

## Resolved Caveats in Release 12.2(18)SXD

### Resolved IPServices Caveats

- CSCee50294—Resolved in 12.2(18)SXD

Cisco IOS devices running branches of Cisco IOS version 12.2S that have Dynamic Host Configuration Protocol (DHCP) server or relay agent enabled, even if not configured, are vulnerable to a denial of service where the input queue becomes blocked when receiving specifically crafted DHCP packets. Cisco is providing free fixed software to address this issue. There are also workarounds to mitigate this vulnerability. This issue was introduced by the fix included in CSCdx46180 and is being tracked by Cisco Bug ID CSCee50294.

This advisory is available at

<http://tools.cisco.com/security/center/content/CiscoSecurityAdvisory/cisco-sa-20041110-dhcp>.

**There are multiple workarounds for this issue:** There are four possible workarounds for this vulnerability:

- Disabling the dhcp service
- Control Plane Policing
- Two versions of Access Control Lists

#### Disabling the DHCP Service

This vulnerability can be mitigated by utilizing the command:

```
no service dhcp
```

However, this workaround will disable all DHCP processing on the device, including the DHCP helper functionality that may be necessary in some network configurations.

#### Control Plane Policing Feature

The Control Plane Policy feature may be used to mitigate this vulnerability, as in the following example:

```
access-list 140 deny    udp host 192.168.13.1 any eq bootps
access-list 140 deny    udp any host 192.168.13.1 eq bootps
access-list 140 deny    udp any host 255.255.255.255 eq bootps
access-list 140 permit   udp any any eq bootps

class-map match-all bootps-class
  match access-group 140

policy-map control-plane-policy
  class bootps-class

  police 8000 1500 1500 conform-action drop exceed-action drop

control-plane
  service-policy input control-plane-policy
```

For this example 192.168.13.1 is a legitimate DHCP server.

Additional information on the configuration and use of the CPP feature can be found at this link:

[http://www.cisco.com/en/US/prod/collateral/iosswrel/ps6537/ps6586/ps6642/prod\\_white\\_paper0900ae\\_cd804fa16a.html](http://www.cisco.com/en/US/prod/collateral/iosswrel/ps6537/ps6586/ps6642/prod_white_paper0900ae_cd804fa16a.html).

This workaround is only applicable to Cisco IOS 12.2S, as this feature is only available in Cisco IOS versions 12.2S and 12.3T. Cisco IOS 12.3T is not impacted by this advisory.

## Access Lists - Two Methods

Access lists can be applied to block DHCP/BootP traffic destined to any router interface addresses, as in the following example:

In this example, the IP address 192.168.13.1 represents a legitimate DHCP server, the addresses 10.89.236.147 and 192.168.13.2 represent router interface addresses, and 192.168.61.1 represents a loopback interface on the router.

In this example, any bootp/dhcp packets destined to the router interface addresses are blocked.

```
access-list 100 remark permit bootps from the DHCP server
access-list 100 permit udp host 192.168.13.1 any eq bootps
access-list 100 remark deny bootps from any to router f1/0
access-list 100 deny    udp any host 10.89.236.147 eq bootps
access-list 100 remark deny bootps from any to router f0/0
access-list 100 deny    udp any host 192.168.13.2 eq bootps
access-list 100 remark deny bootps from any to router loopback1
access-list 100 deny    udp any host 192.168.61.1 eq bootps
access-list 100 remark permit all other traffic
access-list 100 permit ip any any
```

**access-list 100** is applied to f0/0 and f1/0 physical interfaces.

```
interface FastEthernet0/0
  ip address 192.168.13.2 255.255.255.0
  ip access-group 100 in
interface FastEthernet1/0
  ip address 10.89.236.147 255.255.255.240
  ip access-group 100 in
  ip helper-address 192.168.13.1
```

An alternate configuration for the interface access-list workaround.

This example would also need to be applied to all physical interfaces, but deny statements for all of the IP addresses configured on the router are not necessary in this approach. In this example, the address 192.168.13.1 represents a legitimate DHCP server.

```
access-list 100 permit udp host 192.168.13.1 any eq bootps
access-list 100 permit udp any host 192.168.13.1 eq bootps
access-list 100 permit udp any host 255.255.255.255 eq bootps
access-list 100 deny    udp any any eq bootps

interface FastEthernet0/0
  ip address 192.168.13.2 255.255.255.0
  ip access-group 100 in
interface FastEthernet1/0
  ip address 10.89.236.147 255.255.255.240
  ip access-group 100 in
  ip helper-address 192.168.13.1
```

## Resolved Routing Caveats

- [CSCec16481](#)—Resolved in 12.2(18)SXD

A Cisco device running Internetwork Operating System (IOS) and enabled for the Open Shortest Path First (OSPF) Protocol is vulnerable to a Denial of Service (DoS) attack from a malformed OSPF packet. The OSPF protocol is not enabled by default.

The vulnerability is only present in IOS release trains based on 12.0S, 12.2, and 12.3. Releases based on 12.0, 12.1 mainlines and all IOS images prior to 12.0 are not affected. Refer to the Security Advisory for a complete list of affected release trains.

Further details and the workarounds to mitigate the effects are explained in the Security Advisory which is available at the following URL:

<http://www.cisco.com/en/US/products/csa/cisco-sa-20040818-ospf.html>

- **CSCed40933**—Resolved in 12.2(18)SXD

Cisco Internetwork Operating System (IOS) Software is vulnerable to a Denial of Service (DoS) attack from crafted IPv6 packets when the device has been configured to process IPv6 traffic. This vulnerability requires multiple crafted packets to be sent to the device which may result in a reload upon successful exploitation.

More details can be found in the security advisory which is posted at

<http://tools.cisco.com/security/center/content/CiscoSecurityAdvisory/cisco-sa-20050126-ipv6>.

#### **Resolved Security Caveats**

- **CSCed65285**—Resolved in 12.2(18)SXD

Certain release trains of Cisco Internetwork Operating System (IOS), when configured to use the IOS Secure Shell (SSH) server in combination with Terminal Access Controller Access Control System Plus (TACACS+) as a means to perform remote management tasks on IOS devices, may contain two vulnerabilities that can potentially cause IOS devices to exhaust resources and reload. Repeated exploitation of these vulnerabilities can result in a Denial of Service (DoS) condition. Use of SSH with Remote Authentication Dial In User Service (RADIUS) is not affected by these vulnerabilities.

Cisco has made free software available to address these vulnerabilities for all affected customers. There are workarounds available to mitigate the effects of the vulnerability (see the “Workarounds” section of the full advisory for details.)

This advisory will be posted at <http://www.cisco.com/en/US/products/csa/cisco-sa-20050406-ssh.html>

- **CSCed93836**—Resolved in 12.2(18)SXD

A vulnerability in the Transmission Control Protocol (TCP) specification (RFC793) has been discovered by an external researcher. The successful exploitation enables an adversary to reset any established TCP connection in a much shorter time than was previously discussed publicly. Depending on the application, the connection may get automatically re-established. In other cases, a user will have to repeat the action (for example, open a new Telnet or SSH session). Depending upon the attacked protocol, a successful attack may have additional consequences beyond terminated connection which must be considered. This attack vector is only applicable to the sessions which are terminating on a device (such as a router, switch, or computer) and not to the sessions that are only passing through the device (for example, transit traffic that is being routed by a router). In addition, this attack vector does not directly compromise data integrity or confidentiality.

All Cisco products which contain TCP stack are susceptible to this vulnerability.

This advisory is available at

<http://www.cisco.com/en/US/products/csa/cisco-sa-20040420-tcp-ios.html>, and it describes this vulnerability as it applies to Cisco products that run Cisco IOS software.

A companion advisory that describes this vulnerability for products that do not run Cisco IOS software is available at <http://www.cisco.com/en/US/products/csa/cisco-sa-20040420-tcp-nonios.html>.

**Other Resolved Caveats in Release 12.2(18)SXD**

<b>Identifier</b>	<b>Technology</b>	<b>Description</b>
CSCec33028	Access	PA-E3 needs shut/no shut to bring it up
CSCec73063	Access	Output wedge on multilink interface
CSCed08399	Access	NRT:Spurious Accesses seen on 7500 router (etext) for QoS tests
CSCed13350	Access	Ping from PE to CE in VRF not working with dCEF enabled
CSCed65436	Access	Spurious access @ ct3sw_tx_interrupt & ct3sw_fastsend
CSCee64499	Access	CWPA: SYS-3-INVMEMINT invalid mem action interrupt level after reload
CSCin66542	Access	line protocol on T1 stays down even when T3 is hard looped
CSCin67296	Access	CWAN SSO :Fram relay PVC down after reload
CSCec03907	ATM	C7500 crashes when interface loopback 10xxxxxxxx is configured
CSCec12294	ATM	cfg_atm_vemode_bcs_func is broken
CSCee04747	ATM	memory leak when removing ATM VCs
CSCin53126	ATM	Router crashed at abort during OIR of ATM OC3 MM PA
CSCin76900	ATM	ATM-IMA stops passing ping after passing traffic for some time
CSCed92290	Content	CE4-NATIVE:wccp redirect issue after reloading the switch
CSCds71171	Infrastructure	Command show snmp ifIndex
CSCdv20075	Infrastructure	%SYS-3-CPUHOG process = IP SNMP
CSCdx30509	Infrastructure	(HUBBLE-ccCopy)no ccCopyCompletion trap sent after copyfile done.
CSCdy65658	Infrastructure	SSO: Policy-map not synched properly with the standby.
CSCdz27562	Infrastructure	snmpwalk on loopback interface gets response from physical int. IP.
CSCea69601	Infrastructure	Disk Corruption on C6400 and/or RSP compatible platforms
CSCeb35205	Infrastructure	Memory corruption and crash in SP after TFTP copying
CSCeb71693	Infrastructure	12.2S: issues with logging snmp-authfail command
CSCeb79675	Infrastructure	SNMP reply packets do not use the correct source address
CSCec55147	Infrastructure	Memory leak in IFS
CSCec63011	Infrastructure	Standby crashes in redundant systems
CSCec69091	Infrastructure	PCMCIA disk 0 is formatted from a diff router error
CSCed16920	Infrastructure	Constant high CPU in TTY background
CSCed44319	Infrastructure	copy produces corrupted files on big ATA disks
CSCed45942	Infrastructure	Bus error due to corrupted managed timer structure
CSCed64664	Infrastructure	SYS-2-LINKED: Bad enqueue messages when terminating multilink vpdn
CSCed81154	Infrastructure	SNMP retrieve configuration file crash SUP720 RP
CSCed86286	Infrastructure	Software forced crash at ssh_process_message_events
CSCin57765	Infrastructure	appending to files on disks can crash/hang system
CSCuk51673	Infrastructure	malloc_aligned adds unnecessary padding
CSCdv89039	IPServices	Bus Error in ipnat_unlock_parent_entry
CSCdw36571	IPServices	NAT: crash while nvgening static entries

<b>Identifier</b>	<b>Technology</b>	<b>Description</b>
CSCdx95455	IPServices	Memory leak in TCP Protocol with translate tcp
CSCea81029	IPServices	show ip igmp int crashed router
CSCeb54853	IPServices	SLB: tcp probes to failed http daemon show OPERATIONAL
CSCec13278	IPServices	IGMP: IGMP_clear_cache() invoked crashed LC when LC OIRed
CSCec29952	IPServices	bgp md5 authentication not working when configured in mpls vpn vrf
CSCec84887	IPServices	Sup720: Disabled STP for VLAN-bridge becomes to enable by shutdown
CSCed25055	IPServices	12.2S RLS3 (IOS): image crashes with copy ftp: bootflash:
CSCed37514	IPServices	HSRP not receiving Hello packets
CSCed52163	IPServices	Crash or CPUHOG when doing HSRP SNMP query
CSCed83740	IPServices	no ip nat source static command should check global and local address
CSCee06948	IPServices	Sup720 running 12.2(17b)SX is allowing connections to TCP port 514
CSCea71723	LAN	Qllc/dlsw sends CUR to mac-addr 0000.0000.0000 when x25 host is down
CSCea81145	LAN	SNMP/IFMIB test fails in vLAN env., when ISL in use.
CSCea39508	LegacyProtocols	DLSW SDLC FEP to FEP ( NCP PU4 to NCP PU4 ) FAILS WITH SECONLY
CSCea42831	LegacyProtocols	DLSw FST: Bus error during file transfer on MSFC2
CSCeb22529	LegacyProtocols	Snasw hardcodes llc2 n2=10
CSCeb39238	LegacyProtocols	DLSW bridge-group config changes the bandwidth on bvi int to 56 K
CSCec26432	LegacyProtocols	Router crash when executing show ipx access-lists
CSCec68023	LegacyProtocols	Tracebacks found when executing the command dlsw bridge-group 1
CSCee24464	LegacyProtocols	Router Reload with DLSW Ethernet Redundancy
CSCee39240	LegacyProtocols	certain FE intf can not receive cdp packets with dlsw transparent ER
CSCdz32659	Management	%SYS-2-MALLOCFAIL: -Process= CDP Protocol
CSCeb37746	Management	CDP broadcasts internal address when no address on interface.
CSCec25430	Management	IOS may reload from specific packet
CSCed40563	Management	malicious cfg reload neighbor routers by <show cdp entry * protocol>
CSCin67568	Management	Memory leak in CDP process with long host names
CSCdz08851	MPLS	FRR doesnt trigger on ethernet using RSVP HELLO
CSCdz23318	MPLS	Rewrite index passed incorrectly for loadshare rewrites
CSCdz33630	MPLS	Stanby RP crashes when SSO switchover in the HA MPLS co-existence
CSCdz73149	MPLS	Static route exported between vrfs on same pe router not in vrf RT
CSCea65827	MPLS	RP/VIP Crash: OIR Flexwan/loose IGP Route to BGP next hop router
CSCea72889	MPLS	Const2: MPLS VPN CSC bad table id no mpls on RR server 1kvpn
CSCea74222	MPLS	LSNT:Lose tag rewrite information of remote PE in cef table
CSCea76134	MPLS	e-iBGP loadbalancing does not work .
CSCeb08400	MPLS	Cannot see tfib entry for remote BGP routes with CsC config
CSCeb26389	MPLS	BGP allocates same local label to two VPN prefixes
CSCeb40653	MPLS	Bus error crash at vrf_interface_print when deleting vrf config

<b>Identifier</b>	<b>Technology</b>	<b>Description</b>
CSCeb78347	MPLS	Cannot create a VRF
CSCec45307	MPLS	DT:No memory for the expanded TFIB PSA
CSCec56047	MPLS	TE:gtag-rrr: TSP Tunnel not up (Destination IP address not found)
CSCec69982	MPLS	MPLS-AToM: LDP is not restablished after remove/add xconnect
CSCec86102	MPLS	Inconsistent tag info between RSP and VIP
CSCed22837	MPLS	Bus error ALIGN-1-FATAL:Corrupted program counter
CSCed39059	MPLS	LFIB is inconsistent when P-AIS injected on APS interface
CSCed45746	MPLS	duplicate tag between 2 VRFs
CSCed52578	MPLS	vrf route thru recursive tagged loadshared global route bogus label
CSCed55962	MPLS	Connected subnet not in TFIB
CSCed66160	MPLS	Router crashed while verifying if FRR is active at Backup Head
CSCed72297	MPLS	CPUHOG and watchdog timeout crash in LDP process
CSCed81317	MPLS	can not see bgp routes from CE after import map
CSCed82562	MPLS	TFIB/FIB not updated for static route to interface
CSCee07279	MPLS	TFIB NULLADJ errormsg triggered, fix root cause of null tagout_adj
CSCee15974	MPLS	ICMP message generated by LSR should have TTL=255 in all labels
CSCee26700	MPLS	memory leak caused by LSR MIB queries
CSCee43569	MPLS	TE-DB corruption on headend after NHop reload
CSCee56225	MPLS	Alignment errors in tfib_request_all_tags
CSCee59585	MPLS	Duplicate label in sh ip cef on LC
CSCee61423	MPLS	Traffic drop over TE tun from PE to PE when no LDP in core
CSCuk47482	MPLS	crash after no mpls ip
CSCeb30338	Multicast	Mcast traffic loss each minute as MMLS entry deleted and reinstalled
CSCec70366	Multicast	Mwheel process aborted on watchdog timeout and then SW forced crash
CSCec70428	Multicast	DVMRP segment remain pruned when main forwarder fails
CSCed02952	Multicast	filter-autorp option denys all in announce pkt
CSCed95515	Multicast	Pkts drop in all VLANs when last host in one VLAN leave this group
CSCee88700	Multicast	TCAM entry not built for secondary subnet with multicast stub
CSCee89438	Multicast	MSDP doesnt build S,G state after rxing *,G join
CSCec59728	platform-12000	SSO: Standby RP reloads once it is fully-up
CSCea57792	platform-76xx	13E5/GBIC:GE-WAN int with 1000baseT gbic is down after oir with traf
CSCea74537	platform-76xx	GEWAN:Input counter does not work when packet was received
CSCeb61377	platform-76xx	CWTLC fabric related alignment correction
CSCec59550	platform-76xx	OSM-POS crash @ sky4302_enter_drop_mode
CSCec62800	platform-76xx	20E:CWAN-QOS:Increased PQ latency when increasing default queue traf
CSCed07253	platform-76xx	512 Meg SODIMM chip not recognized and shows 256 instead
CSCed19431	platform-76xx	GigabitEthernet negotiation is broken on 7600

<b>Identifier</b>	<b>Technology</b>	<b>Description</b>
CSCed33881	platform-76xx	fatal errors in lc and line protocol down after reload
CSCed48085	platform-76xx	Stats incorrect for all BB2 OSMs with SUP720
CSCed49872	platform-76xx	SYS-2-GETBUF: Bad getbuffer SCP Hybrid process tracebacks
CSCed51835	platform-76xx	OSM/POS/BB1: OC12 IP 64 bytes performance may degrade
CSCed78077	platform-76xx	LRDI is not reported after reload on OSM-2OC12-ATM-SI PRDI is seen
CSCed86778	platform-76xx	: PQ problems with HQoS policy applied to 100 PWAN2 sub-intf
CSCed92724	platform-76xx	OSM-1CHOC12/T3-SI reporting false path E3 ais after shut/no shut
CSCee01868	platform-76xx	OSM-2+4GE-WAN+:Interface UP/UP with GBIC installed but not connected
CSCee45508	platform-76xx	OSM CHOC-OC12 freezes up while proccessing PPP keepalives
CSCee54642	platform-76xx	OSM local bus out of SYNC after stress
CSCee55056	platform-76xx	OSM interface byte counts are inaccurate
CSCee59667	platform-76xx	GE-WAN+ MTU config inconsistent with other IOS devices
CSCee84887	platform-76xx	OSM interface byte counters broken with high pps + large route table
CSCef19811	platform-76xx	MPLS:VPN:MLPPP:PE not receiving packets from connected CE
CSCed09364	PPP	bridge over multilink ppp cant pass traffic larger than 1499 bytes
CSCed42332	PPP	Distributed link fragmentation and interleaving caused VIP reload
CSCin54720	PPP	Bad refcount at datagram done with mlp_transmit_fragments
CSCin61922	PPP	dLFIoATM : mlp_qos - UUT crash with ALIGN-1-FATAL send_one_bufhdr_pk
CSCin67741	PPP	RP crashes on removing encap from multilink interface
CSCuk47905	PPP	Cannot ping across distributed MLPoATM interface
CSCeb43847	QoS	policy with set cos is accepted in main interface with error msg
CSCeb61825	QoS	VIP quantum not updated when MTU changed on PA-A3
CSCec49042	QoS	IPP not being trusted using nbar type class map
CSCec71488	QoS	MSFC2 crashed @ stile_in_policymap when SRM switchover
CSCec75389	QoS	Packet drops not seen in class 2 due to pkt count error on POS intf.
CSCed62637	QoS	CWPA: priority traffic latency varies with default traffic load
CSCee23845	QoS	Policer stops counting on egress after ingress poicy is reapplied.
CSCee31618	QoS	C2SUP2/FW2/CT3+:Voice packet drops at low rates with cRTP+LLQ conf
CSCee68344	QoS	GE-WAN card crashes in /enqueue/process-policymap_msg/policymap_hash
CSCin52060	QoS	After the policy got rejected hqf was not cleaned on vip
CSCin72437	QoS	MQC: Concurrent access crashes the Flexwan during switchover
CSCdr28078	Routing	traceback in MLSM Process on a TRBRF interface, MLS not configured
CSCdt38401	Routing	Frame-relay packets processed by cpu due to CEF inconsistency
CSCdv33550	Routing	%ADJ-3-ADJFIBIDB: Adjacency update with invalid fibidb(8) error
CSCdv33860	Routing	cef adjacency on a lane interface may drop packets
CSCdz40426	Routing	Configuring multiple eigrp processes under a VRF reloads router
CSCdz45031	Routing	distance eigrp missing from config after reload

<b>Identifier</b>	<b>Technology</b>	<b>Description</b>
CSCdz54875	Routing	translate-update broken under AFI mode
CSCdz77047	Routing	network backdoor is not working
CSCea66299	Routing	%BGP-3-NEG COUNTER messages appear during route flapping
CSCea90941	Routing	IOS Ignores EIGRP Stub Command In Startup-Config at Initial Power On
CSCeb17467	Routing	BGP: RP crashes on clearing the BGP table
CSCeb40561	Routing	[SNMP] GGSN reloads during get next operation
CSCeb41095	Routing	no spf calc or dynamic update to ospf database if better learned rte
CSCeb62136	Routing	OSPF default-information originate not advertised on force-failover
CSCeb71671	Routing	NHRP on multi-point GRE tunnel interface causes router crash
CSCeb73578	Routing	FIB Adjacencies take a long time for static ARP entries
CSCeb82273	Routing	OSPFv3:DR fail to flood Netork LSA after neighbor flapping
CSCec04496	Routing	High CPU utilization when ospfIfEntry.* objects are polled
CSCec07636	Routing	snmpwalk on ospfnbrtrld does not display all switch1 interfaces
CSCec19811	Routing	PE ping to CE router failed due to wrong source IP address.
CSCec29953	Routing	retrans counter not getting cleared / continuous ospf neighbor flap
CSCec38322	Routing	CEF reloader holding up memory when toggling DCEF-CEF-DCEF
CSCec44556	Routing	RIP updates not sent over ATM subints
CSCec55418	Routing	router crash when trying ospf authen several times
CSCec66162	Routing	On 10Gig LC pkts are route cached on rel due to missing cef entries
CSCec72160	Routing	ospf fa suppression failed to set forwarding address to zero.
CSCec82144	Routing	NRT:Router crashed at ospf_set_rpf_nexthop_for_te_tunnel in ATOM FRR
CSCec83353	Routing	type7 fw addr set to 0 if next hop address is on VA intf
CSCed12382	Routing	CONST2/IPV6: %IPV6FIB-3-ASSERT messages with traceback on reload
CSCed20042	Routing	IPv6 CEF crash when encountering a recursion loop
CSCed26217	Routing	Unnecessary ARP was sent on OSPF non broadcast network
CSCed29557	Routing	Static routes are not deleted when PEs VRF interface is shut
CSCed29745	Routing	OSPF: first dbd packet not sent when MASTERs initial seq no == 1
CSCed39619	Routing	No passive-interface virtual 0 not working
CSCed43873	Routing	MPLS TE CLNS LSPLISTER traceback mls cef max on head router
CSCed46620	Routing	Reducing reflexive timeout causes CPU to go 100% while ACL creation
CSCed52749	Routing	OSPF: route missing even though OSPF database still exists
CSCed53047	Routing	OSPFv3: indication-lsa from non-Cisco router is ignored
CSCed55180	Routing	ARP process takes too long to update after switchover
CSCed57077	Routing	Crash on displaying expired reflexive ACL entries
CSCed60800	Routing	Routing Table not updated when BGP next hop is withdrawn
CSCed62835	Routing	IPV6FIB-SP-4-RECURSION,CEF IPC STACKLOW msg followed by crash
CSCed62901	Routing	PE failed to switch from BGP route to OSPF route across Sham links

<b>Identifier</b>	<b>Technology</b>	<b>Description</b>
CSCed63692	Routing	input high ospf tag number = output negative value
CSCed70694	Routing	commands entered on ipv6 address family config mode gives error
CSCed70979	Routing	Bus error at db_install
CSCed72062	Routing	ABR does not flood Type3 LSA from MPLS TE Tunnel
CSCed82207	Routing	CEF inconsistency between RP SP
CSCed86534	Routing	EIGRP traceback in dual_restart_finish after switchover
CSCed90943	Routing	dual_process_acked_unicast crash and dual_packetize_interface trace
CSCed91798	Routing	DHCP not working when CEF enabled
CSCed96062	Routing	RP crash at mgd_timer-set_exptime_internal
CSCee02786	Routing	IPX EIGRP fails to set originating router id on startup
CSCee18136	Routing	Integrate CSCed63152 and CSCee14378 into common commit
CSCee21263	Routing	Fragments from return traffic are being dropped by reflexive ACL
CSCee23517	Routing	Inconsistent Fib tables between RP and LCs
CSCee25019	Routing	OSPFv3/modifying redistribute route-map on the fly wont take effect
CSCee28148	Routing	OSPF NSF: LSA not removed from ospf database after SSO switchover
CSCee30050	Routing	FIB-3-FIBDISABLE Fatal error, no window message, LC to RP IPC non-op
CSCee34076	Routing	CEF entry not removed even if route removed on SSO switchover
CSCee35125	Routing	RP crashed on rip_redist_check on clear ip route *
CSCee36622	Routing	Summary LSA stuck in database
CSCee36721	Routing	OSPF does not adv Net LSA when two interfaces have same address
CSCee39853	Routing	CEF getting disable on Standby PRE
CSCee49764	Routing	OSPF redistribute max prefix fails if applied after SSO switchover
CSCef00037	Routing	SSO:T/B DUAL-3-INTERNAL IP-EIGRP(0) internal error after S/W
CSCef00535	Routing	RP crash on validblock when neighbor did SSO switchover
CSCef26976	Routing	Removing one vrf messes up ospf config of other vrf
CSCin30562	Routing	a2a l2tp Et-VI:dCEF fails in ingress dirn after rpr-plus switchover
CSCin72573	Routing	IP directed-broadcast does not work with CEF enabled
CSCin73487	Routing	BGP Conditional advertisement broken
CSCuk48314	Routing	CEF LC IPC Background - %SCHED-7-WATCH:Attempt to monitor uninit Q
CSCuk52062	Routing	RIB link failure after memory exhaustion
CSCdz84583	Security	IOS fw allowing forged packets for a session initiated from inside
CSCec35857	Security	PKI: crash when authenticating a sub CA after auth the root
CSCed35253	Security	Router crash due to corrupted data in list with IOS-firewall
CSCed69858	Security	show ssh command issued repeatedly may crash the system
CSCee34939	Security	Memory leak when SSH client closes connection after key exchange
CSCin74155	Security	SSHv2:router crashes under heavy load at tcb_isvalid
CSCdx91720	Unknown	12.1(12c):Qos:Request to support L4 port expansion in QM code

<b>Identifier</b>	<b>Technology</b>	<b>Description</b>
CSCdy23659	Unknown	Need a way to clear alarms from SFM display
CSCdy53121	Unknown	outbound v.110 calls fail if taking longer 10 seconds to connect
CSCdy62969	Unknown	ALIGN-3-SPURIOUS messages do not include traceback
CSCdy85215	Unknown	Incorrect busy tone played to FXS on call-disconnect
CSCdz14210	Unknown	TCP Intercept watch mode w/conn time pkts SW switched
CSCdz39541	Unknown	Crash when no internal vlan available for pchannel
CSCdz46544	Unknown	MAN: Xponder FPGA version return wrong info, when show hard detail
CSCdz46944	Unknown	MF: Vlan not added to routing table after reload
CSCdz49171	Unknown	Cat4000-Sup3 sends IGMP Leave with 0.0.0.0 source IP address
CSCdz56449	Unknown	MAN:low alarm/low warning not reported in 14e throttle image
CSCdz56613	Unknown	no shut on a layer 3 interface doesnt work sometimes
CSCdz69546	Unknown	4006 SupIII Reload on tcp_putbyte process
CSCdz71462	Unknown	cbQosPostPolicyByte had been incorrectly set to cbQosPrePolicyByte
CSCdz83820	Unknown	RPF unicast(No ACL) forwards both valid & forged pkts
CSCea05915	Unknown	dMFIB: for HW engine use stats instead of signal for liveness
CSCea08556	Unknown	MMLS: OIF inconsistency results in duplicated traffic.
CSCea50629	Unknown	c-hyb:spt-threshold with mmls causes duplicate packets to be egress
CSCea60918	Unknown	(*,g) not removed after (s,g) del results in blackholing traffic
CSCea66218	Unknown	PA-MC-STM1 - Alarmed VCs can bring other VCs down
CSCea69733	Unknown	SPD does not work on AS5300 ethernet
CSCea71016	Unknown	station-id [name]
CSCea71130	Unknown	MMLS/CEF: inconsistent OIFs. Exist on SP but not on RP
CSCea80003	Unknown	IPSec HA RRI injected routes not deleted on hsrp state change
CSCea84998	Unknown	Memory leak in Crypto IKMP
CSCeb01318	Unknown	Switchport trunk allowed vlan list broken on span destination ports
CSCeb14435	Unknown	19E, 8bE14: Mcast shortcuts take long to install after become DMode
CSCeb58952	Unknown	FlexWAN II OC3 LLQ Profiling: latency and voice pkt loss issues
CSCeb64666	Unknown	SPURIOUS mem at isakmp_send send_nat_keepalive in nat
CSCec07456	Unknown	BOOT variable should not have a semi-colon at the end
CSCec09193	Unknown	HA: Fix data descriptor and IfIdx sync key fields/widths
CSCec12236	Unknown	19E:OIR of fabric capabale card on SUP1/SupW causes crash
CSCec32173	Unknown	VSEC:VPN-SM-C2: Traffic is lost if the tunnel mac address is changed
CSCec34010	Unknown	OSM2-GE 64 bit main interface counters stay 0
CSCec36878	Unknown	DEL: no traffic switched when OIF MTU smaller than IIF on EARL6
CSCec39132	Unknown	I/O memory corruption due to IGMP packet flood.
CSCec45398	Unknown	Align error on SP- Traceback: mcast_mld_accept_group
CSCec50884	Unknown	BGP Multipath failover takes very long time to cnvrge (500K)

<b>Identifier</b>	<b>Technology</b>	<b>Description</b>
CSCec52045	Unknown	Respond Life Notify should be processed after SA is authenticated
CSCec53057	Unknown	crypto_drop_packet causing traceback and memory corruption
CSCec53406	Unknown	ACL ODM give up
CSCec59622	Unknown	CE3-HYB:Vlan interface doesnt come up after resetting DR in SRM
CSCec60933	Unknown	ssl-proxy mod <mod-number> allowed-vlan doesnt add module to vlan
CSCec67980	Unknown	snmp-server packetsize 8192 crashes HA standby
CSCec70454	Unknown	RSPAN on SUP720 running IOS causes spanning tree loop.
CSCec72813	Unknown	Traceback at ipaccess_match_duplicate (CPUHOG)
CSCec73134	Unknown	show crypto ipsec sa cmd can crash when IPSec SAs get deleted
CSCec73525	Unknown	C-hyb: Mcast packets may get dropped if ACL TCAM is full
CSCec74016	Unknown	Const2:Router crash when ipv6 ACL removed after remove isataptunnel
CSCec76910	Unknown	C2SUP2/C2MCAST: BIT-SP-4-OUTOFRANGE, then watchdog crash in LTL MGR
CSCec80654	Unknown	Hardware shortcuts installed without RPF traffic
CSCec86976	Unknown	NATIVE: Extended ACL checks 7 bits for dscp not 6 for class-map
CSCec90162	Unknown	tracebacks seen after enabling gre keepalive
CSCed00394	Unknown	Directly connected mcast subnet are NOT programmed in the SP
CSCed05807	Unknown	NBAR stays active even if removed from config
CSCed06744	Unknown	software flood to fabric issues with cross-DFC etherchannels
CSCed11313	Unknown	Packet drop by applying output ACL on Tunnel interface
CSCed12070	Unknown	switchport configuration changed BW value in show int
CSCed12393	Unknown	CPU-HOG in PIM,MLSM & MWheel and multi-device WATCHDOG crash
CSCed17923	Unknown	Const2:no idprom for module after multiple SSO switchover
CSCed19974	Unknown	:SSO:IPv6 interface stat mismatch messages with SSO swover
CSCed22387	Unknown	Ibc input queue drops constantly incrementing on SP
CSCed22494	Unknown	VPNSM: fail to insert RRI route if dynamic cmap added on the fly
CSCed23477	Unknown	RRI: routes not removed as expected
CSCed29594	Unknown	6500 may not unicast flood packets to rp with fallback bridging
CSCed33380	Unknown	IPC failure with show mls netflow ip
CSCed33793	Unknown	Mcast uflow policer does not work on LAN for > certain rates
CSCed34259	Unknown	SUP720 shows System returned to power-on even after a reload
CSCed35745	Unknown	ARP from CSM to real servers not sent downstream after reload
CSCed35900	Unknown	:CWPA2 mpls QoS classification not working until re-add policy
CSCed36177	Unknown	Cat6000 : RP may crash at tunnel_ip_les_fastswitch
CSCed38413	Unknown	cosmos_e:In 6148-GE-TX qos, trust dscp & prec functionality reversed
CSCed38862	Unknown	g1/1 of WS-X6748-GE-TX not link up after changing speed 10M or 100M
CSCed38956	Unknown	Client Browsers see significant delay in retrieving content from ser
CSCed41095	Unknown	SRM needs enhancement to count for lose packets during config-sync

<b>Identifier</b>	<b>Technology</b>	<b>Description</b>
CSCed46278	Unknown	Const2:C2MCAST Standby sup is resetting continuously
CSCed48412	Unknown	L4 port intersection not happening in port expansion
CSCed48718	Unknown	DEC workaround and SPAN reflector to be mutually exclusive
CSCed49423	Unknown	Temp. values not updated in show environment temperature
CSCed49574	Unknown	12.2S: traffic loss if in/out PO bundled Active/Plus LC
CSCed50556	Unknown	memory leak in Crypto IKMP
CSCed52841	Unknown	In some circumstances, switch is not responding to SNMP requests
CSCed53595	Unknown	INTERNAL ERROR (../pas/atmphy_dsx3mib.c:1370) could not delete inter
CSCed55238	Unknown	MST : Vlans interface on MSFC down after switchover
CSCed55283	Unknown	Catalyst 6500 running IOS in L2PT core displays CEs as CDP neighbors
CSCed55342	Unknown	Jumbo frames fail across etherchannel routed on the same vlan
CSCed56658	Unknown	MSTP: no CAM flushing on boundary port when TCN rx
CSCed61632	Unknown	SUP720 may not ARP after SRM-SSO failover with bridging enabled
CSCed62337	Unknown	OSPF adjacencies fail to come up with Sup720, PFC3a and MPLS
CSCed63590	Unknown	GTP SLB doesnt work with GGSN R5.0 Call Admission Control function
CSCed63897	Unknown	shut/unshut edge port cause TC to be initiated
CSCed65372	Unknown	RP/SP software forced reloaded after removing switchport from FE int
CSCed65584	Unknown	Vip crashed when using switched PVC with mfr
CSCed66865	Unknown	SP crash at earl7_force_crash
CSCed67113	Unknown	OSM-1CHOC12/T1 displays T1 has receiver loss of signal on T1
CSCed69233	Unknown	alignment error in qm_get_card_info_for_police_action
CSCed73700	Unknown	Vlan Translation does not work on WS-X6816-GBIC
CSCed75240	Unknown	: OAL does not work if egress int is Gig Sub-intf
CSCed75689	Unknown	pm assert fail,console hang,stdby crash when toggle mls mpls tunnel-
CSCed75920	Unknown	When Glean Rate Limiter enabled Egress ACLs applied on Ingress Pkts
CSCed76200	Unknown	Un all command after (debug ip csg cpu) causes error from CSM
CSCed77033	Unknown	Rp crash on doing sh glbp interface
CSCed77519	Unknown	Sup720-3BXL:EoMPLS:VLAN_M dot1q tag handling for IPv6 pkt problem
CSCed77602	Unknown	:All ports in the etherchannel being bounced on SSO
CSCed78487	Unknown	EoMPLS: L2 traffic causes l2_lc_add_entry l2_rc(8) num_fails.
CSCed78815	Unknown	BT:Shaping with class-default does not work on ATM pvc
CSCed79251	Unknown	Unexplained ro=1: PBIF mem ECC1 P2N popping up on console
CSCed79519	Unknown	Breakpoint exception due to RPC mismatch timeout
CSCed79694	Unknown	C2SUP2: Multi-Link FR fails to forward.
CSCed79711	Unknown	:LTL_DEBUG_ASSERT: Failture on index + j
CSCed80869	Unknown	Pikespeak : mac limit per vlan feature crashed
CSCed81908	Unknown	BOC,DEL,12.2S: HighFabUtil cause Berytos HealthMonitor fail & reset

<b>Identifier</b>	<b>Technology</b>	<b>Description</b>
CSCed82263	Unknown	Fornax / Macedon in slot13 cant switch traffic with reflector enable
CSCed84042	Unknown	SLB-MIB reports 0.0.0.0 for named real servers
CSCed85276	Unknown	VPNSM does not correctly decapsulated nested IPsec traffic.
CSCed85411	Unknown	Rapid-PVST: Short loop forming when root moves
CSCed85509	Unknown	: CWPA Port based EoMPLS packets are corrupted and received
CSCed86486	Unknown	T1 controller errors on cronos card
CSCed88426	Unknown	Extended acl breaks on first switchover (Ctrl-C not synced to stdby)
CSCed90255	Unknown	configuring egress policy silently turns nbar on the interface
CSCed92837	Unknown	Standby RSP hangs after switchover, never loads current image
CSCed93264	Unknown	RP truncates the TOS byte to upper 3 bits on IP with option field
CSCed93359	Unknown	Startup config synched to stdby,BOOT_STRING_INVALID message appears
CSCed93707	Unknown	VPN-SM: Different comb of DF bit, PMTUD settings in GRE must be corre
CSCed94258	Unknown	Traffic routed on L2 DEC stops when other L2 DEC becomes non DEC
CSCee04176	Unknown	Mac-address-limiting inconsistent between LAN & VPLS
CSCee05413	Unknown	Memory leak in EARL VLAN stats subblock
CSCee05653	Unknown	RPR+: Standby SP can not take over when Active SP fails
CSCee05683	Unknown	crash triggered by clear ip slb sticky radius calling-station-id
CSCee07395	Unknown	Const2:FIB Protocol Allocation mismatch
CSCee07996	Unknown	vacl capture (vlan filter) does not get applied to multilink IF
CSCee08015	Unknown	Fabric TIMEOUT error handling on the NMP.
CSCee09385	Unknown	Request to add support for VACLS on HSSI interfaces
CSCee10614	Unknown	DEV: FibTeamSSRAM test fails
CSCee10773	Unknown	mls ip multi bid gm-scan-interval 10 appears setting PIM-SM
CSCee11200	Unknown	All Firmware debug msgs should print slot# and time stamp
CSCee11672	Unknown	Some static mac entries missing in DFC after module reset
CSCee11910	Unknown	SUP720 standby rp temp sensors missing
CSCee14838	Unknown	Multicast macs added for every L3 destination with igmp snooping
CSCee15581	Unknown	sss_mgr with invalid index into 2 arrays causes crash/traceback
CSCee15798	Unknown	CEF entries not installed on LC/SP after SSO switchover
CSCee15895	Unknown	Sup720 experienced high-rate counter-up on sh int null0
CSCee17030	Unknown	Sporadic delay with multicast leave/joins on Spu 720
CSCee18977	Unknown	T3 PMON do not update/increment caused by atmphy_dsx3mib_init
CSCee19156	Unknown	6PE does not obey mpls ttl propagation command
CSCee21772	Unknown	port-channel dflt results wrong after bootup
CSCee22362	Unknown	Multicast src only detection needs to happen faster
CSCee22993	Unknown	Sup720: Diags detect error on standby Sup after SSO failover
CSCee23058	Unknown	Incorrect Netflow Byte Counts With Large Flows

<b>Identifier</b>	<b>Technology</b>	<b>Description</b>
CSCee23271	Unknown	ifType is incorrect for VLAN Interface
CSCee24424	Unknown	Netflow error checking code reports L3-PS-DRV: No Req Blks msgs
CSCee28200	Unknown	Performance hit due to Netflow table hash
CSCee28215	Unknown	CLI to output actual pps performance
CSCee28288	Unknown	2 second delay in forwarding the 1st packet of mcast stream on 7600
CSCee30816	Unknown	TTL for decremented on the encap side when hardware switching
CSCee31719	Unknown	MVPN: Encap PE with FS does not send out packets on the MDT Tunnel
CSCee32151	Unknown	Crossbar MIB not working correctly
CSCee33023	Unknown	L2-Aging : l2_aging_do_rm_rma_aging, entry not found by STDBY in SSO
CSCee33136	Unknown	MPLS packets duplicated in SRP ring (OSM-DPT)
CSCee34416	Unknown	Supervisor may crash due to TestSPRPInbandPing
CSCee35193	Unknown	OSPF sessions are not coming up using pos linecards in the core
CSCee36959	Unknown	Software Forced Reload:get_rp_cpu_info
CSCee38860	Unknown	In online diag mode module reset due to TestMacNotification Failure
CSCee38898	Unknown	llq not working under child policy when Fr flat policy is configured
CSCee38924	Unknown	SP crash @ l2_throttle_debug_print
CSCee39170	Unknown	Incorrect mask value set in ACL TCAM when matching on DSCP values
CSCee39798	Unknown	dot1dBase info should be available without SPT enabled
CSCee40846	Unknown	egress multicast to slot 1 ports also goes to Sup slot
CSCee42278	Unknown	OSM-12CT3/T1 fails to boot up
CSCee43090	Unknown	RLB subscriber packets may loop due to incorrect flow-mask.
CSCee44248	Unknown	Redundant Sup fails to come online after switchover
CSCee45170	Unknown	RPVST: Loopguard blocking both sides of a link without recovery
CSCee45404	Unknown	HSRP does not forward traffic correctly after primary back up
CSCee48296	Unknown	Badevent operator_power_on seen on bootup sometimes
CSCee50911	Unknown	OSM/OC12-ds0:Router crash due to illegal input
CSCee51501	Unknown	Excessive SCP retries and drops while doing shut/no shut repeatedly
CSCee53705	Unknown	cwpa2: Turn on FIFO flow control and EOS driver changes
CSCee53706	Unknown	SSM mapping does not work correctly in presence of IGMPv3 receivers
CSCee53998	Unknown	SUP720: part of config incorrectly written to run-conf after reload
CSCee54526	Unknown	SP: const_mpls_ios_set_hw_taginfo taginfo do not own rew, but ctage
CSCee54734	Unknown	Need to disable module if a real bad xenpak is plugged in.
CSCee56573	Unknown	L3 traff s/w switched after removing/adding port channel
CSCee59513	Unknown	Broken connectivity over OSM-ATM after VRF unconfig
CSCee59601	Unknown	Interface Input drops/flush counter increment at a high rate
CSCee60121	Unknown	SLB-MIB returns null/zero value when polling <real name xxxx>.
CSCee63221	Unknown	SP crash DIAG_PF_CONST2_TEST_HAS_FAILED

<b>Identifier</b>	<b>Technology</b>	<b>Description</b>
CSCee65953	Unknown	Incorrect Netflow Byte Counts With Large Flows
CSCee68052	Unknown	unsolicited igmp reports do not always reset host join timer
CSCee68381	Unknown	Packet drops on old rev WS-X6516-GBIC
CSCee69687	Unknown	UDP fragments dropped with the VACL configured on the SVI
CSCee75540	Unknown	l1l_ha_sync:Failed to get checkpoint buffer message on reset of stdb
CSCee77817	Unknown	CSM cannot communicate with servers in Private VLAN
CSCee77920	Unknown	CSM needs to FT switchover on the same chassis as HSRP failover
CSCee77961	Unknown	CSM cannot sync configs to the standby CSM system
CSCee80365	Unknown	1st hop router randomly fail to add (s,g) flows oif in HW fib table
CSCee83733	Unknown	L2 traffic/connectivity loss after spanning tree reconvergence.
CSCee85152	Unknown	CEF Hardware switching produces ping failure on every other packet a
CSCee87897	Unknown	CSM needs CLIs to configure failstate improvements
CSCee89232	Unknown	Configuring platform while in automore state crashes switch
CSCee89586	Unknown	VPN-SM:ICMP unreachable sent for pkt w/ iplen+ovhead eq mtu, DF set
CSCee90183	Unknown	Need to change RPC syslog in case of RPC request sent failure
CSCee92719	Unknown	Duplicates in NDE on the Sup720
CSCee95301	Unknown	Unhide and document mls rate-limit multicast non-rpf command
CSCef03723	Unknown	HA Coexistence:MPLS:VPN:VRFs not in sync between primary and standby
CSCef04696	Unknown	Cat6K crashed in pm_cp_vlan_stp_topology_process during HA tests
CSCef07965	Unknown	System crashed when accessing CVDM from the switch
CSCin41024	Unknown	c2sup2:CWPA:DMLFR:FR Relay entry (sh fr map) is taking lot of time
CSCin49358	Unknown	PA-MC-STM1:Serial intf down after rpr+ switchover w/ RSP16
CSCin67400	Unknown	FRF12: Checksum errors with POS, ping fails
CSCin67419	Unknown	A shut of any of the member link or cont traff brings down MFR intf
CSCin68355	Unknown	:Marking with microflow policer not working with layer2 port
CSCin71561	Unknown	Bandwidth of port-channel not sum of bw of individual interfaces
CSCin72202	Unknown	Auth-Proxy do not work with ODM merge algorithm
CSCin74123	Unknown	mst root id becomes 0 after switchover
CSCin74475	Unknown	Connectivity lost to MWAMs for resetting CSM/MWAM modules on switch
CSCin76766	Unknown	Active SP reloads at ipc_send_rpc_blocked failed after RPR+ swover
CSCin78380	Unknown	Issues with isolated private vlan
CSCuk49481	Unknown	GRE packets not correctly processed (DF) on cat6500
CSCdt36219	Voice	Router returned to ROM by bus error at ccsip_spi_control_main
CSCe71767	Voice	cRTP doesn't work with PPP on 1750 router
CSCe84911	Voice	Gateway not initiating OLC sometimes in slow start call
CSCe85410	Voice	router crash with one T1 of ivr calls
CSCin41335	Voice	Clock goes to local oscillator instead of Priority clock source

<b>Identifier</b>	<b>Technology</b>	<b>Description</b>
CSCdz00624	WAN	After configure no ip cef router starting to drop packets
CSCea43177	WAN	FR-SVC: Router crashes on applying show frame-relay svc maplist
CSCea56560	WAN	Sw crash with NTP config and debug
CSCeb10672	WAN	GSR dual-PRP: standby getting reloaded due to rf timer expiration
CSCeb25177	WAN	SRP interface Fast-switches when it should DCEF switch
CSCec27867	WAN	PA-POS: Interface remains down/down when enabled with critical alarm
CSCed62698	WAN	CWPA: ATM: DSCP bits 4-6 set to zero
CSCed78803	WAN	Packets coming in a shutdown subinterface are forwarded by CEF
CSCin34959	WAN	RP fails to recognize bay 1 ATM PA after bay 0 was test crashed
CSCin47130	WAN	Flexwan support for using CSCdy30984 for rate counters
CSCin54713	WAN	CWAN SSO:CT3 Mailbox hogging CCB Block semaphore on bootup
CSCin68724	WAN	set atm-clp bit not set on outgoing packets but QoS stats increment
CSCin76078	WAN	ATM(Deluxe & IMA) driver code for Flexwan to prefer priority packets