



Release Notes for Cisco IOS XE Release 3S

First Published: March 26, 2015

Last Updated: March 26, 2015

Release: Cisco IOS XE Release 3.15S

Introduction

These release notes support Cisco IOS Release XE 3S including Cisco IOS Release XE 3.15S and are updated as needed to describe new features, bugs, and related documents. Cisco IOS Release XE 3.15S supports platforms within the following Cisco series:

- Cisco ASR 1000 Series Aggregation Services Routers
- Cisco ASR 903 Series Aggregation Services Router
- Cisco 4000 Series Integrated Services Routers
- Cisco CSR 1000V Series Cloud Services Routers



Americas Headquarters:
Cisco Systems, Inc., 170 West Tasman Drive, San Jose, CA 95134-1706 USA

System Requirements

This document describes the available system requirements for Cisco IOS Release XE 3S releases and includes the following sections:

Cisco ASR 1000 Series Aggregation Services Routers

The system requirements for the Cisco ASR 1000 Series Aggregation Services Routers are available here:

http://www.cisco.com/c/en/us/td/docs/routers/asr1000/release/notes/asr1k_rn_rel_notes/asr1k_rn_sys_req.html

Cisco ASR 4000 Series Aggregation Services Routers

The system requirements for the Cisco ASR 4000 Series Aggregation Services Routers are available here: <http://www.cisco.com/c/en/us/td/docs/routers/access/4400/release/notes/isr4451rn.html>

Cisco ASR 903 Series Aggregation Services Routers

The system requirements for the Cisco ASR 903 Series Aggregation Services Routers are available here:

http://www.cisco.com/c/en/us/td/docs/routers/asr903/release/notes/asr903_3S_rel_notes.html

Cisco CSR 1000V Series Cloud Services Router

The system requirements for the Cisco CSR 1000V Series Cloud Services Router are available here:

http://www.cisco.com/c/en/us/td/docs/routers/csr1000/release/notes/csr1000v_3Srn.html

Limitations and Restrictions

This chapter describes limitations and restrictions in Cisco IOS XE 3.15S releases.

- [Limitations and Restrictions in Cisco IOS XE Release 3.15S, page 5](#)

Limitations and Restrictions in Cisco IOS XE Release 3.15S

There are no new limitations and restrictions in Cisco IOS XE Release 3.15S.

Features and Important Notes for Cisco IOS XE Release 3.15S

These release notes describe the following topics:

- [New Software Features in Cisco IOS XE Release 3.15S, page 7](#)
- [MIBs, page 11](#)
- [Important Notes, page 12](#)

New Software Features in Cisco IOS XE Release 3.15S

This section describes new and changed features in Cisco IOS Release XE 3.15S. Some features may be new to Cisco IOS Release XE 3.15S but were released in earlier Cisco IOS XE software releases. Some features may have been released in earlier Cisco IOS XE software releases and have been changed in Cisco IOS Release XE 3.15S. Links to feature modules are included. If a feature listed does not have a link to a feature module, that feature is documented only in the release notes.

Adaptive QoS Manageability

For detailed information about this feature, see the following document:

http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/qos_plcshp/configuration/xs-3s/qos-plcshp-xe-3s-book/qos-plcshp-adaptive-qos-dmvpn.html

AMT (Automatic Multicast Tunneling)

For detailed information about this feature, see the following document:

http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/ipmulti_pim/configuration/xs-3s/imc-pim-xe-3s-book/amt.html

AVC in L2 Transparent mode

For detailed information about this feature, see the following document:

http://www.cisco.com/c/en/us/td/docs/ios/solutions_docs/avc/guide/avc-user-guide.html

BGP Support of Multiple Sourced Paths per Redistributed Route

For detailed information about this feature, see the following document:

http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/iproute_bgp/configuration/xs-3s/irg-xe-3s-book/bgp-multi-paths-redistribute.html

BGP Flowspec Client (PE) Support

The Border Gateway Protocol (BGP) flow specification client feature enables a device to perform the role of a BGP flow specification client and receive flow specification rules from a BGP flow specification controller.

Configurable export interval in EZPM

For detailed information about this feature, see the following document:

http://www.cisco.com/c/en/us/td/docs/ios/solutions_docs/avc/guide/avc-user-guide.html

Configuring Multiple Policies on an Interface

For detailed information about this feature, see the following document:

http://www.cisco.com/c/en/us/td/docs/ios/solutions_docs/avc/guide/avc-user-guide.html

Call Progress Analysis (CPA) over IP-IP Media Session

For detailed information about this feature, see the following document:

<http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/voice/cube/configuration/cube-book/voi-cube-cpa.html>

Modification of unsupported SIP header using SIP Profiles

For detailed information about this feature, see the following document:

<http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/voice/cube/configuration/cube-book/voi-sip-param-mod.html>

Dynamic extracted fields

For detailed information about this feature, see the following document:

http://www.cisco.com/c/en/us/td/docs/ios/solutions_docs/avc/guide/avc-user-guide.html

EIGRP OTP Support to propagate SGT

For detailed information about this feature, see the following document:

http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/iproute_eigrp/configuration/xe-3s/ire-xe-3s-book/ire-eigrp-over-the-top.html

EIGRP OTP VRF Support

For detailed information about this feature, see the following document:

http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/iproute_eigrp/configuration/xe-3s/ire-xe-3s-book/ire-otp-vrf.html

Enabling absolute timestamp first and last fields

For detailed information about this feature, see the following document:

http://www.cisco.com/en/US/docs/routers/access/ISRG2/AVC/api/guide/AVC_Metric_Definition_Guide.html

Enhanced ART metrics for concurrent connections

For detailed information about this feature, see the following document:

http://www.cisco.com/c/en/us/td/docs/ios/solutions_docs/avc/guide/avc-user-guide.html

Fine-Grain NBAR for Selective Applications

For detailed information about this feature, see the following document:

http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/qos_nbar/configuration/xe-3s/qos-nbar-xe-3s-book/nbar-fine-selapp-xe.html

HA Support for REFER Call Flows upon SSO

For detailed information about this feature, see the following document:

<http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/voice/cube/configuration/cube-book/voi-stateful-switchover.html>

HA for Xcoded Calls (Inbox & Box to Box)

For detailed information about this feature, see the following document:

<http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/voice/cube/configuration/cube-book/voi-cube-dsp.html>

HA for Xcoded Calls w/ DTMF & VCC

For detailed information about this feature, see the following document:

<http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/voice/cube/configuration/cube-book/voi-cube-dsp.html>

Identify and Clear (Terminate) FPI Hung Sessions to Prevent Reboot

For detailed information about this feature, see the following document:

<http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/voice/vcr1/vcr1-cr-book/vcr-c5.html>

ICE infra and ICE lite support

For detailed information about this feature, see the following document:

<http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/voice/cube/configuration/cube-book/voi-cube-ice-lite.html>

ICCP Multi-chassis VLAN Redundancy

For detailed information about this feature, see the following document:

<http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/cether/configuration/xe-3s/ce-xe-3s-book/ce-iccp-multichass-vlan-red.html>

Kaplan draft ENUM Source-URI Enhancement

For detailed information about this feature, see the following document:

<http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/voice/cube/configuration/cube-book/voi-cube-enum-enhance-kaplan.html>

Layer 2 Transparent Firewall support

For detailed information about this feature, see the following document:

http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/sec_data_zbf/configuration/xe-3s/sec-data-zbf-xe-book/zbfw-l2-transp-fw.html

NAT MIB Support

For detailed information about this feature, see the following document:

http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/ipaddr_nat/configuration/xs-3s/nat-xe-3s-book/iadnat-addr-consv.html

NBAR Custom Applications based on DNS Name

For detailed information about this feature, see the following document:

http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/qos_nbar/configuration/xs-3s/qos-nbar-xe-3s-book/nbar-custapp-dns-xe.html

Observation Point

For detailed information about this feature, see the following document:

http://www.cisco.com/c/en/us/td/docs/ios/solutions_docs/avc/guide/avc-user-guide.html

PfRv3 Transit Site Support

For detailed information about this feature, see the following document:

<http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/pfrv3/configuration/xs-3s/pfrv3-xe-3s-book/pfrv3-transit-site.html>

PKI IOSXE Certificate Server

For detailed information about this feature, see the following document:

http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/sec_conn_pki/configuration/xs-3s/sec-pki-xe-3s-book/sec-cfg-mng-cert-serv.html

QoS Service Group

For detailed information about this feature, see the following document:

http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/qos_svcgrp/configuration/xs-3s/qos-svcgrp-xe-3s-book/qos-svcgrps.html

SIP Profile to provide tag, sequence number and modification of unsupported SIP header:

For detailed information about this feature, see the following document:

<http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/voice/cube/configuration/cube-book/voi-sip-param-mod.html>

SEQUENCE/SORT DIAL PEERS

For detailed information about this feature, see the following document:

<http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/voice/vcr4/vcr4-cr-book/vcr-s7.html>

SSL Custom Application

For detailed information about this feature, see the following document:

http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/qos_nbar/configuration/xs-3s/qos-nbar-xe-3s-book/nbar-ssl-custom-appl-xe.html

TrustSec SGT Caching support for ISR-G2

For detailed information about this feature, see the following document:

http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/sec_usr_cts/configuration/xs-3s/sec-usr-cts-xe-3s-book/cts-sgt-cache.html

Undetermined Transport Support

For detailed information about this feature, see the following document:

http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/sec_data_acl/configuration/xs-3s/sec-data-acl-xe-3s-book/ipv6-undeter-trans-xe.html

VRF-Aware Dynamic NAT Mapping with HSRP

For detailed information about this feature, see the following document:

http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/ipaddr_nat/configuration/xs-3s/nat-xe-3s-book/iadnat-dynamc-hsrp.html

Zero Touch Auto-IP

For detailed information about this feature, see the following document:

http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/ipaddr_ipv4/configuration/xs-3s/ipv4-xe-3s-book/Zero-touch-Auto-IP.html

Zone-Based Firewall: Serviceability Enhancements Phase

The Zone-Based Firewall Serviceability Enhancements Phase 4 feature provides the following functionalities: Enhances the zone-based firewall client debugs Enhances the firewall client statistics related to zone, zone pair, VRF, per-filter and PAM Provides policy transaction debugs The following command was introduced: debug platform condition feature fw controlplane submode The following commands were removed: set platform software trace forwarding-manager FP active fw set platform software trace forwarding-manager RP active fw set platform software trace forwarding-manager F0 fw set platform software trace forwarding-manager R0 fw. For more information, see the debug and security command references.

Zone-Based Firewall Handling of Zone Mismatch Traffic

For detailed information about this feature, see the following document:

http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/sec_data_zbf/configuration/xs-3s/sec-data-zbf-xe-book/zbf-zone-mismatch.html

MIBs

To locate and download MIBs for selected platforms, Cisco IOS XE releases, and feature sets, use the Cisco MIB Locator found at the following URL:

<http://tools.cisco.com/ITDIT/MIBS/servlet/index>

If the Cisco MIB Locator does not support the MIB information that you need, you can obtain a list of supported MIBs and download MIBs from the Cisco MIBs page at the following URL:

<http://www.cisco.com/public/sw-center/netmgmt/cmtk/mibs.shtml>

To access the Cisco MIB Locator, you must have an account on Cisco.com. If you have forgotten or lost your account information, send a blank email to cco-locksmith@cisco.com. An automatic check will verify that your email address is registered with Cisco.com. If the check is successful, account details with a new random password will be emailed to you. Qualified users can establish an account on Cisco.com by following the directions found at this URL:

<http://tools.cisco.com/RPF/register/register.do>

Important Notes

The following sections contain important notes about Cisco IOS Release 3.15S:

- [Field Notices and Bulletins, page 12](#)

Field Notices and Bulletins

- **Field Notices**—Cisco recommends that you view the field notices for this release to see if 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.
- **Bulletins**—You can find bulletins at http://www.cisco.com/en/US/products/sw/iosswrel/ps5012/prod_literature.html.



Bugs for Cisco IOS XE Release 3.15S

Open and Resolved Bugs

Bugs describe unexpected behavior in Cisco IOS XE software releases. Severity 1 bugs are the most serious bugs; severity 2 bugs are less serious. Severity 3 bugs are moderate bugs, and only select severity 3 bugs are included in this section.

In this section, the following information is provided for each bug:

- Symptoms—A description of what is observed when the bug occurs.
- Conditions—The conditions under which the bug has been known to occur.
- Workaround—Solutions, if available, to counteract the bug.



Note

If you have an account on Cisco.com, you can also use the Bug Toolkit to find select bugs of any severity. To reach the Bug Toolkit, log in to [Cisco.com](https://www.cisco.com) and go to http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. (If the defect that you have requested cannot be displayed, this may be due to one or more of the following reasons: the defect number does not exist, the defect does not have a customer-visible description yet, or the defect has been marked Cisco Confidential.)

This section consists of the following subsections:

- [Using the Bug Search Tool, page 13](#)
- [Open Bugs—Cisco IOS XE Release 3.15S, page 15](#)
- [Resolved Bugs—Cisco IOS Release XE 3.15S, page 15](#)

Using the Bug Search Tool

The Cisco Bug Search Tool enables you to filter the bugs so that you only see those in which you are interested. In addition to being able to search for a specific bug ID, or for all bugs in a product and release, you can filter the open and/or resolved bugs by one or more of the following criteria:

- Last modified date
- Status, such as fixed (resolved) or open



Americas Headquarters:
Cisco Systems, Inc., 170 West Tasman Drive, San Jose, CA 95134-1706 USA

- Severity
- Support cases

For more information about how to use the Cisco Bug Search Tool, including how to set email alerts for bugs and to save bugs and searches, see [Bug Search Tool Help & FAQ](#).

**Note**

You must have a Cisco.com account to log in and access the Cisco Bug Search Tool. If you do not have one, you can [register for an account](#).

To use the Cisco Bug Search Tool:

1. In your browser, navigate to the [Cisco Bug Search Tool](#).
2. If you are redirected to a **Log In** page, enter your registered Cisco.com username and password and then, click **Log In**.
3. To search for a specific bug, enter the bug ID in the **Search For** field and press Enter.
4. To search for bugs related to a specific software release, do the following:
 - a. In the **Product** field, choose **Series/Model** from the drop-down list and then enter the product name in the text field. If you begin to type the product name, the Cisco Bug Search Tool provides you with a drop-down list of the top ten matches. If you do not see this product listed, continue typing to narrow the search results.
 - b. In the Releases field, enter the release for which you want to see bugs.

The Cisco Bug Search Tool displays a preview of the results of your search below your search criteria. You can mouse over bugs to see more content about a specific bug.

5. To see more content about a specific bug, you can do the following:
 - Mouse over a bug in the preview to display a pop-up with more information about that bug.
 - Click on the hyperlinked bug headline to open a page with the detailed bug information.
6. To restrict the results of a search, choose from one or more of the following filters:

Filter	Description
Modified Date	A predefined date range, such as last week or last six months.
Status	A specific type of bug, such as open or fixed.
Severity	The bug severity level as defined by Cisco. For definitions of the bug severity levels, see Bug Search Tool Help & FAQ
Rating	The rating assigned to the bug by users of the Cisco Bug Search Tool.
Support Cases	Whether a support case has been opened or not.

Your search results update when you choose a filter.

All resolved bugs for a release are available in the [Cisco Bug Search Tool](#) through the [fixed bug search](#).

This search uses the following search criteria and filters:

Field Name	Information
Product	Series/Model Cisco IOS and NX-OS Software => Cisco IOS
Release	Example:15.5(1)S
Status	Fixed
Severity	2 or higher

Open Bugs—Cisco IOS XE Release 3.15S

This section lists the open bugs for Cisco IOS Release XE 3.15S. All the bugs have a link to the Bug Search Tool where you can find details of the specific bug. This section describes only severity 1, severity 2, and select severity 3 bugs.

Table 1 Cisco IOS Release XE 3.15S Open Bugs

Identifier	Description
CSCut11544	AN: ANR crashes (Segmentation fault) while coming UP after save & reload
CSCus23097	\$\$\$ SC's Failed to install with 16 peers after reload
CSCus80690	SC's failed to install after no macsec/macsec in peer router(2 router)
CSCus80672	SC's failed to install after nomacsec/macsec(same router scenario)
CSCur90546	RSP2: qos_mon_periodic processes getting spawned without any configs
CSCut20204	Channel site-prefix status not update until parent route flap
CSCut18719	site-prefix active/standby status is elected per WAN interface only
CSCus91175	XE313 branch site-prefix messed up when connected with MDC hub site
CSCut35154	path-id cannot be discovered when 0 tag and non-zero tag coexist

Resolved Bugs—Cisco IOS Release XE 3.15S

This section lists the resolved bugs for Cisco IOS Release XE 3.15S. All the bugs have a link to the Bug Search Tool where you can find details of the specific bug. This section describes only severity 1, severity 2, and select severity 3 bugs.

Table 2 Cisco IOS XE Release 3.15S Resolved Bugs

Identifier	Description
CSCur25121	“IOSXE-WATCHDOG: Process = RADIUS” process crash with authenticated pkt
CSCur27693	“Process = RADIUS” Crashed with crafted Radius response
CSCug18580	ASR1k crash: UNIX-EXT-SIGNAL SEGFAULT, Process = AAA ACCT Proc
CSCuq41982	Crash at login %SYS-6-STACKLOW: Stack for process LOCAL AAA running low
CSCur82459	DIAMETER trap getting enabled when PKI trap enabled

Identifier	Description
CSCur51387	NG3K stack: standby gets reloaded due to reason "configuration mismatch"
CSCur13587	ANCP session terminated due to message len check
CSCuq31416	IPv4 and IPv6 unicast routing enabled by default
CSCuq22663	RPL is advertising all connected interfaces, including those outside ANI
CSCuq35209	BGP advertising incorrect Link Local ipv6 address
CSCug08566	BGP does not advertize a global static route pointing to a vrf intf
CSCuq13985	BGP Router process crash due to received BGP withdraw
CSCuq24984	In rare high BGP update churn case, sh ip bgp x.x.x.x may crash
CSCup52988	InterAS OptionB ASBR does not allocate label for VPNv4 prefix
CSCuq27095	Memory leak in BGP table if terminate at show bgp af summary auto more
CSCup33405	Prefixes are not removed from BGP table with BDI interface shut
CSCun68322	Support BGP GR for VPN AF in platform without MPLS
CSCuq64180	cdp_get_intf_cdp_tx_count always return zero
CSCup84251	Crash on purge_app_tlv_and_notify
CSCuq46973	CENT MMA not working after attach perf-mon on WAN interface on ISR
CSCur10697	NO Records with WAASX enabled on DMVN CRYPTO tunnel
CSCuq17550	ISRG2-GETVPN-IPv6 Egress IPv6 Interface ACL checked before encryption
CSCuj10443	Standby sw crash@crypto_engine/sw/src/keylib/lib_key_storage.c:646
CSCuq36627	WAAS Express:Failed to create SSL session. (no available resources)
CSCup32542	3750x/2960x stack crash at validblock
CSCun97765	3850/03.03.02SE/Unable to disable IPDT
CSCuo75601	C2960, 15.2(1)E, Guest Vlan
CSCuo48068	CSCuo48068 C5760 AP SSO 2nd controller keeps crashing
CSCuo61393	IOS 15.2 dot1x accounting does not send calling station id
CSCuq34942	Sup8E EFT: Dot1x agent found event not triggered on receiving EAPOL
CSCuo66933	Switch sent Failure packet after reboot and caused PC to fail authen
CSCuq75936	4500 SUP 8E port goes to unauthorized for certain DACL lengths
CSCur47861	Nightster can crash upon deleting sub-interfaces with Secured MKA sess
CSCur13495	Service-data of a service change is not updated by SAF forwarder
CSCup52101	EnergyWise Denial of Service vulnerabilty
CSCuq93406	IOSd crash on Ethernet CFM receiving a malformed CFM frame
CSCur76019	Router reloads when deleting a VLAN MEP with CFM diag debug on
CSCup26981	RSP1:Router is getting crashed with g8032 config on xe313 image
CSCur11538	ASR1k lldpMIB walk (1.0.8802.1.1.2.1.3.7.1) , but lldpMIB unsupported
CSCuq20912	cfm error using wrong local mep id
CSCuq19954	Invalid error type with dying gasp on IOS-XE and IOS-XR interop
CSCur45606	logging discriminator doesn't work

Identifier	Description
CSCuq17177	syslog discriminator blocks call-home
CSCun53358	CLI hang executing sh flow cache filter ipv4 source addr 8.8.8.8 for tab
CSCuo71145	Standby VSS switch crashes when configuring flow exporter
CSCuq29503	SYS-6-STACKLOW with Flow Exporter enabled
CSCuq47386	ISSU:XE312->XE313:Stby-RP failed to come up at loadversion on RP upgrade
CSCur43251	POODLE protocol-side fix: HTTPS Client
CSCuq53017	RSP1/RSP2: crash on bootup with invalid core file : 21st mcp_dev
CSCuq09690	“no parameter-map” causes crash on 3.3.3 : auth_proxy_cache_redirect_url
CSCuo01236	CPU utilization is high with un-authenticated HTTPS redirected traffic
CSCup76410	IOSd crash on 5760 running 3.6SE at get_logo_location
CSCuq42359	Webauth - Customized webpage succes & expiry not sent to client
CSCuq15789	CLI "License save bootflash:" etc options missing on MCP_dev
CSCur24102	SSTE: Memory leak @ license_modify_priority_by_line_local
CSCul23249	Appnav PT statistic show wrong number after addition and removal of SN
CSCuq67023	SN group isn't getting removed from context in specific scenario
CSCus86256	uCode crash when MPLS packet received on LAN side of AppNav intercept
CSCuq96691	Utah crash during ezconfig installation.
CSCur12089	MACsec does not show correct number of installed RX SC
CSCuq63167	XE313 : PAP address allocation issue - retry with mods to gaddr_unlock
CSCur32628	7600 mis-programming causing intermittent packet loss
CSCuq90747	IKEV2 Virtual-Access Interface goes down when using HSRP VIP
CSCuq69894	Session is not syncing to the standby after standby reload
CSCuq15567	Crash with %SYS-3-OVERRUN with crypto_ipsec_clear_peer_sas
CSCuq24354	GETVPN KS rekeys without pol changes may cause IOS XE GMs to re-register
CSCur29582	IPSEC-VPN: removal of "crypto-map" kills BFD session forever
CSCur29861	Traceback seen on c2900 platform for ike_keepalives
CSCun13772	NHRP: CPUHOGs seen when many child entries expire simultaneously
CSCuq86382	FLEXVPN IKEv2 auto reconnect virtual-access VRF lost anyconnect
CSCuq40081	Crash on primary KS with suiteB configs
CSCuq18492	GETVPN - COOP loses KS reachability during IKE rekey
CSCuq88419	GETVPN Suite-B: Adding permit to KS ACL, wrong policy on GM & Sec KS
CSCur65486	GETVPN: Fail to delete GMs on sec-KS after 3 scheduled rekeys failure
CSCuq77550	TEK remaining lifetime not updated on GM
CSCur36860	XE3.14 / PI26 - GETVPN KS Crash during Rekey for Multicast
CSCup95191	ENH: IKEV2 reconnect should use original EAP id for acct
CSCur73327	IKEv2 - AAA IPv6 route set local installed in wrong VRF
CSCuq94877	IKEV2 Anyconnect session reconnect fails on multiple reconnects

Identifier	Description
CSCur23619	IKEv2 reconnect radius accounting stop should mention terminate cause
CSCur86768	IKEv2 reconnect radius ACCT to have terminate cause for suspend/resume
CSCur65007	IKEv2 SA doesn't come up if invalid session-lifetime attribute is used
CSCur63068	Wrong ikev2 session-lifetime value calculations for larger vlaues
CSCuq46955	IOS ISR AM IKEv1 doesnt work with rsa-sig
CSCun72450	IPv6 GETVPN traffic dropped after un-configure then re-configure VRF
CSCuj13127	SSTE: DNS IPv6 traffic fails with IKEv2 and ZBFW configured
CSCuq56948	BGP: import from LISP with route-map wrong match applied
CSCuq50496	%SYS-3-CPUHOG: L2ISIS Upd Overlay1
CSCuq51439	ASR903: ISIS LSP generation delayed after receiving BFD down event
CSCuq49073	LDP breaks after defaulting an interface
CSCuq92462	iWAG-GTP: APN lookup stuck in pending state when using domain name
CSCum90471	ASR1k: Ping failure b/w CE1 & CE3 after Switchover.
CSCuq45187	L2vpn - Local access circuit DOWN after RELOAD
CSCuo86388	NXOS-VPC-VPLS Scale-after Core LC OIR,subset of PW Remain in Down state
CSCuq77051	out of ids when configuring xconnect
CSCur02734	IOS-XE evaluation for CVE-2014-6271 and CVE-2014-7169
CSCus69732	IOS-XE: Evaluation of glibc GHOST vulnerability - CVE-2015-0235
CSCur78744	LISP mobility with HSRP invalid host detection events
CSCuq79077	LISP MCAST: lisp mcast not enabled in CSR1kv images
CSCuq85667	Crash@mcast_rw_link_dequeue on config replace in MCAST THS
CSCur36464	mVPN: Inter-AS Option B: Different RDs: proxy vector: local RD is picked
CSCur09682	Router crashes in PIM due to infinite recursion at ip_set_mdb_flag
CSCuq62392	CENT MMA montior wrong hierarchy displayed after attach perf-mon
CSCur08096	PI25: 2911 crashed@perf_mon_async_get_next_mon_ctx with invalid access
CSCup47628	SS, TS:NBAR:For App-based policy, perf mon doesnt learn the flows
CSCur10311	MAG does not accept PBA without GRE key during de-registration
CSCum01661	MPLS Traffic drop after SSO, Label is NONE with IPFRR config
CSCur70478	Software crash at ldp_x_mem_reallocz_grow due to insufficient memory
CSCup20254	ignore path_pro cutover following > 255 mpls-tp cutover
CSCuq57261	cBR-8 SUP HA Long M-BGP and LDP Resync Delay
CSCur92862	TE leaks memory when restarting isis
CSCuq33025	Tuneel is getting flapping while doing sso with MPLS-TE config
CSCuo83901	RSP1 :Traceback @ mpls_tp_lsp_ep_event_error after TP tunnel no-shut
CSCur07571	Processor memory leak with MRCP_Client at cc_api_get_call_active_entry
CSCek10384	7200 NAT dropping Out to In ESP Packets
CSCus74006	Some protocols traffic is misclassified as SSL on XE3.15/PI27

Identifier	Description
CSCup82109	CENT: hub MC CENT_COMMUNICATION_THREAD crash@cent_get_instance_by_id
CSCuq98449	PFRv3 CPUHOG in "IP RIB Update" after link flap
CSCuo67247	High CPU due to NHRP process on ASR in DMVPN ph3 after upgrading IOS-XE
CSCuo29389	NTP clients of 3900 loses sync sporadically,due to high offsetvariations
CSCup64478	VTY/XR Seg Fault Handling ExecutionCmd_destroyIDL
CSCum10847	OFA CLIs hangs with 16K flow after LC reload
CSCuq16071	PSS sanity: applying shaping policy to interface, app disconnects
CSCup56598	SSTE: Onep Core observed when flows are re-added
CSCuq94226	cell-hwic command not found in 4G platforms
CSCuq97336	Crash on Crypto PKI Enrollment
CSCur10058	IOS PKI : CRL parsing may fail if HTTP Content-Length is not specified
CSCuq74176	PKI IOS removed valid CA certificate before expiry date
CSCum94541	Split Source-interface missing in PKI Enrolment profile
CSCur14783	PnP: ZTD in ISR's blocked due to config wizard
CSCuq64710	Large memory leak on RP SSS/SSM processes during pppoe churn
CSCun87941	PPP link interfaces causes SUP to crash
CSCun62014	Router crash with %SYS-3-BADFREEPTRS after reconfiguring pppoe
CSCuo51601	ISR4400 - Traffic incorrectly forwarded through class class-default
CSCur57558	To fix limitation of 20sec TBAR for ASR1K GM
CSCur90494	sbs_entry allocation failure causes ESP crash
CSCus09942	ASR Crash on ipv4_nat_ha_upd_to
CSCur33915	ASR1000 QFP crash due to stuck thread
CSCus00801	ASR1002-X cpp crash while processing ICMP Unreachable
CSCus66974	ASR1K QFP ESP 200 crashed in a B2B CGN NAT scenario with PAP+BPA
CSCur01849	ASR1K: FP crash @ipv4_nat_ha_bind_to
CSCut10470	CSR_b2b : NAT UDP translations are not done properly
CSCur51863	XE314: border router ucode crash@ipv4_input_cent_rc_process
CSCuq10904	ISR4331:MMA perf-mon out-of-order in punted packets
CSCuq75576	Input queue wedged on outside interface of standby nat-ha router
CSCur09941	Tracebacks and %UTIL-3-TREE: Data structure error seen in XE314 images
CSCuq39109	Memory Fragmentation due to IP SLA
CSCun88463	Router reload due to memory corruption with IP SLA
CSCup80756	SNMP Engine Crashes in IOS-XE, Segfault When Processing rttMonStats MIB
CSCum87411	software install from tftp get failed fts_client issue
CSCuq41114	ENH: SSH configuration option to restrict cipher public key and HMAC
CSCuq74492	IOS/IOSd Multiple Vulnerabilities in OpenSSL - August 2014
CSCur44075	AC ICE+ ver <= 4.0 Client unable to connect to XE SSL Headend {CSR1K}

Identifier	Description
CSCun89616	IOS Does Not Properly Respond to TLS 1.2 Client Hellos
CSCuq54496	DHCP SIP Lite session not created when dual initiator configured
CSCup86552	Issue with qos service installation
CSCup47193	Mem leak on 'SSS info element' on Active RP
CSCuq54260	Session is not syncing to the standby with collect identifier remote-id
CSCuh92882	XE3.11 Seginfo->l2hw_cond_debug is set to "1" when there is no condition
CSCur68259	XE3.13 : Subscribers not pingable after 2nd "clear ip route vrf x *"
CSCup52725	XE3.13: asr1k RP Crash while 72 hour longevity run
CSCue88982	MA2b:Supervisor crash seen upon Remote login and the session is idle
CSCup32531	Both ESPs crash at AOM Parent when flapping 6K flexvpn sessions
CSCur23484	L2TP control packet send with UDP checksum zero
CSCus70527	MDC: Template and IPC issue leading to hung memory allocation

Related Documentation for Cisco IOS XE 3S Releases

The following sections describe the documentation available for Cisco IOS XE Release 3S. These documents include hardware and software installation guides, Cisco IOS XE configuration and command reference publications, system error messages, and feature modules.

Documentation is available as printed manuals or electronic documents, except for feature modules, which are available online on cisco.com.

This chapter contains the following sections:

- [Platform-Specific Documents, page 21](#)
- [Cisco Feature Navigator, page 21](#)
- [Cisco IOS XE 3S Software Documentation Set, page 22](#)

Platform-Specific Documents

Cisco ASR 1000 Series Aggregation Services Routers

<http://www.cisco.com/c/en/us/support/routers/asr-1000-series-aggregation-services-routers/tsd-products-support-general-information.html>

Cisco ASR 920 Series Aggregation Services Routers

<http://www.cisco.com/c/en/us/support/routers/asr-920-series-aggregation-services-router/tsd-products-support-general-information.html>

Cisco ASR 930 Series Aggregation Services Routers

<http://www.cisco.com/c/en/us/support/routers/asr-903-series-aggregation-services-routers/tsd-products-support-general-information.html>

Cisco Cloud Services Router 1000V Series

<http://www.cisco.com/c/en/us/support/routers/cloud-services-router-1000v-series/tsd-products-support-series-home.html>

Cisco 4400 Series Integrated Services Routers

<http://www.cisco.com/c/en/us/support/routers/4400-series-integrated-services-routers-isr/tsd-products-support-series-home.html>

Cisco Feature Navigator

Cisco Feature Navigator is a web-based tool that enables you to quickly determine which Cisco IOS, Catalyst OS, and Cisco IOS XE software images support a specific set of features and which features are supported in a specific Cisco IOS image. You can search by feature or release. Under the release section, you can compare releases side by side to display both the features unique to each software release and the features in common.

Cisco Feature Navigator is updated regularly when major Cisco IOS software releases and technology releases occur. For the most current information, go to the Cisco Feature Navigator home page at the following location:

<http://www.cisco.com/go/fn>

Cisco IOS XE 3S Software Documentation Set

The Cisco IOS XE Release 3S documentation set consists of configuration guides, command references, and other supporting documents and resources. For the most current documentation, go to the following URL:

<http://www.cisco.com/c/en/us/support/ios-nx-os-software/ios-xe-3s/tsd-products-support-series-home.html>

Notices

The following notices pertain to this software license.

OpenSSL/Open SSL Project

This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit (<http://www.openssl.org/>).

This product includes cryptographic software written by Eric Young (ey@cryptsoft.com).

This product includes software written by Tim Hudson (tjh@cryptsoft.com).

License Issues

The OpenSSL toolkit stays under a dual license, i.e. both the conditions of the OpenSSL License and the original SSLeay license apply to the toolkit. See below for the actual license texts. Actually both licenses are BSD-style Open Source licenses. In case of any license issues related to OpenSSL please contact openssl-core@openssl.org.

OpenSSL License:

Copyright © 1998-2007 The OpenSSL Project. All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions, and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. All advertising materials mentioning features or use of this software must display the following acknowledgment: "This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit (<http://www.openssl.org/>)".

4. The names “OpenSSL Toolkit” and “OpenSSL Project” must not be used to endorse or promote products derived from this software without prior written permission. For written permission, please contact openssl-core@openssl.org.
5. Products derived from this software may not be called “OpenSSL” nor may “OpenSSL” appear in their names without prior written permission of the OpenSSL Project.
6. Redistributions of any form whatsoever must retain the following acknowledgment:

“This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit (<http://www.openssl.org/>)”.

THIS SOFTWARE IS PROVIDED BY THE OpenSSL PROJECT “AS IS” AND ANY EXPRESSED OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE OpenSSL PROJECT OR ITS CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

This product includes cryptographic software written by Eric Young (ey@cryptsoft.com). This product includes software written by Tim Hudson (tjh@cryptsoft.com).

Original SSLeay License:

Copyright © 1995-1998 Eric Young (ey@cryptsoft.com). All rights reserved.

This package is an SSL implementation written by Eric Young (ey@cryptsoft.com).

The implementation was written so as to conform with Netscapes SSL.

This library is free for commercial and non-commercial use as long as the following conditions are adhered to. The following conditions apply to all code found in this distribution, be it the RC4, RSA, lhash, DES, etc., code; not just the SSL code. The SSL documentation included with this distribution is covered by the same copyright terms except that the holder is Tim Hudson (tjh@cryptsoft.com).

Copyright remains Eric Young’s, and as such any Copyright notices in the code are not to be removed. If this package is used in a product, Eric Young should be given attribution as the author of the parts of the library used. This can be in the form of a textual message at program startup or in documentation (online or textual) provided with the package.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. All advertising materials mentioning features or use of this software must display the following acknowledgement:

“This product includes cryptographic software written by Eric Young (ey@cryptsoft.com)”.

The word ‘cryptographic’ can be left out if the routines from the library being used are not cryptography-related.

4. If you include any Windows specific code (or a derivative thereof) from the apps directory (application code) you must include an acknowledgement: “This product includes software written by Tim Hudson (tjh@cryptsoft.com)”.

THIS SOFTWARE IS PROVIDED BY ERIC YOUNG “AS IS” AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

The license and distribution terms for any publicly available version or derivative of this code cannot be changed. i.e. this code cannot simply be copied and put under another distribution license [including the GNU Public License].

Obtaining Documentation and Submitting a Service Request

For information on obtaining documentation, submitting a service request, and gathering additional information, 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>

Subscribe to the What’s New in Cisco Product Documentation as a Really Simple Syndication (RSS) feed and set content to be delivered directly to your desktop using a reader application. The RSS feeds are a free service and Cisco currently supports RSS Version 2.0.

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. 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)

Any Internet Protocol (IP) addresses used in this document are not intended to be actual addresses. Any examples, command display output, and figures included in the document are shown for illustrative purposes only. Any use of actual IP addresses in illustrative content is unintentional and coincidental.

Copyright © 2015 Cisco Systems, Inc. All rights reserved.