



# Introduction

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This release notes contain information about the Cisco ASR 920 Series Aggregation Services Routers, provides new and changed information for these routers, hardware support, limitations and restrictions, and caveats for Cisco IOS-XE Release 3.13.0S and later releases.

This release notes provides information about the following variants of the Cisco ASR 920 Series Routers supported from Cisco IOS-XE Release 3.13S release:

- ASR-920-12CZ-A
- ASR-920-12CZ-D
- ASR-920-4SZ-A
- ASR-920-4SZ-D

This release notes provides information about the following variants of the Cisco ASR 920 Series Routers supported from Cisco IOS-XE Release 3.13.1S release:

- ASR-920-10SZ-PD

This release notes provides information about the following variants of the Cisco ASR 920 Series Routers supported from Cisco IOS-XE Release 3.14S release:

- ASR-920-24SZ-IM
- ASR-920-24SZ-M
- ASR-920-24TZ-M

This release notes provides information about the following variants of the Cisco ASR 920 Series Routers supported from Cisco IOS-XE Release 3.16.1aS release:

- ASR-920-12SZ-IM

## Cisco ASR 920 Series Routers Overview

The Cisco ASR 920 Series Aggregation Services Routers provide a comprehensive and scalable set of Layer 2 and Layer 3 VPN services in a compact package. They are temperature-hardened, small form factor, with high throughput and low power consumption ideal for mobile backhaul, business services and residential voice, video, and data ("triple-play") applications.

# Feature Navigator

You can use Cisco Feature Navigator to find information about feature, platform, and software image support. To access Cisco Feature Navigator, go to <http://www.cisco.com/go/cfn>. An account on cisco.com is not required.

## Documentation Roadmap

To view other documents for the Cisco ASR 920 Router, see the [Cisco ASR 920 Router Documentation Roadmap](#).

## Determining the Software Version

You can use the following commands to verify your software version:

- Consolidated Package—**show version**

## Supported HoFPGA Versions

The tables below list the HoFPGA version of the software releases.

**Table 1-1** HoFPGA Versions for the Cisco ASR-920-12CZ-A, ASR-920-12CZ-D, ASR-920-4SZ-A, ASR-920-4SZ-D, and ASR-920-10SZ-PD

Cisco IOS XE Release	HoFPGA Version
3.13	0x1000e
3.13.1	0x10010
3.14	0x10010
3.15	0x10010
3.16	0x0001001a
3.16.1	0x0001001a
3.16.2a	0X0001001a
3.16.3a	0X0001001c
3.16.4	0X0001001c
3.17	0x0001001a
3.18	0X0001001c
3.18SP	0x1_001C(w/o NETFLOW, with BFD_SADT) 0x2_0004 (w/o BFD_SADT, withNETFLOW)
3.18.1SP	0X0001001d
3.18.2SP	0X00020029
3.18.3SP	0X0001001d

**Table 1-1** *HoFPGA Versions for the Cisco ASR-920-12CZ-A, ASR-920-12CZ-D, ASR-920-4SZ-A, ASR-920-4SZ-D, and ASR-920-10SZ-PD*

<b>Cisco IOS XE Release</b>	<b>HoFPGA Version</b>
3.18.4SP	0X00020029
3.18.5SP	0X00020031
3.18.6SP	0X00020031
3.18.7SP	0X00020032
3.18.8aSP	0X00020032
3.18.9SP	0X00030014

**Table 1-2 HoFPGA and FPGA Versions for the Cisco ASR-920-24SZ-IM, ASR-920-24SZ-M, and ASR-920-24TZ-M**

Cisco IOS XE Release	HoFPGA Version	Gigabit Ethernet Interface Module (Phase 1) FPGA	Gigabit Ethernet Interface Module (Phase 2) FPGA	8 T1/E1	16 T1/E1	32 T1/E1
3.14	0x2001B	0.44	69.20	0.54 (0x36)	-	-
3.15	0x2001B	0.44	69.20	0.54 (0x36)	-	-
3.16	0X00020024	0.47	69.22	0.54 (0x36)	-	-
3.16.4	0X00020026	0.47	69.22	0.54 (0x36)	-	-
3.17	0x0001001a	0.47	69.22	0.54 (0x36)	-	-
3.18	0X0001001b	0.47	69.22	0.54 (0x36)	-	-
3.18SP	0x30005 (with BFD_SADT & NETFLOW)	0.47	69.22	0.54 (0x36)	-	-
3.18.1SP	0X00030006	-	-	-	-	-
3.18.2SP	0X00030006	-	-	-	-	-
3.18.3SP	0X00030006	0.49	69.24	-0.54	0.54	-
3.18.4SP	0X0003000a	0.49	69.24	0.54	0.54	0.46
3.18.5SP	0X0003000c	0.49	69.24	0.54	0.54	0.46
3.18.6SP	0X00030016	0.49	69.24	0.54	0.54	0.46
3.18.7SP	0X00030014	0.49	69.24	0.54	0.54	0.46
3.18.8aSP	0X00030015	0.49	69.24	0.54	0.54	0.46
3.18.9SP	0X00030014	0.49	69.24	0.54	0.54	0.46

**Table 1-3 HoFPGA and FPGA Versions for the Cisco ASR-920-12SZ-IM**

Cisco IOS XE Release	HoFPGA Version	Gigabit Ethernet Interface Module (Phase 1) FPGA	Gigabit Ethernet Interface Module (Phase 2) FPGA	8 T1/E1	16 T1/E1	32 T1/E1
3.16.1aS	0x0001000c	0.47	69.22	0.54	-	0.46
3.17	0X0001000c	0.47	69.22	0.54	-	0.46
3.18	0X0001000c	0.47	69.22	0.54	-	0.46
3.18SP	0x1_000E (w/o NETFLOW, with BFD_SADT) 0x2_0004 (w/o BFD_SADT, with NETFLOW)	0.47	69.22	0.54	-	0.46
3.18.1SP	0X0001000f	-	-	-	-	-
3.18.2SP	0X0001000f	-	-	-	-	-
3.18.3SP	0X0001000f	0.49	69.24	0.54-	0.54	-
3.18.4SP	0x00010016	0.49	69.24	0.54	0.54	0.46

Cisco IOS XE Release	HoFPGA Version	Gigabit Ethernet Interface Module (Phase 1) FPGA	Gigabit Ethernet Interface Module (Phase2) FPGA	8 T1/E1	16 T1/E1	32 T1/E1
3.18.5SP	0x00030017	0.49	69.24	0.54	0.54	0.46
3.18.6SP	0x00030017	0.49	69.24	0.54	0.54	0.46
3.18.7SP	0X0003001b	0.49	69.24	0.54	0.54	0.46
3.18.8aSP	0X0003001c	0.49	69.24	0.54	0.54	0.46
3.18.9SP	0X0003001b	0.49	69.24	0.54	0.54	0.46

## Limitations and Restrictions on the Cisco ASR 920 Series Routers

- The **default interface** command is used to default the parameters under that interface. However, when speed is configured on the interface, the following error is displayed:  

```
Speed is configured. Remove speed configuration before enabling auto-negotiation
```
- SSFPs are not supported on the Cisco ASR-920-24SZ-IM, ASR-920-24SZ-M, ASR-920-24TZ-M, and ASR-920-12SZ-IM Aggregation Services Routers.
- Adding or deleting the Trunk Ethernet flow points (TEFPs) with scaled bridge-domain, without delay causes the Cisco ASR920 Series router to crash. This issue occurs in Cisco IOS XE Release 3.1.3.0S and later.
- In the case of power loss on the Cisco ASR-920-24SZ-IM, ASR-920-24SZ-M, ASR-920-24TZ-M Aggregation Services Routers running Cisco IOS-XE Release 3.14.0S and the Cisco ASR-920-12SZ-IM running the Cisco IOS-XE Release 3.16.1aS, dying gasp packets are sent to peer routers. However, the system state is not captured in the system logs (syslogs) or SNMP traps.
- Interface naming of the Cisco ASR-920-12SZ-IM is from right to left. For more information, see the [Cisco ASR 920 Series Aggregation Services Router Chassis Configuration Guide](#).
- Virtual services should be deactivated and uninstalled before performing replace operations.
- Effective Cisco IOS-XE Release 3.18S, packet size greater than 1460 is not supported over IPsec Tunnel for ASR-920-12SZ-IM.
- For ASR-920-12SZ-IM, minimal traffic drop might be seen for a moment when higher rate traffic is sent through the IPsec tunnels for the first time.
- Effective Cisco IOS-XE Release 3.18S, IPsec is only supported for TCP and UDP and is not supported for SCTP for ASR-920-12SZ-IM.

## Field Notices and Bulletins

- Field Notices—We recommend that you view the field notices for this release to determine whether your software or hardware platforms are affected. You can find field notices at [http://www.cisco.com/en/US/support/tsd\\_products\\_field\\_notice\\_summary.html](http://www.cisco.com/en/US/support/tsd_products_field_notice_summary.html).
- Bulletins—You can find bulletins at [http://www.cisco.com/en/US/products/sw/iosswrel/ps5012/prod\\_literature.html](http://www.cisco.com/en/US/products/sw/iosswrel/ps5012/prod_literature.html).

# MIB Support

To view supported MIB, go to <http://tools.cisco.com/ITDIT/MIBS/MainServlet>.

## Accessibility Features in the Cisco ASR 920 Series Routers

For a list of accessibility features in Cisco ASR 920 Series Routers, see the *Voluntary Product Accessibility Template (VPAT)* on the Cisco website, or contact [accessibility@cisco.com](mailto:accessibility@cisco.com).

All product documents are accessible except for images, graphics, and some charts. If you would like to receive the product documentation in audio format, braille, or large print, contact [accessibility@cisco.com](mailto:accessibility@cisco.com).

## End-of-Life and End-of-Sale Notices

For End-of-Life and End-of-Sale Notices for the Cisco ASR 920 Series Routers, see <http://www.cisco.com/c/en/us/products/routers/asr-920-series-aggregation-services-router/eos-eol-notice-listing.html>.

## Additional References

### Product Information

- [Cisco ASR 920 Series Aggregation Services Router Data Sheets](#)

### Hardware Installation Guide

- [Cisco ASR 920 Series Aggregation Services Hardware Installation Guide \(ASR-920-12CZ-A, ASR-920-12CZ-D, ASR-920-4SZ-A, ASR-920-4SZ-D\)](#)
- [Cisco ASR 920-10SZ-PD Aggregation Services Router Hardware Installation Guide](#)
- [Cisco ASR-920-24SZ-IM, ASR-920-24SZ-M, ASR-920-24TZ-M Aggregation Services Router Hardware Installation Guide](#)
- [Cisco ASR-920-12SZ-IM Aggregation Services Router Hardware Installation Guide](#)

### Software Configuration Guides

All configuration guides are available at [Cisco ASR 920 Series Aggregation Services Router Configuration Guides](#).

### Regulatory Compliance and Safety Information

[Regulatory Compliance and Safety Information—Regulatory Compliance and Safety Information for the Cisco ASR 920 Series Aggregation Services Routers](#)