IGP IS-IS.
<a href="#">CSCue11688</a>	The VRF routes are leaked from the adjacent VRF with a particular IP:nn pattern.
<a href="#">CSCue18282</a>	CPU hog and traceback is observed when scale configuration is pushed from CE server to the router.
<a href="#">CSCue27148</a>	Console hangs when <b>verify</b> command is executed on two telnet sessions.
<a href="#">CSCue45003</a>	ASR901 storm control filter does not support current counters value in <b>show storm</b> output.
<a href="#">CSCue54634</a>	Traffic outage and pstorm errors are observed when port channel is configured and unconfigured multiple times.
<a href="#">CSCue94536</a>	The port channel interface flaps when lacp max-bundle is configured and unconfigured.
<a href="#">CSCuf21682</a>	High reconvergence is observed for global traffic in Remote Loop Free Alternate (RLFA).
<a href="#">CSCuf48503</a>	Higher latency is observed for middle priority queue.
<a href="#">CSCuf49860</a>	Configuration of backup peer on primary xconnect, after bringing up remote peer backup results in flap.
<a href="#">CSCug61006</a>	Auto-select is not working on the Gigabit Ethernet (0/4) port.  For combo ports, shutdown or no shutdown on the interface is mandatory while changing the media type from RJ45 to auto-select and auto-select to RJ45 respectively.

Bug ID	Description
<a href="#">CSCug91477</a>	Storm control filter for the port channel does not show the discarded counters.
<a href="#">CSCug92777</a>	On Layer 3, multicast traffic are punted to CPU even when storm control drops all the packets.
<a href="#">CSCuh37393</a>	100M SFP support is not available for auto-select medium feature.
<a href="#">CSCuh46724</a>	Sometimes, port-channel with 10G interfaces have high convergence numbers for REP.
<a href="#">CSCuh51097</a>	Error disable recovery state does not persist for the second time on fiber port even after the error recovery interval.
<a href="#">CSCuh54827</a>	Layer 2 control protocol forwarding and tunneling is not following the Spanning Tree Group (STG) states updated by Resilient Ethernet Protocol (REP)/Multiple Spanning Tree Protocol (MSTP).
<a href="#">CSCuh69916</a>	The ASR 901 router does not support Multicast Route entry based counters.
<a href="#">CSCuh77658</a>	When the router boots up, the Gigabit Ethernet port flaps multiple times.
<a href="#">CSCuh81074</a>	The ASR 901 router does not support Multicast Route entry based rate counters.
<a href="#">CSCuh81074</a>	The output of <b>show ip mroute active</b> and <b>show ip mfib active</b> commands are showing incorrect traffic rate.
<a href="#">CSCuh84139</a>	The ASR 901 router is experiencing very high Fast Reroute (FRR) cutover downtime when port-channel core-facing interface is down.
<a href="#">CSCuh86459</a>	Detection of Avago type GigabitEthernet SFP may sometimes fail. To recover, remove and re-insert the SFP.
<a href="#">CSCuh91973</a>	After reload, incorrect error message is displayed for unsupported SFPs.
<a href="#">CSCui28984</a>	If the accept interface and forward interface are in the same BD, multicast traffic is not forwarded.
<a href="#">CSCui34892</a>	Multicast packet counters are not showing proper count on receiving interface, when the size is above 1500.
<a href="#">CSCui35642</a>	Multicast traffic in the ASR 901 router is getting forwarded based on physical interface MTU instead of SVI MTU.
<a href="#">CSCui52937</a>	“%DATACORRUPTION-1-DATAINCONSISTENCY:” message and traceback is observed on <b>show rep topology</b> command output.
<a href="#">CSCui59984</a>	REP flap is observed on scale configurations (bridge-domain scaled up to 250 or MAC address learnt is about 10K) with low link status layer (LSL) timers.
<a href="#">CSCui85659</a>	Layer 2 control packets (Tx) cannot be spanned.
<a href="#">CSCui88126</a>	“ReachedMaximumNumberIPv6 Hosts” error message and traceback is observed on core link flap. The ASR901 router allows lesser than MAX Multicast Routes due to HASH COLLISION LIMITATION in certain Source and Group Combination.
<a href="#">CSCuj19691</a>	Hybrid clock is working as ordinary PTP clock, though it was configured in hybrid mode.
<a href="#">CSCuj27999</a>	Hot swap from copper SFP to fiber 1G SFP is not working properly.

Bug ID	Description
<a href="#">CSCUj49502</a>	Multiprotocol Label Switching (MPLS) EXP classification is not working in P router for plain IP, L2VPN and L3VPN traffic flowing from one Ingress MLPPP to another Egress MLPPP/Egress GigabitEthernet.
<a href="#">CSCUj53627</a>	Sometimes, high convergence numbers are observed on Layer 2 VPN traffic over REP.
<a href="#">CSCUj64713</a>	Router is not generating field replaceable unit (FRU) traps after the insertion and removal of SFPs.
<a href="#">CSCUj65823</a>	Router console session or telnet session hangs after deleting IMA group.
<a href="#">CSCUj65984</a>	FRR egress objects for L2VPN pseudowires may get leaked on flapping all IP routes multiple times.
<a href="#">CSCUj68180</a>	Transceiver traps are not sent for digital optical monitoring (DOM) threshold violations.
<a href="#">CSCUj87842</a>	IP connectivity fails on combo ports with copper link after reload.
<a href="#">CSCUj98996</a>	After installing AdvancedMetroIPAccess license, router is setting it for next reboot level even though no license is set at boot level.
<a href="#">CSCUj99184</a>	Router fails to trigger Protocol-Independent Multicast (PIM) assert resulting in duplicate traffic for 2-3mins.
<a href="#">CSCUl06056</a>	All config-reg values are accepting “break”.
<a href="#">CSCUl09417</a>	Confreg 0x2142 is allowed after disabling password recovery.
<a href="#">CSCUl12225</a>	On a 10G router, when 10G interface is used in 1G mode, traffic switching from one member of port-channel to another takes more time.
<a href="#">CSCUl22030</a>	Duplicate traffic is received for sometime on the receiver which is directly connected on RP after RPF shut/no-shut operation.
<a href="#">CSCUl24345</a>	IMA VCC pseudowire redundancy flow creation fails with Winpath errors and Tracebacks.
<a href="#">CSCUl52790</a>	SyncE fails when 10G port is used in 1G mode.

## Resolved Caveats

This section provides information about the resolved caveats for the Cisco ASR 901 router running Cisco IOS Release 15.4(1)S.

Bug ID	Description
<a href="#">CSCue91862</a>	Peering is not working for untagged EVC when service instance is configured with default encapsulation.
<a href="#">CSCuh11698</a>	When more than four ports are connected to a peer where the ports are administratively up, the interface which detects a link up event takes the license first. Hence, the behavior of ports is non predictable. The first port which detects the link up will take the license and the other port may not get a valid license.
<a href="#">CSCui68701</a>	When you insert CWDM or avago type fiber adjacent to GLC-LH-SMD port, the GLC-LH-SMD port goes down.

# Troubleshooting

The following sections describe troubleshooting commands you can use with the Cisco ASR 901 Series Aggregation Services Router.

## Collecting Data for Router Issues

To collect data for reporting router issues, issue the following command:

- **show tech-support**—Displays general information about the router if it reports a problem.

## Collecting Data for ROMMON Issues

To collect data for ROMMON issues, issue the following command while in the EXEC mode:

- **show rom-monitor**—Displays currently selected ROM monitor.



### Note

If you contact Cisco support for assistance, we recommend that you provide any crashinfo files stored in flash memory. For more information about crashinfo files, see [http://www.cisco.com/en/US/products/hw/routers/ps167/products\\_tech\\_note09186a00800a6743.shtml](http://www.cisco.com/en/US/products/hw/routers/ps167/products_tech_note09186a00800a6743.shtml).

## Related Documentation

Documents related to the Cisco ASR 901 Series Aggregation Services Router include the following:

- *Cisco ASR 901 Series Aggregation Services Router Hardware Installation Guide*
- *Cisco ASR 901 Series Aggregation Services Router Software Configuration Guide*
- *Regulatory Compliance and Safety Information for Cisco ASR 901 Series Aggregation Services Routers*
- *Cisco ASR 901 Series Aggregation Services Router Series MIB Specifications Guide*

To access the related documentation on Cisco.com, go to:

[http://www.cisco.com/en/US/partner/products/ps12077/tsd\\_products\\_support\\_series\\_home.html](http://www.cisco.com/en/US/partner/products/ps12077/tsd_products_support_series_home.html)

## Services and Support

For information on obtaining documentation, obtaining support, providing documentation feedback, security guidelines, and also recommended aliases and general Cisco documents, see the monthly *What's New* in Cisco Product Documentation, which also lists all new and revised Cisco technical documentation, at:

<http://www.cisco.com/en/US/docs/general/whatsnew/whatsnew.html>

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*Release Notes for Cisco ASR 901 Aggregation Series Router for Cisco IOS Release 15.4(1)S*

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