



# Release Notes for Cisco ASR 901 Series Aggregation Services Router for Cisco IOS Release 15.4(2)S1

---

July 2014

OL-32758-01

This release notes is for the Cisco ASR 901 Series Aggregation Services Router for Cisco IOS Release 15.4(2)S1 and contains the following sections:

- [Introduction, page 1](#)
- [System Specifications and Memory Details, page 2](#)
- [New and Changed Information, page 3](#)
- [Supported Hardware, page 4](#)
- [Caveats, page 7](#)
- [Troubleshooting, page 16](#)
- [Related Documentation, page 17](#)
- [Services and Support, page 17](#)

## 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 1G Router model versions.

**Table 1** *Cisco ASR 901 1G Router Models*

Power Source	TDM + Ethernet Version	Ethernet Version
DC Power	<ul style="list-style-type: none"> <li>A901-12C-FT-D</li> <li>A901-4C-FT-D</li> </ul>	<ul style="list-style-type: none"> <li>A901-12C-F-D</li> <li>A901-4C-F-D</li> </ul>
AC Power	<ul style="list-style-type: none"> <li>none</li> </ul>	<ul style="list-style-type: none"> <li>none</li> </ul>

[Table 2](#) lists the Cisco ASR 901 10G Router model versions.

**Table 2** *Cisco ASR 901 10G Router Models*

Power Source	TDM + Ethernet Version	Ethernet Version
DC Power	<ul style="list-style-type: none"> <li>A901-6CZ-FT-D</li> </ul>	<ul style="list-style-type: none"> <li>A901-6CZ-F-D</li> <li>A901-6CZ-FS-D</li> </ul>
AC Power	<ul style="list-style-type: none"> <li>A901-6CZ-FT-A</li> </ul>	<ul style="list-style-type: none"> <li>A901-6CZ-F-A</li> <li>A901-6CZ-FS-A</li> </ul>



**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 and Memory Details

[Table 3](#) lists the supported system configurations and memory details for the Cisco ASR 901 Router:

**Table 3** *Cisco IOS Release 15.4(2)S1 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

**Table 3** *Cisco IOS Release 15.4(2)S1 Memory Details*

Platform	Software Image	Flash Memory	DRAM Memory	Runs From
Cisco ASR 901 Series Aggregation Services Router, Ethernet version	asr901-universalk9-mz	128 MB	512 MB	RAM
Cisco ASR 901 Series Aggregation Services Router, IPsec enabled Ethernet version	asr901sec-universalk9.mz	256 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:

The following example shows output from Cisco ASR 901 router that supports normal IOS software.

```
Router> show version
```

```
Cisco IOS Software, 901 Software (ASR901-UNIVERSALK9-M), Version 15.4(2)S1, RELEASE SOFTWARE (fc1)
Technical Support: http://www.cisco.com/techsupport
Copyright (c) 1986-2014 by Cisco Systems, Inc.
Compiled Mon 23-Jun-14 06:20 by prod_rel_team
```

The following example shows output from Cisco ASR 901 Series Aggregation Services Router, IPsec enabled Ethernet version.

```
Router> show version
```

```
Cisco IOS Software, 901 Software (ASR901SEC-UNIVERSALK9-M), Version 15.4(2)S1, RELEASE SOFTWARE (fc1)
Technical Support: http://www.cisco.com/techsupport
Copyright (c) 1986-2014 by Cisco Systems, Inc.
Compiled Mon 23-Jun-14 06:20 by prod_rel_team
```

## New and Changed Information

- [New Hardware Features in Release 15.4\(2\)S1, page 3](#)
- [New Software Features in Release 15.4\(2\)S1, page 4](#)
- [Modified Software Features in Release 15.4\(2\)S1, page 4](#)

## New Hardware Features in Release 15.4(2)S1

There are no new hardware features in Cisco IOS Release 15.4(2)S1.

## New Software Features in Release 15.4(2)S1

There are no new software features in Cisco IOS Release 15.4(2)S1.

## Modified Software Features in Release 15.4(2)S1

The following feature is modified in this release:

### Configuring Resilient Ethernet Protocol

Effective with this release, the **rep platform fast-lsl enable** command is introduced to support the Resilient Ethernet Protocol (REP) sessions with Link Status Layer (LSL) timers that are less than one second long.

For configuration information, see the Configuring Resilient Ethernet Protocol at:

[http://www.cisco.com/c/en/us/td/docs/wireless/asr\\_901/Configuration/Guide/b\\_asr901-scg/b\\_asr901-scg\\_chapter\\_01100.html](http://www.cisco.com/c/en/us/td/docs/wireless/asr_901/Configuration/Guide/b_asr901-scg/b_asr901-scg_chapter_01100.html)

For information on the **rep platform fast-lsl enable** command, see the Cisco ASR 901 Series Aggregation Services Router Command Reference at:

[http://www.cisco.com/c/en/us/td/docs/wireless/asr\\_901/Command/Reference/asr901\\_cmdref/Cmdref\\_asr901.html#pgfId-2656177](http://www.cisco.com/c/en/us/td/docs/wireless/asr_901/Command/Reference/asr901_cmdref/Cmdref_asr901.html#pgfId-2656177)

## Supported Hardware

Table 4 and Table 5 shows the SFP modules supported on the Cisco ASR 901 Routers:



#### Note

- 10G SFPs inserted into 1GE port provides 1GE speed.
- 10G SFPs inserted into 10GE port without a valid license provides 1GE speed.
- 100M SFP works only with **no negotiation auto** command.
- Effective with Cisco IOS Release 15.4(1)S, if 1G SFP is used to connect a 10G port to a 1G port, you do not have to explicitly configure the **no negotiation auto** command to bring up the link.

**Table 4 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> <li>• GLC-LX-SM-RGD</li> <li>• GLC-SX-MMD</li> </ul>	<ul style="list-style-type: none"> <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> <li>• GLC-BX40-D-I</li> <li>• GLC-BX40-DA-I</li> <li>• GLC-BX40-U-I</li> <li>• GLC-BX80-D-I</li> <li>• GLC-BX80-U-I</li> </ul>
---	---

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 5 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>
---	--

**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-IPSLA-ETHERNETMIB
- CISCO-MEMORY-POOL-MIB
- CISCO-NETSYNC-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
- OLD-CISCO-SYS-MIB
- OLD-CISCO-TS-MIB
- OSPF-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
- 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
- CISCO-IPSEC-FLOW-MONITOR-MIB
- CISCO-IPSEC-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(2)S1.

Bug ID	Description
<a href="#">CSCsd58192</a>	Multicast MAC entry is formed on a Layer 2 VLAN without a querier.
<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
<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="#">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.



Bug ID	Description
<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.
<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.

Bug ID	Description
<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="#">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="#">CSCud75293</a>	The <b>show rom-monitor</b> command is not showing upgraded ROMMON version in IOS mode.

Bug ID	Description
<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="#">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.
<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="#">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="#">CSCuh81074</a>	The ASR 901 router does not support Multicast Route entry based rate counters. 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="#">CSCui28984</a>	If the accept interface and forward interface are in the same BD, multicast traffic is not forwarded.

Bug ID	Description
<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="#">CSCui85659</a>	Layer 2 control packets (Tx) cannot be spanned.
<a href="#">CSCui88126</a>	Traceback and error message <i>ReachedMaximumNumberIPv6 Hosts</i> is observed during core link flap.
<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="#">CSCuj33687</a>	Node failure in open ring results in high convergence time for REP.
<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="#">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="#">CSCuj86953</a>	Static NAT entries are not created in the translation table unless there is traffic for that translation.
<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="#">CSCul04332</a>	Unknown IP multicast packet flooding is observed when snooping is enabled.
<a href="#">CSCul06056</a>	All config-reg values are accepting “break”.
<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="#">CSCul14767</a>	Process thrashing on IP multicast table shows 300 groups.
<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="#">CSCul30014</a>	Traceback is observed while removing <i>ppp multilink group</i> from serial interfaces which are bundled in BCP over MLPPP.
<a href="#">CSCul41152</a>	Layer 3 traffic drop is observed after REP preemption, in REP setup with VLAN load balancing (VLB).
<a href="#">CSCul47423</a>	During heavy traffic, some of the links stop transmitting traffic and link goes down with the error message <i>WP_ERR_MP_CHANNEL_NOT_DISABLED</i> .
<a href="#">CSCul58461</a>	IGMPv3 Snooping Explicit Host Tracking (EHT) is not working.
<a href="#">CSCul60965</a>	Internet Security Association and Key Management Protocol (ISAKMP) profile is not working with inside global address from outside.
<a href="#">CSCul67908</a>	Internet Group Management Protocol (IGMP) snooping cannot be enabled on specific BDs.

Bug ID	Description
<a href="#">CSCul71854</a>	Traceback is observed at REP LSL Hello PP Process while trying to replace the configuration with G8032 configuration saved in the flash memory.
<a href="#">CSCum04946</a>	For Internet Key Exchange Version 2 (IKEv2), though the tunnel is coming up, the traffic fails to pass through the IPsec tunnel.
<a href="#">CSCum09333</a>	Multicast traffic is looped by Protocol Independent Multicast (PIM) rendezvous point (RP) if traffic is received on a different VLAN.
<a href="#">CSCum20414</a>	High convergence numbers are observed for multicast traffic when Remote Loop-free Alternate (RLFA) - Fast Reroute (FRR) is configured.
<a href="#">CSCum23734</a>	G8032 is not notified for Connectivity Fault Management (CFM) error when static remote MEP (RMEP) is configured.
<a href="#">CSCum40529</a>	Traffic is not flooded to other interface when IGMP report is stopped on one interface.
<a href="#">CSCum43027</a>	For IGMP and MLD snooping, the PIM neighbourship flaps when Resilient Ethernet Protocol (REP) is configured and <i>pim query-interval</i> is set to a value less than 10.
<a href="#">CSCum53244</a>	High CPU usage is observed after configuring multiple segments on the same router with REP Edge No-Neighbor configuration.
<a href="#">CSCum53280</a>	IPsec traffic is not getting encrypted, if Authentication Header (AH) Hashed Message Authentication Codes (HMAC) is used with Encapsulating Security Payload (ESP) encryption algorithm.
<a href="#">CSCum54897</a>	Reduced throughput is observed for non-TCP/UDP IPsec traffic.
<a href="#">CSCum54904</a>	When IPsec traffic breaches 500 Mbps (approximate) for uni-directional traffic and 250 Mbps (approximate) for bi-directional traffic, drastic drop in traffic is observed.
<a href="#">CSCum59363</a>	Ethernet ring flap is observed when the topology has 3 to 4 rings.
<a href="#">CSCum95421</a>	IGMP snooping or MLD snooping entries are not getting updated correctly, when there is a topology change with REP, G8032, or MSTP.
<a href="#">CSCun02393</a>	CPU spike is observed for 10 to 20 seconds when IGMP snooping or MLD snooping is configured with REP or G8032 or MSTP.
<a href="#">CSCun13361</a>	Traffic is not flowing to the IGMP hosts after adding or removing the port-channel member interfaces.
<a href="#">CSCun14432</a>	Router crashes when GigabitEthernet interface is selected as the default interface.
<a href="#">CSCun14606</a>	After configuring the <b>no ipv6 mld snooping vlan num listener-message-suppression</b> command, the running configuration shows <b>no ipv6 mld snooping vlan num report-suppression</b> . After reboot, the configuration is not accepted and the configuration is lost.
<a href="#">CSCun25855</a>	IPsec counters are doubled when re-keying is enabled.
<a href="#">CSCun27273</a>	MPLS Label Distribution Protocol (LDP) bindings are being created for virtual console IP.
<a href="#">CSCun30789</a>	Router crashes after adding new class with match on QoS group.
<a href="#">CSCun33689</a>	IPsec tunnel ping fails, with repeated removal and addition of tunnel protection from the tunnel interface.

Bug ID	Description
<a href="#">CSCun29980</a>	Sometimes, CFM is not sending failure notification to G8032.
<a href="#">CSCun41738</a>	Traceback is observed on route processor while 500 MLD groups are used.
<a href="#">CSCun42385</a>	CPU process is running even after IPSLA is disabled.
<a href="#">CSCun42436</a>	Ethernet loopback failure is noticed during service performance testing on both sender and responder.
<a href="#">CSCun44319</a>	If more than 100 IGMP joins or leaves occur in a single burst, some entries might get dropped. It works fine up to a maximum of 100 joins or leaves in a single burst.
<a href="#">CSCun48620</a>	Neighbor solicitation (NS) bit is not cleared for IPv4 multicast groups.
<a href="#">CSCun51336</a>	Open Shortest Path First (OSPF) remains active even after configuring Access Control List (ACL) deny any on the interface.
<a href="#">CSCun52296</a>	Validblock_diagnose crash with code 2 and 8 on Soak with triggers.
<a href="#">CSCun52716</a>	Egress policy counters are not working after applying on the port-channel interface.
<a href="#">CSCun58346</a>	The <b>clear ip nat translation</b> command is not clearing translation entries.
<a href="#">CSCun70313</a>	Micro loop is observed with Multiple Spanning Tree Protocol (MSTP), when the port channel is in no shut mode.
<a href="#">CSCun76522</a>	The Bit Error Rate Test (BERT) sync counter is not getting reset from one test to another.
<a href="#">CSCun81002</a>	The ACL slices are showing double wide in the Cisco ASR 901 10G IPsec/NAT router.
<a href="#">CSCun86086</a>	The show environment command is showing inconsistent speeds for different fans (fan 1 and 2 are having same speed, while fan 3 shows a different speed).
<a href="#">CSCu138240</a>	Data packets are not getting spanned with port-channel as source port on PE having xconnect.
<a href="#">CSCum09471</a>	Traffic drop is observed on other receiver in the scale scenario. When leave is sent from the host connected on DR side, drop occurs on receiver connected on querier.
<a href="#">CSCun96531</a>	The <b>show license</b> command output always shows the ipsecnatpat license as 'not in use'.
<a href="#">CSCun03965</a>	IOS time does not synchronize with Linux time.
<a href="#">CSCun25150</a>	High convergence number is observed when G.8032 is configured with port-channel interfaces.
<a href="#">CSCup07476</a>	After reload, the traffic generator over Xconnect does not start.
<a href="#">CSCug36837</a>	Dynamic change of queue limit is not supported on Cisco ASR 901 Router.
<a href="#">CSCup08176</a>	<b>show logging onboard voltage</b> command does not display the relevant output.
<a href="#">CSCun07003</a>	Traceback is observed while enabling multicast.

Bug ID	Description
<a href="#">CSCun83950</a>	IP and Connectionless Network Service (CLNS) routers flap, and traceback is observed on xconnect.
<a href="#">CSCun99104</a>	Traceback is observed while configuring offload CFM sessions.
<a href="#">CSCuo08953</a>	Cisco ASR 901 Router crashes when the core interface flaps and the <b>debug platform software qos all</b> command is enabled.
<a href="#">CSCuo28247</a>	Remote MEP is not discovered since router in the remote complains incorrect CFM packets.
<a href="#">CSCuj38194</a>	Cisco ASR 901 Router hangs while writing about the keystone initialization crash information.
<a href="#">CSCuo59587</a>	SFP is not getting detected.
<a href="#">CSCuq07013</a>	Traffic is not flowing from Cisco ASR 901 router running the IPsec software to other routers.

## Resolved Caveats

This section provides information about the resolved caveats for the Cisco ASR 901 Router running Cisco IOS Release 15.4(2)S1.

Bug ID	Description
<a href="#">CSCud66147</a>	Master FLL state does not change to the normal but gets stuck in the acquiring state with valid ToD and 1 PPS interface.
<a href="#">CSCuh86459</a>	Detection of Avago type GigabitEthernet SFP may sometimes fail. To recover, remove and re-insert the SFP.
<a href="#">CSCui59984</a>	Resilient Ethernet Protocol (REP) flaps with low Link Status Layer (LSL) timers, for the following scale: <ul style="list-style-type: none"> <li>• Scale of MAC address</li> <li>• Scale of bridge-domain</li> <li>• Repeated or multiple REP topology changes</li> <li>• CPU intensive activities.</li> </ul>
<a href="#">CSCuj62912</a>	Platform logs are appearing on Downstream Unencrypted Traffic (DUT) console after enabling and disabling Bootstrap Router (BSR) route processor (RP) candidate.
<a href="#">CSCul24443</a>	Cisco ASR 901 Router crashes while scaling the service instance to 3.6 k.
<a href="#">CSCul29833</a>	Duplicate traffic is appearing in bridge domain (BD) after changing the designated router (DR) priority.
<a href="#">CSCul73770</a>	Cisco ASR 901 Router crashes while adding an interface to the port-channel.
<a href="#">CSCum24876</a>	High convergence numbers are observed from the redundant path after the port channel is shut with REP preempt.
<a href="#">CSCum35492</a>	Strict PQ drops when changing the speed in the interface.
<a href="#">CSCum45798</a>	Dynamic IP NAT is not working.



Bug ID	Description
<a href="#">CSCum48108</a>	Convergence is taking more time with LFA-FRR on local shut of BFD enabled path.
<a href="#">CSCun03936</a>	Access list configuration fails during boot up when NAT is configured with pool.
<a href="#">CSCun21177</a>	In Cisco ASR 901 Router, CoS-based ingress policy does not working consistently.
<a href="#">CSCun30477</a>	Traceback is observed with SNMPGET.
<a href="#">CSCun35809</a>	Traceback is observed after executing <b>show rep topology</b> command when REP is configured.
<a href="#">CSCun41498</a>	Untagged EVCs are allowing tagged packets with Tag Protocol ID (TPID) of 9200.
<a href="#">CSCun48199</a>	Cisco ASR 901 Router crashes when class-default is removed from the policy-map
<a href="#">CSCun48323</a>	Invalid bridge domain index error messages are displayed on deleting the reserved bridge domains.
<a href="#">CSCun58224</a>	Scaling NAT sessions leads to memory issues. This issue is observed when there are multiple translation entries of NAT with overload.
<a href="#">CSCun61597</a>	UDP packets fail in IPsec tunnel even when the IPsec SA is up.
<a href="#">CSCun62497</a>	After changing interface configurations (EVC), hardware multicast table is not getting updated properly.
<a href="#">CSCun64957</a>	Group replication fails on the LHR (RP also) after reloading the transit router.
<a href="#">CSCun88621</a>	Memory leak is observed while reconfiguring the ring node interface multiple times.
<a href="#">CSCun99911</a>	It is not possible to set <b>license boot level airbase/advance</b> command on the Cisco ASR 901 Router, IPsec enabled Ethernet version.
<a href="#">CSCuo75189</a>	CFM traceroute fails while adding MIP with qnq pop2 configuration.
<a href="#">CSCuo85100</a>	The Cisco ASR 901 1G router automatically reloads when working at temperature less than minus 20 degree Centigrade (minus 4 degree Fahrenheit).

## 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:

Cisco ASR 901 1G Router home page:

[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)

Cisco ASR 901 10G Router home page:

<http://www.cisco.com/c/en/us/support/routers/asr-901-10g-series-aggregation-services-routers/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>

Cisco and the Cisco logo are trademarks or registered trademarks of Cisco and/or its affiliates in the U.S. and other countries. To view a list of Cisco trademarks, go to this URL: [www.cisco.com/go/trademarks](http://www.cisco.com/go/trademarks). Third-party trademarks mentioned are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (1110R)

*Release Notes for Cisco ASR 901 Aggregation Services Router for Cisco IOS Release 15.4(2)S1*

© 2014, Cisco Systems, Inc. All rights reserved.

