

# Release Notes for Cisco ASR 901 Series Aggregation Services Router for Cisco IOS Release 15.1(2)SNI

### May 2012

OL-27180-01

This release notes is for the Cisco ASR 901 Series Aggregation Services Router for Cisco IOS Release 15.1(2)SNI, and contains the following sections:

- Introduction, page 1
- System Specifications, page 2
- New and Changed Information, page 3
- Limitations and Restrictions, page 4
- Supported Hardware, page 5
- Supported MIBs, page 7
- Caveats, page 8
- Troubleshooting, page 15
- Related Documentation, page 16
- Services and Support, page 16

## 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 radio access network (RAN). The Cisco ASR 901 router includes the following models:

- Cisco ASR 901 Router TDM version (A901-12C-FT-D, A901-4C-FT-D)
- Cisco ASR 901 Router Ethernet version (A901-12C-F-D, A901-4C-F-D)





Cisco ASR 901 models A901-4C-FT-D and A901-4C-F-D are introduced in this release, with port based licensing. For more details, see the Licensing chapter in *Cisco ASR 901 Series Aggregation Services Router Software Configuration Guide*.

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 HSPA or 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.

# **System Specifications**

## **Memory Details**

Table 1 lists the memory available for the Cisco ASR 901 router.

Table 1 Cisco IOS Release 15.1(2)SNI 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 15.1(2)SNI, RELEASE SOFTWARE (fc2)
Technical Support: http://www.cisco.com/techsupport
Copyright (c) 1986-2012 by Cisco Systems, Inc.
Compiled Tue 08-May-12 12:09 by prod_rel_team
```

## **New and Changed Information**

#### New Hardware Features in Release 15.1(2)SNI

There are no new hardware features in Release 15.1(2)SNI.

#### New Software Features in Release 15.1(2)SNI

Cisco ASR 901 router supports the following features from this release:

- Structure-Agnostic TDM over Packet (SAToP) is a structure-agnostic protocol for transporting TDM using pseudowires (PW). PW connections using SAToP are supported.
- SAToP pseudowire with UDP encapsulation is supported.
- CESoPSN pseudowire with UDP encapsulation is supported.
- QoS for CESoPSN over UDP and SAToP over UDP—IP DSCP and IP Precedence via service-policy, and Type of Service (ToS) settings are supported in pseudowire class.
- L2VPN Pseudowire Redundancy feature:
  - provides backup service for circuit emulation (CEM) pseudowires.
  - enables the network to detect failure, and reroute the Layer 2 (L2) service to another endpoint that can continue to provide the service.
  - provides the ability to recover from a failure: either the failure of the remote PE router, or of the link between the PE and the CE routers.
- T1 Local Switching—This feature allows switching of Layer 2 data between two CEM interfaces on the same router.
- IEEE 1588-2008 (PTPv2) Ordinary Clock (OC) Master Clock mode is supported.
- G.781 QL-enabled mode is supported for synchronization clock selection to avoid timing loops in the network.
- ESMC—This feature dynamically distributes clock-quality across synchronous ethernet links and enables selection of the best clock in the network.
- Onboard Failure Logging (OBFL)—OBFL provides a mechanism to store hardware, software, and
  environment related critical data in a non-volatile memory, such as flash EPROM or EEPROM on
  routers. Stored OBFL data can be retrieved in the event of a crash or failure.
- MAC Flap control—A MAC flap occurs when a switch receives packets from two different
  interfaces, with the same source MAC address. When a MAC flap occurs, Cisco ASR 901 does
  Err-Disabling in one of the ports that has flapping.
- CFM over EFP Interface with cross connect— This feature allows you to:
  - Forward continuity check messages (CCM) towards the core over cross connect pseudowires.
  - Receive CFM messages from the core.
  - Forward CFM messages to the access side (after Continuity Check Database [CCDB] based on maintenance point [MP] filtering rules).
- IPSLA Path Discovery—The LSP path discovery (LPD) feature allows the IP SLA MPLS LSP to automatically discover all the active paths to the forwarding equivalence class (FEC), and configure LSP ping and traceroute operations across various paths between the provide edge (PE) devices.
- Routed QinQ—Pop 2 configuration is supported.

- Port Based EoMPLS—Port mode allows a frame coming into an interface to be packed into an MPLS packet and transported over the MPLS backbone to an egress interface. The entire ethernet frame without the preamble or FCS is transported as a single packet.
- Rommon and MCU upgrade—Upgradable MCU and ROMMON is bundled with the IOS image.
   Once the IOS image is upgraded, both the MCU and the ROMMON images also get upgraded.
- T1.403 remote loopback—Cisco ASR 901 accepts the remote loopback (line and payload) initiated at the far end.
- Layer3 VPN over REP/MST is supported.

## **Limitations and Restrictions**

Cisco IOS Release 15.1(2)SNI for the Cisco ASR 901 has the following limitations and restrictions:

- QinQ configuration for layer 3 is possible only with rewrite pop2 symmetric.
- Layer 2 forwarding is not supported in QinQ configuration, with rewrite pop2 symmetric.
- Default xconnect MTU is 9216.
- For interoperability with other routers for an xconnect session, ensure that the MTU on both PE routers is same before the xconnect session is established.
- Bridge Domain IDs 4093, 4094, and 4095 are reserved for internal usage.
- In a default configuration, Cisco ASR 901 does not run any spanning-tree protocol. Therefore, all the ports participating in bridge domains are moved to the forward state. To enable MSTP, use the **spanning-tree mode mstp** command in the global configuration mode.
- Cisco ASR 901 does not support VRF on TDM interfaces.

#### ACL

- Following IOS keywords are not supported on Cisco ASR 901—match-any, ip-options, logging, icmp-type/code, igmp type, dynamic, reflective, evaluate.
- Ingress PACL and RACL supports TCP/UDP port range.
- Egress ACL does not work if the encapsulation VLAN id and the bridge domain number are different.
- ACL is not supported on Management port (Fast Ethernet) and serial interfaces.
- Devices in the management network (network connected to Fast Ethernet port) cannot be accessed from any other port. If the default route is configured on Cisco ASR 901 to fast ethernet interface
- (Fa0/0), all the routed packets will be dropped. However, this configuration could keep CPU busy and affect overall convergence.

#### Clocking

- External interfaces like BITS and 1PPS have only one port—they work either as an input interface or output interface at a given time.
- The line to external option for external SSU is not supported.
- ToD is not integrated to the router system time. ToD input or output reflects only the PTP time, not the router system time.
- Revertive and non-revertive modes work well only with two clock sources.
- BITS cable length option is supported via platform timing bits line-build-out command.

- There is no automatic recovery from OOR Alarms. It has to be manually cleared using clear platform timing oor-alarms command.
- If copper Gigabit Ethernet port is selected as the input clock source, the link should be configured as a IEEE 802.3 link-slave, using synce state slave command.
- BITS reports LOS only for AIS, LOS and LOF alarms.
- Loop timing is not supported in E1/T1 controllers. (IOS Command—clock source line).
- However, the clock can be recovered from T1/E1 lines and used to sync system clock using the IOS command network-clock input-source cprio> controller <E1/T1> 0/x.

#### IEEE 1588v2 (PTP)

- Only ordinary clock is supported.
- Unicast Direct and Unicast Negotiation modes are supported; Multicast mode is not supported.
- Single and two-step modes are supported.
- VLAN 4093 is used for internal PTP communication; do not use 4093 in your network.
- Loopback interface is used in Cisco ASR 901 router instead of ToP interface for configuring 1588 interface/IP address.
- The output 1pps command is not supported. Alternately, you can use the no input 1pps command.
- Sync and Delay request rates should be above 32pps, the optimum value being 64pps.
- Clock-ports even when configured as slave-only, start off as master. So the initial or reset state of the clock always shows as master. This implies that the master should have higher priority (priority 1, priority 2) for the slave to accept the master.
- When you configure a loopback address on an interface, make sure that this loopback interface is reachable (using ICMP ping) from remote locations, before assigning the interface to PTP. Once the interface is assigned to PTP, it does not respond to ICMP pings.

#### T1 Local Switching

- Autoprovisioning is not supported.
- Out-of-band signaling is not supported.
- Port mode local switching is not supported on the CEM interface.
- Interworking with other interface types is not supported.
- The same CEM circuit cannot be used for both local switching and xconnect.
- You cannot use CEM local switching between two CEM circuits on the same CEM interface.

# **Supported Hardware**

The Cisco ASR 901 router supports the following SFP modules:

- GLC-LX-SM-RGD
- GLC-SX-MM
- GLC-SX-MM-RGD
- GLC-ZX-SM
- GLC-ZX-SM-RGD

- GLC-T
- GLC-FE-100FX-RGD
- GLC-LH-SM
- GLC-BX-D
- SFP-GE-L
- SFP-GE-S
- SFP-GE-Z
- SFP-GE-T
- SFP-LX-SM
- SFP-SX-MM

For information about 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:

- CISCO-CDP-MIB
- CISCO-CEF-MIB
- CISCO-CONFIG-COPY-MIB
- CISCO-CONFIG-MAN-MIB
- CISCO-ENHANCED-MEMPOOL-MIB
- CISCO-ENTITY-VENDORTYPE-OID-MIB
- CISCO-FLASH-MIB
- CISCO-IETF-PW-MIB
- CISCO-IF-EXTENSION-MIB
- CISCO-IMAGE-MIB
- CISCO-MEMORY-POOL-MIB
- CISCO-EIGRP-MIB
- CISCO-PROCESS-MIB
- CISCO-PRODUCTS-MIB
- CISCO-RTTMON-MIB
- CISCO-NTP-MIB
- CISCO-SMI-MIB
- CISCO-OAM-MIB
- CISCO-SYSLOG-MIB
- CISCO-CLASS-BASED-QOS-MIB
- CISCO-QUEUE-MIB
- CISCO-CAR-MIB
- CISCO-CAS-IF-MIB
- CISCO-ENTITY-ASSET-MIB
- CISCO-ENVMON-MIB
- ENTITY-MIB
- IANAifType-MIB
- IEEE8021-CFM-MIB
- IF-MIB
- OLD-CISCO-CHASSIS-MIB
- OLD-CISCO-INTERFACES-MIB
- OLD-CISCO-SYS-MIB
- OLD-CISCO-IP-MIB

- OLD-CISCO-TS-MIB
- CISCO-SNAPSHOT-MIB
- CISCO-PING-MIB
- SNMP-TARGET-MIB
- SNMPv2-CONF
- SNMPv2-MIB
- SNMPv2-SMI
- BGP4-MIB
- OSPF-MIB
- CISCO-OSPF-MIB
- CISCO-STP-EXTENSIONS-MIB
- IP-MIB
- TCP-MIB
- UDP-MIB
- EtherLike-MIB
- BRIDGE-MIB
- INT-SERVE-MIB
- CISCO-RESILIENT-ETHERNET-PROTOCOL -MIB
- EOAM-MIB
- CISCO-NETSYNC-MIB
- CISCO-PTP-MIB
- HCNUM-TC
- PerfHist-TC-MIB
- MPLS-LSR-MIB
- MPLS-LDP-MIB
- MPLS-VPN-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. In the severity 3 category, only select few caveats are listed.

This section contains the following topics:

- Using Bug Toolkit
- Open Caveats
- Resolved Caveats

## **Using Bug Toolkit**

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 tool kit. This section explains how to use the bug toolkit and has the following topics:

- Search Bugs
- Save Bugs
- Save Search
- · Retrieve Saved Search or Bugs
- Export to Spreadsheet

### **Search Bugs**

The following steps explain how to use the Bug ToolKit to search for a specific bug.

Step 1 Go to http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl.

You are prompted to log into Cisco.com. After successful login, the Bug Toolkit page opens.

- Step 2 Click Launch Bug Toolkit.
- Step 3 To search for a specific bug, enter the bug ID in the Search for Bug ID field and click Go in the Search Bugs tab.

To search for bugs in a specific release, enter the following search criteria:

- Select Product Category—Select Routers.
- Select Products—Select the required product from the list. For example, to view bugs for Cisco ASR 901, choose Cisco ASR 901 Series Aggregation Services Router from the list.
- Software Version—Choose the required Cisco IOS version from the drop-down lists. For example, to view the list of outstanding and resolved bugs in Cisco IOS Release 15.1(2)SNI, choose **15.1** from the first drop-down list, **2** from the second drop-down list, and **SNI** from the third drop-down list.
- Search for Keyword(s)—Separate search phrases with boolean expressions (AND, NOT, OR) to search within the bug title and details.
- Advanced Options—You can either perform a search using the default search criteria or define
  custom criteria for an advanced search. To customize the advanced search, select Use custom
  settings for severity, status, and others and provide the following information:

- Severity—Select the severity level.
- Status—Select **Open**, **Fixed**, or **Terminated**.

Select **Open** to view all the open bugs. To filter the open bugs, clear the Open check box and select the appropriate sub-options that appear below the Open check box. The sub-options are New, Held, More, Open, Waiting, Assigned, Forwarded, Postponed, Submitted, and Information Required. For example, if you want to view only new bugs in Cisco IOS Release 12.2(33)SCD, select **New**.

Select **Fixed** to view fixed bugs. To filter fixed bugs, clear the Fixed check box and select the appropriate sub-options that appear below the Fixed check box. The sub-options are **Resolved** or **Verified**.

Select **Terminated** to view terminated bugs. To filter terminated bugs, clear the Terminated check box and select the appropriate sub-options that appear below the terminated check box. The sub-options are **Closed**, **Junked**, and **Unreproducible**. Select multiple options as required.

- Advanced—Select the Show only bugs containing bug details check box to view only those
  bugs that contain detailed information, such as symptoms and workarounds.
- Modified Date—Select this option if you want to filter bugs based on the date on which the bugs were last modified.
- Results Displayed Per Page—Select the appropriate option from the list to restrict the number of results that appear per page.
- Step 4 Click Search. The Bug Toolkit displays the list of bugs based on the specified search criteria.

### **Save Bugs**

Complete these steps to save the bugs retrieved by your search in a specific release.

- **Step 1** Perform a search.
  - Repeat Step 1 through Step 3 in the "Search Bugs" section on page 8.
- Step 2 Select the check boxes next to the bug you want to save in the Search Results page and click Save Checked.

The Save Bug Settings dialog box appears under the Search Bugs tab.

- **Step 3** Specify group settings in the **Place in Group** field.
  - Existing Group—Select an existing group.
  - Create New Group—Enter a group name to create a new group.

Existing groups have their group notification options already set. If you select an existing group, go to Step 5.

- **Step 4** Specify the following email update (group notification) options.
  - No emailed updates—Select if you do not want to receive email updates.
  - Yes, email updates to—Enter your email address.
    - On a schedule—Specify the frequency of email delivery.
- Step 5 Click Save Bug.

The Bug ToolKit saves the selected bugs in the specified group.

### **Save Search**

Complete these steps to save your search.

**Step 1** Perform a search.

Repeat Step 1 through Step 3 in the "Search Bugs" section on page 8.

**Step 2** Click **Save Search** in the Search Results page to save your search with the specified criteria.

The Save Search Settings dialog box appears under the My Notifications tab.

- Step 3 Enter a name for your search in the Search Name field.
- **Step 4** Specify group settings in the **Place in Group** field.
  - Existing Group—Select an existing group.
  - Create New Group—Enter a group name to create a new group.

Existing groups have their group notification options already set. If you select an existing group, go to Step 6.

- **Step 5** Specify the following email update (group notification) options.
  - No emailed updates—Select if you do not want to receive email updates.
  - Yes, email updates to—Enter your email address.
    - On a schedule—Specify the frequency of email delivery.
- Step 6 Click Save Search.

The Bug ToolKit saves your search in the specified group.

### **Retrieve Saved Search or Bugs**

Complete these steps to retrieve a saved search or bugs.

Step 1 Go to http://www.cisco.com/cgi-bin/Support/Bugtool/launch\_bugtool.pl and click Launch Bug Toolkit.

You are prompted to log into Cisco.com.

Step 2 Click My Notifications tab.

My Notifications tab displays the Group Name, Summary, and Actions.

- **Step 3** Click the group in the Group Name column. The group contains saved search and bugs.
- **Step 4** Retrieve saved search or bugs.
  - Click the saved search name to display the Search Results page.
  - Click the saved bug to display details or hover your mouse pointer over the Info link.

The My Notifications tab also provides option to delete bug, delete search, delete group, edit group notifications (in the Actions column), move selected saved search or bugs to different group, and to export saved bugs in all the groups to a spreadsheet.

### **Export to Spreadsheet**

The Bug ToolKit provides the following options to export bugs to a spreadsheet:

- Click the **Export All to Spreadsheet** link in the Search Results page under the Search Bugs tab. Specify a file name and folder name to save the spreadsheet to. All the bugs retrieved by the search are exported.
- Click the **Export All to Spreadsheet** link in the My Notifications tab. Specify a file name and folder name to save the spreadsheet to. All the saved bugs in all the groups are exported.

If you are unable to export the spreadsheet, log into the Technical Support Website at <a href="http://www.cisco.com/cisco/web/support/index.html">http://www.cisco.com/cisco/web/support/index.html</a> for more information or call Cisco TAC (1-800-553-2447).

## **Open Caveats**

This section provides information about the open caveats for the Cisco ASR 901 router running Cisco IOS Release 15.1(2)SNI and later.

Bug ID	Description	
CSCtr70228	High CPU utilization (98%) observed in Exec, on performing save or copy operation. However, this does not have any impact on system functionality.	
CSCtx77374	When keepalive is disabled on a serial interface that is part of a multilink interface, input errors may increment incorrectly for the serial interface when it flaps.	
CSCtx34208	Interface Gigabitethernet 0/4 does not get selected as sync-e clock source for the board, when the media-type of the interface is SFP.	
	To work around the issue, increase the global hold-off time from 300ms to 1800ms using the following command:	
	Router(config)# interface GigabitEthernet0/4 Router(config)# network-clock hold-off 1800 global	
	There is no such issue when the media type is copper.	
CSCts92808	WRED counters for discard class 0 is not supported.	
CSCtx41514	Crashinfo is not dumped when the router crashes due to machine check exception.	
CSCts84679	CEM interface displays wrong configuration output in the running-configuration, when pw-class is configured.	
CSCtt14439	Ping size 1499 fails on moving all member links from one MLPPP group to another.	

Bug ID	Description	
CSCtw77870	When a policy-map that is attached as an egress service-policy under a MLPPP interface is deleted, while the service-policy is still attached to the MLPPP interface, a QoS assertion failure occurs and a traceback is thrown.	
CSCtx14499	CPUHOG and tracebacks observed on executing <b>show license status</b> command. However, this does not have any impact on system functionality.	
CSCtx22010	SyncE is not supported for the following SFPs:	
	• GLC-T	
	• SFP-GE-T	
CSCtk33675	Service instance configuration is rejected when the encapsulation is default for double tagged traffic.	
CSCtl19081	Unconfigure an NNI port; Configuration is not modified and the bidirectional traffic flows without any interruption.	
CSCtl70431	The <b>no rewrite</b> operation throws an error, though it becomes operational on the interface.	
CSCtn71094	Interface VLAN 1 is deleted when the <b>no int vlan 1</b> command is used.	
CSCtn79746	The <b>show ethernet service instance stats</b> command does not show any statistics.	
CSCtr66435	Interface counters show incorrect values when you configure L2 NNI and UNI interface and send packets over the interfaces.	
CSCts80072	MPLS forwarding-table counters are not incremented.	
CSCtr05566	For MPLS core interface on port channel, the bridge domain should be configured the same as the encapsulation ID. This should not be untagged as well.	
CSCts66081	Ingress VLAN translation failures are seen with more than 3000 VLAN Translation entries.	
	This can be seen with EVCs or EVCs in combination with EOMPLS sessions, mounting to more than 3000 entries; This can cause layer 2 traffic failure or EOMPLS traffic failure due to VLAN translation issues.	
CSCtt20958	Whenever a syslog message SRC_UPD is generated, a fixed small amount of memory is lost. This happens only if the controller or interface is part of the input clock source and an AIS or OOR alarm is raised on that controller or interface.	
CSCtw98202	IP SLA echo and jitter is not supported over xconnect.	
CSCtw52497	If you reload the router with write erase, and copy the saved configuration to the running configuration, the interface may drop all the ingress packets.	
	This happens only if there is a hierarchical queuing policy attached to the interface. To work around the issue, copy and paste the saved configuration from the router terminal, instead of copying from the file.	

Bug ID	Description	
CSCtt28873	Following configurations are not logically possible:	
	• dot1ad EFP with single pop	
	• dot1q EFP with single pop	
	Cisco ASR 901 router validates such illogical configurations and throws error in some scenarios. However, the validation routine does not cover all the scenarios; the sequence of configuration may also cause the validation to skip the error. To avoid errors, you can manually check the configuration.	
CSCts85484	On using the rep preempt segment segid command, you may see the following syslog and a trace back:	
	Mar 8 00:02:49.587 IST: %SYS-3-CPUHOG: Task is running for (28)msecs, more than (28)msecs (1/1),process = REP LSL Hello PP Process.  These trace backs are harmless and will not degrade the router performance.	
CSCtq26793	Occasionally, some ports may not get bundled in the port channel, due to port attributes mismatch (such as flow-control).	
	To workaround the issue, configure the same flow control values on the local as well as the remote router. This ensures that the ports get bundled.	
CSCtz38207	On Cisco ASR 901 router, when both the fans fail, DUT reboots. When the IOS comes up, it checks the fans status, sees them in failed state and goes for a reload again.	
	This continues until the fans are repaired.	
CSCty04070	Traffic fails and continuous traceback is observed, when xconnect is configured on untagged EVC.	
CSCtz82423	Occasionally, copper SFP link does not come up during online insertion.	
	Workaround is to remove and insert the copper SFP from the port on both the sides. This makes the link come up.	
CSCtz83067	Creation of a CEM circuit fails in the following scenario:	
	1. Unconfigure MLPPP and channel-group.	
	<b>2.</b> Configure cem-group and local switching connection by copying and pasting the configuration.	
	To workaround the issue, configure directly on the terminal, instead of copying and pasting the configuration commands.	

Bug ID	Description	
CSCtz83100	Data plane of a CEM local switching connection may not function in the following scenario:	
	1. Unconfigure MLPPP and channel-group.	
	<b>2.</b> Configure cem-group and local switching connection by loading the configurations from a stored configuration file.	
	To workaround the issue, configure directly on the terminal, instead of loading the configurations from a stored configuration file.	
CSCtz71758	One of the alarms, RAI alarm, is not sent out by the router for T1 circuits, when a T1 circuit receives or detects AIS/LOF/LOS alarms.	
CSCtz67224	Serial or PPP interface may come down and the PPP process may stop running on Cisco ASR 901 in the following scenario:	
	MLPPP session is established; pings are running over the session on the router, and the peer router is reloaded numerous times (say 100 times).	
	Reloading the router helps in recovering from the issue.	

## **Resolved Caveats**

This section provides information about the resolved caveats for the Cisco ASR 901 router running Cisco IOS Release 15.1(2)SNI and later.

Bug ID	Description	
CSCtw83002	Whenever REP ring was brought up and BFD was also enabled, the REP neighbors started flapping.	
CSCtw66503	When CEM configuration was applied to all the 16 controllers simultaneously, like copying and pasting CEM configuration or through scripting, E1/T1 controllers were in down state and CESoPSN pseudowire did not come up.	
CSCtw47874	On reloading the router, the configuration of named, IP extended, access list failed and the configuration of the access group disappeared from the running configuration.	
CSCtr19507	After enabling BFD on an interface and configuring an IPV4 static route with BFD routing through this interface, the IPV4 BFD session did not get established at times.	
CSCtq99321	If Layer 2 and Layer 3 VPNs were configured on Cisco ASR 901, and they participated in the REP ring, the router did not switch the traffic when an MPLS egress port is switched due to REP topology change.	
CSCts85351	BITS Out configured in the T1 mode sent the wrong frame type.	

Bug ID	Description	
CSCts85464	Shutdown of physical interface occasionally took upto 500 ms REP convergence time. The cable pull REP convergence time was around 120 to 250 ms.	
CSCtt28876	With Cisco ASR 901 TDM version base license, BITS can not be configured.	
CSCtt20958	At times, OOR alarms were raised in T1/E1 lines network clock source after clearing LOF, as given below:	
	<ul> <li>Occasionally, when there was a configuration change like framing mode change in remote controller, or a priority change in network-clock source, Cisco ASR 901 detected OOR alarms. As a result, the clock source went down till you manually cleared the alarm (using clear platform timing oor-alarms command).</li> </ul>	
CSCty27254	When a fan fails on the router, there was no remote alarm.	
CSCty20483	Cisco ASR 901 router shutdown at 60 celsius, instead of 65 celsius.	
CSCty26685	In band TFTP download (via the gigabit ethernet ports) was either timing out or taking up to two hours to complete.	
CSCty65899	Cisco ASR 901 router boards had very high fan noise.	
CSCtw55341	MLPPP class map counters for queues, display the egress packet count.	
CSCtx54254	The show environment command is missing in the Cisco ASR 901 router.	
CSCty06273	Voltage rail 1.25V is not supported on a the Cisco ASR 901 router ethernet version models.	
CSCty06403	Line six voltage1.05V is displayed incorrectly in the environment monitor output.	
CSCtx92040	The service unsupported-transceiver command did not show up in the running configuration	
CSCtx21938	Network Time Protocol (NTP) did not sync on Cisco ASR 901 router.	
CSCtz43977	MCU upgrade failed occasionally in Cisco ASR 901 router.	
CSCty56893	QinQ configuration did not support multiple NNI ports.	
CSCtw80038	The following SFPs worked only in the one gigabit ethernet mode:	
	• GLC-T	
	• SFP-GE-T	

# **Troubleshooting**

### **Collecting Data for Router Issues**

To collect data for reporting router issues, use 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, use the following command while in the EXEC mode:

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



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 <a href="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</a>.

## **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 Command Reference

## **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: <a href="https://www.cisco.com/go/trademarks">www.cisco.com/go/trademarks</a>. 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)

 $Release\ Notes\ for\ Cisco\ ASR\ 901\ Aggregation\ Series\ Router\ for\ Cisco\ IOS\ Release\ 15.1(2) SNI$ 

© 2012, Cisco Systems, Inc All rights reserved.