



Release Notes for Cisco ASR 901 Series Aggregation Services Router for Cisco IOS Release 15.5(2)S2

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This release notes is for the Cisco ASR 901 Series Aggregation Services Router for Cisco IOS Release 15.5(2)S2 and contains the following sections:

- [Introduction, page 1](#)
- [System Specifications and Memory Details, page 2](#)
- [New and Changed Information, page 3](#)
- [Supported MIBs, page 4](#)
- [Caveats, page 4](#)
- [Troubleshooting, page 5](#)
- [Related Documentation, page 6](#)
- [Obtaining Documentation and Submitting a Service Request, page 6](#)

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"> A901-12C-FT-D A901-4C-FT-D 	<ul style="list-style-type: none"> A901-12C-F-D A901-4C-F-D
AC Power	<ul style="list-style-type: none"> none 	<ul style="list-style-type: none"> none

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"> A901-6CZ-FT-D 	<ul style="list-style-type: none"> A901-6CZ-F-D A901-6CZ-FS-D
AC Power	<ul style="list-style-type: none"> A901-6CZ-FT-A 	<ul style="list-style-type: none"> A901-6CZ-F-A A901-6CZ-FS-A



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 15.5(2)S2 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
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.

```
ASR901_1> show version
Cisco IOS Software, 901 Software (ASR901-UNIVERSALK9-M), Version 15.5(2)S2, RELEASE
SOFTWARE (fc1)
Technical Support: http://www.cisco.com/techsupport
Copyright (c) 1986-2015 by Cisco Systems, Inc.
Compiled Fri 16-Oct-15 08:38 by prod_rel_team

ROM: System Bootstrap, Version 15.5(3r)S1, RELEASE SOFTWARE (fc1)

ASR901_1 uptime is 1 hour, 2 minutes
System returned to ROM by reload at 11:45:07 IST Mon Oct 19 2015
System restarted at 11:48:44 IST Mon Oct 19 2015
System image file is
"tftp://202.153.144.25//auto/tftp-blr-users3/pguntur/images/XE315_Renumbered_-ASR901_1"
Last reload type: Normal Reload
Last reload reason: Reload Command
```

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

```
SANR4> show version
Cisco IOS Software, 901 Software (ASR901SEC-UNIVERSALK9-M), Version 15.5(2)S2, RELEASE
SOFTWARE (fc1)
Technical Support: http://www.cisco.com/techsupport
Copyright (c) 1986-2015 by Cisco Systems, Inc.
Compiled Fri 16-Oct-15 08:58 by prod_rel_team

ROM: System Bootstrap, Version 15.5(3r)S1, RELEASE SOFTWARE (fc1)

SANR1 uptime is 1 minute
System returned to ROM by reload at 18:53:09 IST Mon Oct 19 2015
System restarted at 18:55:19 IST Mon Oct 19 2015
System image file is
"tftp://202.153.144.25//auto/tftp-blr-users4/abpujaha/images/XE315_Renumbered_Santorin"
Last reload type: Normal Reload
Last reload reason: Reload Command
```

New and Changed Information

- [New Hardware Features in Release 15.5\(2\)S2, page 3](#)
- [New Software Features in Release 15.5\(2\)S2, page 4](#)
- [Modified Software Features in Release 15.5\(2\)S2, page 4](#)

New Hardware Features in Release 15.5(2)S2

There are no new hardware features in this release.

New Software Features in Release 15.5(2)S2

There are no new software features in this release.

Modified Software Features in Release 15.5(2)S2

There are no modified features in this release.

Supported MIBs

To see the list of MIBS supported on this release, go to the following URL and search using the Image Name: <http://tools.cisco.com/ITDIT/MIBS/MainServlet>

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 15.5(2)S2.

Bug ID	Description
CSCuu32863	Deny MAC ACL is not denying L2CP traffic
CSCuu94709	Error not thrown & Policy-map is applied with wrong config in the intf

Resolved Caveats

This section provides information about the resolved caveats for the Cisco ASR 901 router running Cisco IOS Release 15.5(2)S2.

Bug ID	Description
CSCuu32285	"permit any any" config should override default "deny any any" FP entry
CSCuv11274	acl match counters showing junk value on adding a rule
CSCuu94594	IPV4 acl counters are not incrementing
CSCut92739	Vlan-priority is not preserved for non-rewrite xconnect interface
CSCuv43536	Negative counters FFFFFFFE0 with multicast data in Tengig interface
CSCuv31196	Random MPLS Packet Drops With IP Multicast Over L3 Ring on ASR901
CSCuv09066	Incorrect P-bit for CPU originated packets once EoMPLS VC on
CSCuu23334	Santorini NAT node hangs and crashes after clearing the max nat flows.
CSCuu28678	ASR901: AIS on TDM AC does not trigger L-bit to be set in SAToP CW
CSCuu28735	ASR901: Incoming SAToP packets with L-bit are ignored after CEM flap
CSCut31379	ASR901: G.8265.1 TP BMCA does not work after unconfig M1 and config M2
CSCuu56933	observing error msg when removing transport ip and clock source in ptp
CSCuu25588	ptp stops working when master loop back is shut and unshut

Troubleshooting

The following sections describe troubleshooting commands you can use with the 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.

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
- 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>

Obtaining Documentation and Submitting a Service Request

For information on obtaining documentation, using the Cisco Bug Search Tool (BST), submitting a service request, and gathering additional information, see *What's New in Cisco Product Documentation* at: <http://www.cisco.com/c/en/us/td/docs/general/whatsnew/whatsnew.html>.

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