Resolved Caveats—Cisco IOS Release 12.2(3g)

Cisco IOS Release 12.2(3g) is a rebuild of Cisco IOS Release 12.2(3). All caveats listed in this section are resolved in Cisco IOS Release 12.2(3g) but may be open in previous Cisco IOS releases.

- CSCea02355

  Cisco routers and switches running Cisco IOS software and configured to process Internet Protocol version 4 (IPv4) packets are vulnerable to a Denial of Service (DoS) attack. A rare sequence of crafted IPv4 packets sent directly to the device may cause the input interface to stop processing traffic once the input queue is full. No authentication is required to process the inbound packet. Processing of IPv4 packets is enabled by default. Devices running only IP version 6 (IPv6) are not affected. A workaround is available.

  Cisco has made software available, free of charge, to correct the problem.

  This advisory is available at

  http://www.cisco.com/warp/public/707/cisco-sa-20030717-blocked.shtml

Resolved Caveats—Cisco IOS Release 12.2(3d)

Cisco IOS Release 12.2(3d) is a rebuild of Cisco IOS Release 12.2(3). All caveats listed in this section are resolved in Cisco IOS Release 12.2(3d) but may be open in previous Cisco IOS releases.

- CSCdw65903

  An error can occur with management protocol processing. Please use the following URL for further information:

  http://www.cisco.com/cgi-bin/bugtool/onebug.pl?bugid=CSCdw65903

Resolved Caveats—Cisco IOS Release 12.2(3b)

Cisco IOS Release 12.2(3b) is a rebuild release for Cisco IOS Release 12.2(3). The caveats in this section are resolved in Cisco IOS Release 12.2(3b) but may be open in previous Cisco IOS releases.

- CSCdu38878

  When an interface is cleared, the service profile identifier (SPID) is reported on the BRI network module or WAN interface card as invalid. The SPID that is reported after the interface is cleared is still invalid. There is no workaround.

- CSCdu59975

  A glare condition may occur randomly on all voice platforms in Cisco IOS Release 12.2(1a), 12.2(2)T, and 12.2 XA when a busy port is assigned to a new incoming call. A glare condition occurs when two calls are assigned to the same port. For example, if there are only two ports, and they are both busy on a call when a new call comes in without a check for glare, one of the busy ports is allocated to the new call. This condition causes the preexisting call to be disconnected and the new call to receive a busy signal. There is no workaround.

- CSCdu65008

  Outgoing ISDN calls fail if the connected switch responds to an outgoing setup with a setup acknowledgement followed by a “Call Proceeding” message. This situation applies to all ISDN PRI voice platforms and has been observed in Cisco IOS Release 12.2(1) and any later release.

Workaround: Configure the **isdn sending-complete** command on the serial interface. This action forces ISDN to send a "sending complete" information element in the outgoing setup, so the switch will simply reply with a "Call Proceeding" message.

- CSCdu82132

  A Cisco 3600 series router that is running Cisco IOS Release 12.2(1a) reloads with a bus error after an ISDN BRI outgoing call is sent from a Cisco 3600 router to an ISDN switch. This condition occurs when the Cisco 3600 router sends "SETUP" messages on the BRI port and receives "SETUP_ACK" and "CALL_PROC/w PI=8" messages. There is no workaround

- CSCdv00338

  Some ISDN calls may not be cleared when the dial idle-timeout period expires. The calls end normally when the user exits or when a **shutdown** interface configuration command is issued. There is no workaround.

- CSCdv03724

  On a Cisco AS5300 access server that is running Cisco IOS Release 12.2(3a) or 12.2(4)T, all voice calls that are running ISDN signaling may fail to process a disconnect, which leads to a buffer leak. There is no workaround.

Resolved Caveats—Cisco IOS Release 12.2(3a)

Cisco IOS Release 12.2(3a) is a rebuild release for Cisco IOS Release 12.2(3). The caveats in this section are resolved in Cisco IOS Release 12.2(3a) but may be open in previous Cisco IOS releases.

- CSCdu24249

  A Cisco router with a Cisco 2600 or 3600 hardware Virtual Private Network (VPN) module may pause indefinitely when is processing a burst of large packets (more than 2 KB). This condition occurs when the **show running-config** privileged EXEC command is issued while the router is passing a moderate amount of large-packet data. This condition is more likely to occur when double authentication is used (when esp-sha-hmac and ah-sha-hmac are used).

  A change that was introduced in Cisco IOS Release 12.2(3)T fixes the indefinite pause but introduces a different problem. In Cisco IOS Release 12.2(3)T, the driver stops processing packets that are queued for processing when all the jumbo buffers are in use. The router does not pause indefinitely, but the VPN module stops processing packets. In either case, the router must be reloaded to correct the condition.

  There is no workaround.

- CSCdu65282

  Inbound calls from a channel-associated signaling (CAS) peer to a Cisco VG200 telephony voice gateway that are bound for an IP phone may experience audio dropouts. The called party will hear approximately the first half second of audio and then lose one to three seconds. After that time, the audio will return, and no further issues occur with the call after the initial dropout. Outbound calls do not experience this condition.

  Workaround: Run Cisco IOS Release 12.1(5)T9.

- CSCdu69124

  A Cisco AS5300 universal access server that is running Cisco IOS Release 12.2(1), 12.2(2b), or 12.2(2.4) may see the %SYS-3-INVMEMINT and %SYS-2-MALLOCFAIL error messages and cdapi_create_raw_msg tracebacks. There is no workaround.

- CSCdu69287

The frequency of 402.75 MHz has been added to the list of frequencies that will be searched immediately following the North American channel search plans.

- CSCdu77489

  Calls that are sent to a Stack Group Bidding Protocol (SGBP) member that is set to forward only to an offload server are not properly forwarded. This condition is observed in Cisco IOS Release 12.2(1.1) and later releases. There is no workaround.

Resolved Caveats—Cisco IOS Release 12.2(3)

This section describes possibly unexpected behavior by Cisco IOS Release 12.2(3). All the caveats listed in this section are resolved in Cisco IOS Release 12.2(3). This section describes severity 1 and 2 caveats and select severity 3 caveats.

Access Server

- CSCds33599

  Symptoms Modem recovery does not startup as expected when abnormal behavior (such as a no answer condition or double digital signal processor failures [DSP]) is observed on a Modem ISDN channel aggregation (MICA) technologies modem. This symptom may cause bad modems to be allocated for a call and a low call success rate (CSR) on the system.

  Conditions This symptom is observed on a MICA modem on a Cisco router.

  Workaround There is no workaround.

- CSCdt82323

  Symptoms The following error and traceback messages may be observed on a Cisco AS5800:

```
%TTY-3-AUTOCONFIG: TTY1/9/29: Modem auto-configuration failed
%TTY-3-AUTOCONFIG: TTY1/9/33: Modem auto-configuration failed
%TTY-3-AUTOCONFIG: TTY1/9/34: Modem auto-configuration failed
%TTY-3-AUTOCONFIG: TTY1/9/57: Modem auto-configuration failed
%TTY-3-AUTOCONFIG: TTY1/9/62: Modem auto-configuration failed
%TTY-3-AUTOCONFIG: TTY1/9/56: Modem auto-configuration failed
%TTY-3-AUTOCONFIG: TTY1/9/75: Modem auto-configuration failed
%TTY-3-AUTOCONFIG: TTY1/9/64: Modem auto-configuration failed Queued messages:

%SYS-3-LOGGER_FLUSHING: System pausing to ensure console debugging output.
%SYS-3-LOGGER_FLUSHED: System was paused for 00:00:02 to ensure console debugging
output.
%SYS-2-MALLOCFAIL: Memory allocation of 1048 bytes failed from 0x6053A7F0, poo l
Processor, alignment 0 -Process= "Crash writer", ipl= 0, pid= 120 -Traceback= 604412B0
60442F08 6053A7F8 6046BD4C 604743BC 604006DC 604008AC 60437D2C 60437D18
%SYS-2-CFORKMEM: Process creation of Async tty Reset failed (no memory). -Process=
"Serial Background", ipl= 0, pid= 7 -Traceback= 60463CD0 6045605C 6065EB10 6065ED80
609C4F30 6000FF3C 60437D2C 60437D18 %MODEM-1-DL_FAIL: Firmware download failed for
slot 3341 module_mask 609A8D88 %SYS-3-LOGGER_FLUSHED: System was paused for 00:00:00
to ensure console debugg ing output.
```

  The Cisco AS5800 then reloads because of the following bus error:

```
System returned to ROM by bus error at PC 0x6097DD50, address 0xDEADBEFB at 10:43:38
```

  Conditions This symptom is observed on a Cisco AS5800 that is running Cisco IOS Release 12.1(7.2).

  Workaround There is no workaround.

- CSCdu02692

  Symptoms A software-forced reload because of a bus error may occur on a Cisco AS5300.

  Conditions This symptom is observed on a Cisco AS5300 that is running Cisco IOS Release 12.2(0.18).

  Workaround There is no workaround.

Basic System Services

- CSCdp74458

  Symptoms A Cisco 7500 series may reload because of a software-forced reload.

  Conditions This symptom is observed on a Cisco 7500 series that is configured with compression and that is running Cisco IOS Release 12.0(7.03).

  Workaround There is no workaround.

- CSCdr27911

  Symptoms Two Cisco multiservice access concentrators may not be able to place Voice over Frame Relay (VoFR) calls to each other.

  Conditions This symptom is observed on a Cisco MC3810 that is running Cisco IOS Release 11.3(1)MA7 and a Cisco MC3810 that is running Cisco IOS Release 12.0(7)XK1.

  Workaround There is no workaround.

- CSCdr73097

  Symptoms Hardware compression (SA-COMP/1) does not work as expected when it is used with Multilink PPP (MLP) on a router. The output of the **show compress** EXEC command may show software compression and all fields as zero. Not all data will be affected but there is no way of knowing if compression is occurring.

  Conditions This symptom is observed on a Cisco 7200 series or a Cisco 3640.

  Workaround There is no workaround.

- CSCdr89687

  For a Cisco Versatile Interface Processor 2-10 (VIP2-10), VIP2-15, VIP2-20, or VIP2-40, revisions 73-1684-01, 73-1684-02, and 73-1684-03 have ROMMONs that cannot boot large Cisco IOS images. VIP2-50s and the previously mentioned VIPs that are revision 73-1684-04 or a later revision have a ROMMON that can boot larger Cisco IOS images. VIP4s are not affected. You can use the **show controller cbus** command to see which version of ROMMON is on your card. The 17-2674-0X parts contain VIP software ROMMON version 17.0 which fails. The 17-4327-01 parts contain VIP software ROMMON version 115.0, which works. There is no workaround.

- CSCdr95072

  Symptoms A Cisco AS5300 may reload with a bus error.

  Conditions This symptom is observed on a Cisco AS5300 that is running Cisco IOS Release 12.1(3.1).

  Workaround There is no workaround.

- CSCds06280

  Symptoms Voice over ATM does not carry the “called_oct3” and the “calling_oct3” fields in the setup message.

Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.1(3)T, 12.1(3)XI, or Release 12.2.

Workaround There is no workaround.

- CSCds26699

  Symptoms A misleading message may be displayed when a T1 controller on a Cisco MC3810 is shut down.

  Conditions This symptom is observed on a Cisco MC3810 that has a T1 controller and that is running Cisco IOS Release 12.2 T.

  Workaround There is no workaround.

- CSCds34304

  Symptoms A software-forced reload may occur on a Cisco 7500 series after interfaces are configured.

  Conditions This symptom is observed on a Cisco 7500 series when quality of service (QoS) is configured on more than 512 interfaces.

  Workaround There is no workaround.

- CSCds52612

  Symptoms A PPC gcc.97r1-9804.ppc compiler error occurs on a 64-bit data movement.

  Conditions This symptom is observed on a Cisco router.

  Workaround Use Cisco IOS Release 12.1(5)T or Release 12.2.

- CSCds72436

  Symptoms A software-forced reload may occur on a router when the Simple Network Management Protocol (SNMP) is used to copy a configuration such as the following:

  ```
  snmpset -t 180 -r 2 10.200.40.10 cisco.local.lsystem.netConfigSet.172.17.247. 195
  octetstring config2
  ```

  The router displays the following message, indicating that it is trying to free memory that has already been freed:

  ```
  %SYS-2-FREEFREE: Attempted to free unassigned memory at 62F46994, alloc 6030DF8C,
  dealloc 602423B8
  ```

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.1(5.02).

  Workaround Use the following SNMP commands:

  ```
  snmpset 10.200.40.10 ccCopySourceFileType.11 integer 1
  snmpset 10.200.40.10 ccCopyDestFileType.11 integer 4
  snmpset 10.200.40.10 ccCopyServerAddress.11 ipaddress 172.17.247.195
  snmpset 10.200.40.10 ccCopyFileName.11 octetstring config
  snmpset 10.200.40.10 ccCopyEntryRowStatus.11 integer 1
  ```

- CSCds79572

  Symptoms PPP negotiation fails when asynchronous PPP is used with dialer profiles while Cisco Discovery Protocol (CDP) is enabled.

  Conditions This symptom is observed on a Cisco AS5800 that is running Cisco IOS Release 12.1(5.03).

  Workaround Use the **no cdp run** interface configuration command.

- CSCds92198

Symptoms After one or two calls are made on a router, the port remains in an off-hook condition. The Foreign Exchange Station (FXS) voice interface card (VIC) and direct inward dial (DID) VIC fails to recognize an on-hook condition.

Conditions This symptom is observed after one or two calls are made on a Cisco router that has a voice interface card (VIC).

Workaround There is no workaround.

- CSCdt07408

  Symptoms NetFlow and distributed Cisco Express Forwarding (dCEF) do not function properly on an enhanced Gigabit Ethernet Interface Processor (GEIP+) that has 256 MB of DRAM.

  Conditions This symptom is observed on an enhanced Gigabit Ethernet Interface Processor (GEIP+) that has 256 MB of DRAM.

  Workaround There is no workaround.

- CSCdt08577

  Symptoms A Cisco AS5400 may reload when AAA system accounting cannot be sent successfully to a RADIUS server.

  Conditions This symptom is observed on a Cisco AS5400 that is running Cisco IOS Release 12.2(0.01).

  Workaround There is no workaround.

- CSCdt11245

  Symptoms A router may reload when channel-associated signaling (CAS) calls are running. This symptom occurs when the router attempts to access a memory chunk that has already been freed.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.2(2)T.

  Workaround There is no workaround.

- CSCdt12084

  Symptoms The virtual circuit (VC) bundle state is reported as up even when the protected VC is down.

  Conditions This symptom is observed on a VC bundle that is on a Cisco router.

  Workaround There is no workaround.

- CSCdt12634

  Symptoms If the SrBuildSnmpMessage fails, and when the Simple Network Management Protocol (SNMP) engine performs a memcpy operation on the invalidated memory, memory corruption may cause a router to reboot.

  Conditions This symptom is observed on a Cisco router that has a Route Switch Processor (RSP-4) and that is running Cisco IOS Release 12.2(0.04).

  Workaround There is no workaround.

- CSCdt20427

  Symptoms Spurious memory access may occur on every Compressed Real-Time Transport Protocol (CRTP) packet when distributed Compressed Real-Time Transport Protocol (dCRTP) is configured on an interface.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.2(0.05).

  Workaround Disable CRTP.

- CSCdt23572

  Symptoms Round-Trip Time (RTT) measurements may be incorrect if the measurement cycle begins just before 00:00:00 Coordinated Universal Time (UTC) time.

  Conditions This symptom affects all probe types.

  Workaround There is no workaround.

- CSCdt26965

  Symptoms A Cisco 7200 series that has the following alignment errors may observed the errors increasing at a rate of 1 per second:

  ```
  %ALIGN-3-SPURIOUS
  ```

  Conditions This symptom is observed on a Cisco 7200 series that is running Cisco IOS Release 12.1(5a)E.

  Workaround There is no workaround.

- CSCdt31081

  Symptoms ATM adaptation Layer 2 (AAL2) does not upspeed when a V.21 fax tone is present.

  Conditions This symptom is observed on a Cisco MC3810 that is running Cisco IOS Release 12.1 T.

  Workaround There is no workaround.

- CSCdt41883

  Symptoms When a call is made from the T1 interface of a Cisco MC3810 to another Cisco MC3810 over Frame Relay, the called party will clip the voice of the calling party when the parties talk at the same time.

  Conditions This symptom is observed on a Cisco MC3810 that is running Cisco IOS Release 12.2(1).

  Workaround There is no workaround.

- CSCdt43665

  Flash memory is put in a “Device not programmable status” state. This situation is consistently seen with certain images on the Cisco 1600 series platform and with vendor-specific Flash memory. The router displays the following error message:

  ```
  %Error: PCMCIA flash sizing mismatch Size reported = 16384KB, calculated = 16640KB
  ```

  The image should run correctly although the information for a Flash memory card is incorrect. The Flash memory device is locked so you cannot use the Flash memory. There is no workaround.

- CSCdt44478

  Symptoms Export packets that are sent by a router may be dropped and may not make it to the collector.

  Conditions This symptom is observed even though NetFlow export is configured correctly on a Cisco router that is running Cisco IOS Release 12.2.

  Workaround There is no workaround.

- CSCdt49217

  Symptoms RADIUS format D does not work normally and major changes are required in the RADIUS server to enable the server to authenticate users.

  Conditions This symptom is observed on a Cisco 6400 that is running Cisco IOS Release 12.1(4.04)DC1.

  Workaround There is no workaround.

- CSCdt56273

  When you set up calls on a Cisco AS5800 series universal access server, the access server displays the following messages:

  ```
  %DIAL3-3-MSG:
  %NP-3-NAKRSP: NAK Response Received
  - command 0x1502, result code 0x8010, msg id 0x15FF, session id 0x65, msg tag 0x0
  %NP-3-NAKRSP: NAK Response Received
  - command 0x1502, result code 0x8010, msg id 0x15FF, session id 0x66, msg tag 0x0
  ```

  There is no workaround.

- CSCdt56915

  A Cisco 3620 router that is running Cisco IOS 12.1(5.3)T may reload with a bus error after running out of memory when the router accesses the following MIB counters:

  - cbQosMarkingFeature
  - cbQosPolicyMapName
  - cbQosPolicyMapDesc
  - cbQosCMName
  - cbQosCMDesc
  - cbQosMatchStmtName

  There is no workaround.

- CSCdt57626

  Symptoms A Cisco MC3810 may pause indefinitely when an inbound Voice over Frame Relay (VoFR) call is received and destined for the voice ports. The Cisco MC3810 does not respond to the break sequence and must be rebooted.

  Conditions This symptom is observed on a Cisco MC3810 that is running Cisco IOS Release 12.1(5)T4 after the **debug vpm dsp** EXEC command is enabled. This symptom is not observed when other debug commands are enabled.

  Workaround There is no workaround.

- CSCdt71006

  Symptoms Simple Network Management Protocol (SNMP) MIBS that use read-create objects in their rows (such as the SNMP ping MIB or the ConfigCopy MIB) may cause a router to reload unexpectedly.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.1 or Release 12.2.

  Workaround Disable SNMP.

- CSCdt72387

  Symptoms When a vendor-specific browser is used to configure a router, the request pauses indefinitely and times out. The command is not performed, and no output is returned.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.1 or Release 12.2.

  Workaround Use an earlier version of the browser.

- CSCdt73904

Symptoms A router may reload with a segmentation violation (SegV) exception when the **random-detect-group** global command that has been configured on a permanent virtual connection (PVC) is edited.

Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.1(7).

Workaround Remove the **random-detect-group** global configuration command from the permanent virtual connection (PVC), edit, and then reattach the command to the PVC.

- CSCdt78099

  Symptoms A reload may occur when two authentication, authorization, and accounting (AAA) configurations options are configured at the same time. This may include the two following commands:

  ```
  aaa accounting update periodic number
  aaa accounting resource default start-stop-failure group radius
  ```

  Conditions This symptom is observed on a Cisco AS5400 that is running Cisco IOS Release 12.1(5)T.

  Workaround There is no workaround.

- CSCdt84020

  Symptoms Some interfaces on a Route Switch Processor (RSP) or a Versatile Interface Processor (VIP) may remain down after the fix for CSCdt75868 has been integrated.

  Conditions This symptom is observed on an RSP or VIP interface.

  Workaround There is no workaround.

- CSCdt87420

  A Cisco 1401 router that is running Cisco IOS Release 12.2(0.14)T may experience a memory leak that is associated with the Simple Network Management Protocol (SNMP) ConfCopyPro process. There is no workaround.

- CSCdt87846

  Symptoms An MPC860 quad integrated communications controller on a Cisco MC3810 interprets the idle line binary synchronous communication (BSC) characters (FFs) as a frame and ships it across a Block Serial Tunnel (BSTUN). The idle line characters do not constitute a valid frame and should not be shipped to the upper layer.

  Conditions This symptom is observed on an MPC860 quad integrated communications controller on a Cisco MC3810.

  Workaround There is no workaround.

- CSCdt88794

  Symptoms A Cisco 1600 series may fail to boot after a Rivest, Shamir, and Adleman (RSA) key pair is generated and the **crypto ca identity** global configuration command is configured.

  Conditions This symptom is observed on a Cisco 1600 series that is running Cisco IOS Release 12.1(5)T5.

  Workaround There is no workaround.

- CSCdt90995

  Symptoms A Cisco 1000 series may fail to boot up.

  Conditions This symptom is observed on a Cisco 1000 series that is running the Cisco c1000-y-mz image of Cisco IOS Release 12.1(7.6).

  Workaround There is no workaround.

- CSCdt92513

  Symptoms A Cisco 6400 Node Switch Processor (NSP) may reload with a bus error exception.

  Conditions This symptom is observed on a Cisco 6400 NSP that is running Cisco IOS Release 12.1(5)DC after a long tunnel-session-auth-id or tunnel-password is configured.

  Workaround There is no workaround.

- CSCdt93287

  Symptoms The Cisco Discovery Protocol (CDP) may fail to correctly match identical neighbor entries and build a list of duplicated neighbor entries on the CDP neighbor table. The duplicate neighbor entries can be seen in the output when the **show cdp neighbor** EXEC command is entered. This symptom may cause the CDP to consume a higher than normal amount of memory on the router.

  Conditions This symptom is observed on a Cisco 2500 series that is running Cisco IOS Release 12.0(11).

  Workaround Set the CDP timer to a value that is comparable to the value of the CDP hold-down timer. For example, with the CDP hold-down timer set at the default of 180 seconds, the CDP timer can be set to 150 seconds. This setting will help to decrease the number of duplicate entries on the CDP neighbor table.

  Alternate Workaround Disable CDP.

- CSCdt93862

  When an HTTP server is enabled and local authorization is used, it is possible, under some circumstances, to bypass the authentication and execute any command on the device. It that case, the user will be able to exercise complete control over the device. All commands will be executed with the highest privilege (level 15).

  All releases of Cisco IOS software, starting with the release 11.3 and later, are vulnerable. Virtually, all mainstream Cisco routers and switches running Cisco IOS are affected by this vulnerability.

  Products that are not running Cisco IOS software are not vulnerable.

  The workaround for this vulnerability is to disable HTTP server on the router or to use Terminal Access Controller Access Control System (TACACS+) or Radius for authentication.

  This advisory will be posted at http://www.cisco.com/warp/public/707/IOS-httplevel-pub.html

- CSCdt93866

  The advisory is posted at http://www.cisco.com/warp/public/707/NTP-pub.shtml. Please read the advisory for the most up to date information.

  Network Time Protocol (NTP) is used to synchronize time on multiple devices. A vulnerability has been discovered in the NTP daemon query processing functionality. This vulnerability has been publicly announced.

  The workarounds for this vulnerability are described in the Workarounds section of the advisory.

  The following products are identified as affected by this vulnerability:

  – All releases of Cisco IOS software Media Gateway Controller (MGC) and related products BTS 10200 Cisco IP Manager

  – Other Cisco software applications may run on Solaris platforms and where those products have not specifically been identified, customers should install security patches regularly in accordance with their normal maintenance procedures.

  The following products are not affected:

  - Cisco routers 1600/1600-T, running an IP-only image
  - Cisco Content Service Switch 11000 Series
  - Catalyst 6000 family switches, all CatOS releases
  - Catalyst 5000 family switches, all CatOS releases
  - Catalyst 4000 family switches, all CatOS releases

  Cisco is continuing to research this issue in other products that may be affected. Unless explicitly stated otherwise, all other products are considered to be not affected.

- CSCdt96357

  Symptoms Radius attribute 4 in a Node Route Processor (NRP) configuration disappears after a Cisco NRP is reloaded.

  Conditions This symptom is observed on a Cisco 6400 NRP that is running Cisco IOS Release 12.1(5)DC.

  Workaround There is no workaround.

- CSCdu00952

  Symptoms After the fix for CSCdt78099 has been removed, system accounting becomes periodic when it is not suppose to be.

  Conditions This symptom is observed on a Cisco AS5850 that is running Cisco IOS Release 12.1 T.

  Workaround There is no workaround.

- CSCdu08711

  A Cisco 3660 router may fail to boot when the router is power-cycled or reloaded, if the total number of either the **ccs encap** or the **ccs connect** interface commands exceeds 10 in the startup configuration.

  The following error messages are logged at the console port at the time of the failure, before the router reloads with a bus error exception:

  ```
  %ALIGN-1-FATAL:Illegal access to a low address
  ```

  Workaround: Deconfigure part of the configuration, to bring down the number of the **ccs encap** or the **ccs connect** interface commands to a total of 10 or fewer. The entire configuration can be input after the router has booted up.

- CSCdu13339

  Symptoms A Cisco AS5300 may reload at the radius_add_redirected_station process.

  Conditions This symptom is observed on a Cisco AS5300 that is running Cisco IOS Release 12.2(0.5)g.

  Workaround There is no workaround.

- CSCdu19460

  Symptoms Three Cisco 7206 routers that have the Network Processing Engine (NPE-400) may reload simultaneously after the software is upgraded to Cisco IOS Release 12.1(5)T7.

  Conditions This symptom is observed on three Cisco 7206 routers that have been running Cisco IOS Release 12.1(5)T7 for a period of approximately two weeks.

  Workaround There is no workaround.

- CSCdu22255

  A Cisco AS5850 universal access server may suffer a reload under stress if it has AAA periodic accounting configured.

Workaround: Disable AAA periodic accounting on the access server.

- CSCdu22349

  Symptoms A Cisco 2600 series that is configured with the Service Assurance Agent (SA Agent) may display the following error message when the Simple Network Management Protocol (SNMP) is repeatedly polled for rttMonJitterStats:

  ```
  %SYS-2-MALLOCFAIL: Memory allocation of -2132490248 bytes failed from 0x8064BDBC,
  pool Processor, alignment
  ```

  Conditions This symptom is observed on a Cisco 2600 series that is running Cisco IOS Release 12.1(7).

  Workaround There is no workaround.

- CSCdu30105

  A Cisco router that is running Cisco IOS Release 12.1(7.3)E or 12.2(1.3) may experience a reload when a vendor-specific challenge handshake authentication protocol authentication is performed through a RADIUS server when the wrong username or password is entered and when the RADIUS server returns an access-reject with at least one attribute other than the vendor-specific attribute (VSA). There is no workaround.

- CSCdu42683

  Symptoms Some calls may be rejected.

  Conditions This symptom is observed on all voice platforms that have the call fallback mechanism enabled.

  Workaround There is no workaround.

- CSCdu52862

  Symptoms A router may reload after random-detect is configured and then unconfigured on an interface.

  Conditions This symptom is observed on a Cisco router that has the Network Processing Engine (NPE-200).

  Workaround There is no workaround.

- CSCdu54827

  Symptoms A router may reload when a Dynamic Host Configuration Protocol (DHCP) operation is scheduled.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.2(2.3).

  Workaround There is no workaround.

DECnet

- CSCdj62828

  Symptoms A router may reload if the **show decnet neighbor** EXEC command is entered while **decnet conversion** global configuration command is configured.

  Conditions This symptom is observed on a Cisco Catalyst 4000.

  Workaround There is no workaround.

- CSCdt08085

  Symptoms DECnet fast switching does not work on 802.1q trunks.

Conditions This symptom is observed when 802.1q trunks are configured on a Cisco router.

Workaround Disable fast switching of DECnet packets by entering the **no decnet route-cache** command on the primary interface that have the subinterfaces that are using dot1q encapsulation.

EXEC and Configuration Parser

- CSCdr64477

  A Cisco 3640 router that is running Cisco IOS Release 12.1 that is configured with the **autoselect** {**ppp**} line configuration command may experience a TTY line lock-up and excessive CPU usage when an EXEC-based PPP session pauses indefinitely after a modem connection is dropped on a random tty line.

  Workaround: Clear the line manually using the **clear line** *line-number* privileged EXEC command.

- CSCds11268

  Symptoms When large amounts of character mode traffic are downloaded from a Telnet client, the CPU utilization for the corresponding EXEC session on a Cisco AS5300 series increases to over 90 percent.

  Conditions This symptom is observed on a Cisco AS5300 series that is running Cisco IOS Release 12.0(11.06).

  Workaround There is no workaround.

- CSCdt77021

  Symptoms The **network** command under a Border Gateway Protocol (BGP) configuration does not show up in the running-config.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.2(0.15)T.

  Workaround There is no workaround.

- CSCdu20666

  A bus error may occur when the following privileged EXEC commands are entered:

  - **traceroute** (privilege EXEC level 1)
  - **ping** (privilege EXEC level 1)
  - **show ip access-lists** (privilege EXEC level 15)
  - **show ip** (privilege EXEC level 1)
  - **show access-lists** (privilege EXEC level 15)
  - **show** (privilege EXEC level 1)

  There is no workaround.

IBM Connectivity

- CSCdm59018

Symptoms When Frame Relay Access Support Border Access Node (FRAS BAN) is configured with dial-on-demand routing (DDR) backup, the backup is only driven if the primary interface enters the “down/down” state. If the data-link connection identifier (DLCI) is lost, the interface enters the “up/down” state and the backup is not driven. This feature is working as it is designed but it is of limited use to the customer.

Conditions This symptom is observed when Frame Relay Access Support Border Access Node (FRAS BAN) is configured with dial-on-demand routing (DDR) backup.

Workaround There is no workaround.

- CSCdm75874

  Symptoms Data-link switching (DLSw) Ethernet redundancy does not work on Inter-Switch Link (ISL)-encapsulated subinterfaces of Versatile Interface Processor (VIP) cards that have Ethernet port adapters on Cisco 7500 series routers.

  Conditions This symptom is observed on ISL-encapsulated subinterfaces of VIP cards that have Ethernet port adapters.

  Workaround Do not use DLSw Ethernet redundancy but configure support for DLSw by entering transparent bridge group commands.

- CSCdr93460

  Symptoms A router may reload when Qualified Logical Link Control (QLLC) tunneling tests are performed.

  Conditions This symptom is observed on a Cisco router that has a Route Switch Processor (RSP) card and that is running Cisco IOS Release 12.1(3.03).

  Workaround There is no workaround.

- CSCds78753

  Symptoms When a data-link switching (DLSw) circuit is established on a Cisco 3640, the router sends a receiver ready (RR) frame to the secondary station indicating that it is ready to accept Information frames (I-frames). The station responds rapidly with the I-frame, which arrives at the router about 0.5 milliseconds after the router has sent the RR frame. With Priority peers, a race condition can develop between the first I-frame and the contacted Switch to Switch Protocol (SSP) message if they are over different ports. If the I-frame is received first, it is dropped.

  Conditions This symptom is observed on a Cisco 3640 that is running Cisco IOS Release 12.0(8).

  Workaround There is no workaround.

- CSCds80725

  Symptoms When service is interrupted on a Frame Relay access support (FRAS) border access node (BAN) that is configured to use more than one Frame Relay permanent virtual circuit (PVC) that is attached to one physical serial interface, a router does not send exchange identification (XID) to both data-link connection identifiers (DLCIs) to initiate a session.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.1(2).

  Workaround There is no workaround.

- CSCdt08063

  Symptoms A Cisco 2600 series may pause indefinitely.

  Conditions This symptom is observed on a Cisco 2600 series that is running Cisco IOS Release 12.1(5)T under very high Binary Synchronous (Bisync) traffic conditions.

  Workaround There is no workaround.

- CSCdt08126

  Symptoms Data-link switching (DLSw) Ethernet redundancy may fail to send the IWANTIT and CKT_GONE frames if the **dlsw timer explorer-wait-time** global configuration command is configured. Because of this symptom, the Systems Network Architecture (SNA) client cannot reestablish the circuit.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.1(5).

  Workaround There is no workaround.

- CSCdt15981

  An information frame (IFrame) is seen on the WAN trace but not on the Channel Interface Processor (CIP) trace. This occurs when there is a single logical unit (LU) on a physical unit (PU). The frame will pause indefinitely at llc txQ. There is no workaround.

- CSCdt16151

  Symptoms A router that is configured for Frame Relay access support (FRAS) border access node (BAN) does not turn on the routing information indicator (RRI) when explorer frames are sent out on the Frame Relay interface.

  Conditions This symptom is observed on a Cisco router that is configured for FRAS BAN and that is running Cisco IOS Release 12.1(4).

  Workaround There is no workaround.

- CSCdt17920

  You may receive the following information every day after upgrading Cisco IOS Release 11.3 to Release 12.0(13):

  ```
  %TCP-2-INVALIDTCPENCAPS: Invalid TCB encaps pointer:
  0x0
  -Process= "IP Input", ipl= 0, pid= 12
  -Traceback= 60382C2C 60383F14 60A56FF0 60A583F8 60A569E4 60A46840 60A4E58C
  60382B78 602EAE00 602ECB84 603233D4 6030BD04 6030A200 6030A2FC 6030A470 6
  02973AC
  ```

  This situation is specific to a data-link switching (DLSw) border peer network. It does not happen in a standard DLSw environment with only configured or promiscuous DLSw peers. There is no workaround.

- CSCdt25623

  A Cisco 7206 router that is running Cisco IOS Release 12.0(15) may reload because of a bus error exception at PC 0xD0D0D7D because of a data-link switching Plus (DLSw+) installation that is using Qualified Logical Link Control (QLLC) as a Data Link Control (DLC). There is no workaround.

- CSCdt35626

  A host needs to initiate the connection only. Also, once an ATM fails it needs to be removed from the multidrop polling list. To do this, use the Synchronous Data Link Control (SDLC) partner command for each address is configured with the keyword *inbound* and the **sdlc address** command is configured with the *passive* keyword. Also, the **no sdlc slow-poll** interface configuration command is configured.

  The host initiates a request and the Cisco 2600 router starts sending Set Normal Response mode (SNRMs) to the physical unit (PU). If the PU is down and does not respond to the SNRMs then the router should stop sending them after it has retried sdlc n2 times (default 20). But in this case, the router continues sending the SNRMs forever.

This is the configuration on the sdlc (controller) side:

```
interface Serial0/1 bandwidth 4800 no ip address encapsulation sdlc no keepalive
ignore-dcd sdlc role primary sdlc vmac 1000.4018.3900 sdlc poll-pause-timer 200 sdlc
N2 7 sdlc address 01 passive sdlc

partner 5000.8804.40c0 01 inbound sdlc address 02 passive sdlc
partner 5000.8804.40c0 02 inbound sdlc address 04 passive sdlc
partner 5000.8804.40c0 04 inbound sdlc address 05 passive sdlc
partner 5000.8804.40c0 05 inbound sdlc address 07 passive sdlc
partner 5000.8804.40c0 07 inbound sdlc address 08 passive sdlc
partner 5000.8804.40c0 08 inbound no sdlc slow-poll sdlc dlsw default
```

There is no workaround.

- CSCdt41239

  On a Cisco 7500 series router when a serial port adapter (PA) is configured with Serial tunnel (STUN) encapsulation, the Route Switch Processor (RSP) performs a cbus complex. This situation happens when the encapsulation is changed from or to Serial Tunnel Serial Tunnel (STUN). There is no workaround.

- CSCdt57321

  Channel Interface Processor (CIP) to Synchronous Data Link Control (SDLC) through Data-link switching (DLSw) local switching on a Cisco router may lose a path information unit (PIU) outbound over the serial interface. Network Control Program (NCP) reports degraded performance and a missing PIU. This situation is caused by carrier transitions occurring on the line. When the transition occurs, the Interface Descriptor Block (IDB) is marked down until the carrier comes back up. If the carrier is down when SDLC tries to encapsulate the packet, the encapsulation fails and the packet is silently discarded. There is no workaround.

- CSCdt79763

  Symptoms Data-link switching (DLSw) Ethernet load balance does not work in Cisco IOS Release 12.1(7) for resources that are reachable local to the router with more than one cache entry in the DLSw reachability cache for a given resource such as a MAC address or a NetBIOS name. When this symptom occurs, a user might see bogus routing information field (RIF) entries in the reachability cache for resources that are reachable.

  Conditions When this symptom occurs, DLSw will cache up to four entries for a given resource and then load balance between the four entries if DLSw is configured to do so. Otherwise, the first entry for a given resource is used. This symptom affects the second, third, or fourth entry only if there is no RIF.

  Workaround There is no workaround.

- CSCdt82241

  Symptoms A router that is configured for data-link switching (DLSw) Ethernet redundancy may reload with a bus error if circuits are established while peer connections are torn down.

  Conditions This symptom is observed on a Cisco router that is configured for DLSw Ethernet redundancy and that is running Cisco IOS Release 12.1(2)E.

  Workaround Use DLSw with transparent bridging.

- CSCdt83848

  Symptoms A buffer leak may occur on a Cisco 2600 series when a LAN network manager is configured.

  Conditions This symptom is observed on a Cisco 2600 series that is running Cisco IOS Release 12.1(5)T.

  Workaround There is no workaround.

- CSCdu05260

  Symptoms The input of the **bsc contention** *address* interface configuration command defaults to a decimal. Hexadecimal input can be forced on the command by entering the "0x" prefix. The issue is that the **show running-config** EXEC command shows the **bsc contention** *address* interface configuration command with a hexadecimal value but without the "0x" prefix. If the configuration is saved and the system is rebooted, the router does not accept the **bsc contention** *address* interface configuration command and removes it from the configuration.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.1.

  Workaround Add the command again to the configuration.

- CSCdu25605

  Symptoms A router that is running the data-link switching plus (DLSw+) Ethernet Redundancy feature may reload when two redundant domains are merged.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.1.

  Workaround There is no workaround.

- CSCdu42979

  A Cisco router that is running Data-Link Switching (DLSw) Ethernet Redundancy may reload when two redundant domaines are merged. There is no workaround.

Interfaces and Bridging

- CSCdm94677

  Symptoms Subinterfaces that are created on a Cisco 7500 series Route Switch Processor (RSP) may not be able to route AppleTalk packets. Sniffer tests show that the cable range is being reached even though the router does not respond to the **appletalk getzonelist-filter** interface configuration command. The router is unable to ping any of the connected Apple machines even though Routing Table Maintenance Protocol (RTMP) appears to be working.

  Conditions This symptom is observed on a Cisco 7500 series RSP that is running Cisco IOS Release 12.0.

  Workaround There is no workaround.

- CSCdp64588

  Symptoms Command failures and "ATMPA-3-SARCRASH" messages may be observed on an enhanced ATM port adapter (ATM-PA-A3) and the port adapter may power down. After the "PA-3-DEACTIVATED" power down message is displayed, the configuration of the ATM port adapter becomes missing from the configuration. Under rare circumstances, the router may reload.

  Conditions This symptom is observed on an ATM-PA-A3 port adapter on a Cisco 7200 series that is running Cisco IOS Release 12.0(6).

  Workaround There is no workaround.

- CSCdr94341

  A Virtual Private Network (VPN) with 802.1q on a PA-FE port adapter works with Cisco Express Forwarding (CEF) but not distributed Cisco Express Forwarding (dCEF). There is no workaround.

- CSCdr96683

Symptoms A router may "glitch" (pulse-low) the request to send (RTS) signal when "pulse-time" is coded for the data terminal ready (DTR) signal. In some instances, RTS follows the behavior of DTR. At other times, RTS simply glitches low for a few milliseconds. This symptom may cause interoperability problems when certain data communications equipment (DCE) or a particular interface wiring is used (for example, looping RTS back to data carrier detect (DCD).

Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.1(1).

Workaround There is no workaround.

- CSCds03961

  Symptoms A router that has a Gigabit Ethernet Interface Processor (GEIP) may reload after it has booted up.

  Conditions This symptom is observed on a Cisco 7507 router that has a GEIP that is installed in slot 5 and slot 6. This symptom is observed when the Cisco 7507 is upgraded to Cisco IOS Release12.0(11)S.

  Workaround Use Cisco IOS Release 11.1(33)CC.

- CSCds31325

  Symptoms An EtherSwitch 12E/2FE port adapter (PA-12E/2FE) may fail to initialize.

  Conditions This symptom is observed on a PA-12E/2FE on a Cisco 7200 series that has a Network Processing Engine (NPE-400) and that is running Cisco IOS Release 12.1(3a)E. The Network Processing Engine (NPE-300) can be used with the PA-12E/2FE without any problems.

  Workaround Use the Network Processing Engine (NPE-300).

- CSCds48844

  Enabling Multilink PPP on some interfaces on a PA-MC-2T3 card together with distributed Cisco Express Forwarding (dCEF) may cause tracebacks. There is no workaround.

- CSCds72438

  Symptoms When a Cisco 7200 series that has a Packet over SONET (POS) port adapter is reloaded, the POS subinterfaces may not come up in the enabled state.

  Conditions This symptom is observed on a Cisco 7200 series that has a POS port adapter.

  Workaround Enter the **shutdown** interface configuration command followed by the **no shutdown** interface configuration command on the POS interface.

- CSCds75494

  Symptoms A virtual circuit descriptor (VCD) that is configured on a given bridge group may erroneously in the output of another bridge group when the **show bridge group** [**verbose**] privileged EXEC command is entered.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.1(5). This symptom occurs when ATM virtual circuits (VCs) are configured into several bridge groups.

  Workaround Enter the **clear bridge** EXEC command.

- CSCds77395

  Symptoms When the dot5StatsTokenErrors counter is queried, the value that is returned is the value for the dot5StatsBurstErrors counter instead of the dot5StatsTokenErrors counter

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.0(07)XE01.

  Workaround There is no workaround.

- CSCds79548

Symptoms If a fiber is detached and if the keepalive is removed from the Packet over SONET (POS) interface by entering the no keepalive command, the like may remain up indefinitely after the patch cord is removed. An output that is similar to the following may be displayed when the keepalives are set to one second:

```
00:30:06: %SONET-4-ALARM:  POS1/0/0: SLOS
00:30:10: %LINEPROTO-5-UPDOWN: Line protocol on Interface POS1/0/0, changed
state to down
00:30:10: %OSPF-5-ADJCHG: Process 1, Nbr 10.0.2.4 on POS1/0/0 from FULL to
DOWN, Neighbor Down: Interface down or detached
00:30:10: %LINK-3-UPDOWN: Interface POS1/0/0, changed state to down
```

The line protocol does not go down immediately after a section loss of signal (SLOS) alarm condition is detected. Instead, the line protocol goes down only after three missed keepalives.

Conditions This symptom is observed on a Cisco 7000 series that is running Cisco IOS Release 12.1(4.04)T3 or Release 12.2.

Workaround There is no workaround.

- CSCdt04013

  Multicast traffic on a nonbridging subinterface may cause spurious access in tbridge_irb_inline, when there is at least one bridging subinterface on the same physical interface. There is no workaround.

- CSCdt08213

  Symptoms The **show compress** EXEC command displays only the information about the statistics of the first data-link connection identifier (DLCI) even when the interface is configured for compression on multiple DLCIs.

  Conditions This symptom is observed on a Cisco 2600 series, Cisco 3600 series, or Cisco 7200 series when Frame Relay encapsulation is used and when multiple DLCIs are configured with Frame Relay Forum payload compression (FRF.9).

  Workaround There is no workaround.

- CSCdt19788

  Symptoms The ATM permanent virtual circuit (PVC) subinterface of a Cisco 7206VXR may intermittently drop packets from the output queue. When this symptom occurs, the PVC remains up and continues to send traffic that is originating from the Cisco 7206VXR.

  Conditions This symptom is observed on a Cisco 7206VXR that has a Network Processing Engine (NPE-300), an enhanced ATM port adapter (PA-OC-3), and some ATM subinterfaces. Cisco Express Forwarding (CEF) and fast switching are not used in this setup.

  Workaround Reenter the **atm pvc** interface configuration command on the ATM subinterfaces.

- CSCdt39126

  Symptoms A protected Packet over SONET (POS) interface may continue to send PPP Link Control Protocol (LCP) requests and wink the alarm indication signal (AIS) after a timeout occurs and confuse the provider.

  Conditions This symptom is observed on a protected POS interface that is configured with PPP while the protected POS interface is in the automatic protection switching (APS) protect state. This symptom is observed on a Cisco router after it has been upgraded from Cisco IOS Release 12.0(14)S2 to Release 12.0(15)S.

  Workaround Use High-Level Data Link Control (HDLC) encapsulation.

- CSCdt41215

Symptoms A Cisco 7200 series or Cisco 7500 series may stop forwarding packets on one or more virtual connections (VCs).

Conditions This symptom is observed on a Cisco 7200 series or Cisco 7500 series that has an enhanced 1-port ATM OC-3c/STM-1 multimode port adapter (PA-A3-OC3) and that is running Cisco IOS Release 12.0(10)S3.

Workaround Enter the clear interface privileged EXEC command to restore the Cisco 7200 series or Cisco 7500 series to the normal working condition.

- CSCdt41427

  A Cisco router reloads with alignment errors and displays the following error message:

  ```
  ALIGN-1-FATAL: Illegal access to a low address addr=0x13C, pc=0x6056C83C,
  ra=0x603E8D4C, sp=0x62177800
  ```

  There is no workaround.

- CSCdt42684

  When a RJ-45 cable is disconnected from a 10BaseT Ethernet port adapter (PA-4E or PA-8E) that is installed on a Cisco 7500 router, the line protocol goes down and remains down even after the RJ-45 cable is reconnected.

  Workaround: Enter the **shut** command followed by the **no shut** command on the 10BaseT Ethernet port adapter interface to restore the line protocol after the RJ-45 cable is reconnected to the port adapter.

- CSCdt53880

  Symptoms A Cisco 7507 may reload with a bus error.

  Conditions This symptom is observed on a Cisco 7507 when it is running Cisco 56-bit encryption IP Security (IPSec) and Token Ring interfaces.

  Workaround There is no workaround.

- CSCdt54407

  The gigabit port on a Cisco Catalyst 4000 gateway card fails to come up because the FX1000 does not work properly.

  Workaround: Use the Cisco IOS release that contains the fix for this caveat.

- CSCdt55637

  When a permanent virtual circuit (PVC) on a PA-A2 port adapter ATM interface is overloaded, the Operation, Administration, and Maintenance (OAM) cell drops and causes the PVC to go down. This situation does not affect a PA-A3 port adapter interface. There is no workaround.

- CSCdt60738

  Symptoms The traffic counters on an ATM subinterface may display values that are different from the traffic counters on the main interface when the **show interface** EXEC command is entered. The counters on the subinterface are incorrect and the counters on the main interface are correct.

  Conditions This symptom is observed on the ATM subinterface of a Cisco router. This symptom may also be observed when a Simple Network Management Protocol (SNMP) walk is performed on the ifEntry table.

  Workaround There is no workaround.

- CSCdt65989

A Cisco 7200 series provider edge (PE) router may zero out all the contents of the packet beyond the ATM adaptation layer 5 (AAL5) header when Cisco Express Forwarding (CEF) is switching an IP packet from a customer edge (CE) router to a remote virtual private network (VPN) destination. This problem occurs only when the input port adapter is the i82543-based 2 port FastEthernet port adapter (PA-2FE) I/O controller. There is no workaround.

- CSCdt67276

  Pings fail for an IP datagram size larger than 586 bytes on an ISDN BRI D channel when configured for bridging with X.25. Process-level transparent bridging behaves erratically. There is no workaround.

- CSCdt89527

  Symptoms After a router is reloaded, there may not be any connectivity between the serial interfaces that have channel groups configured.

  Conditions This symptom is observed on a Cisco router that has serial interfaces and that is running Cisco IOS Release 12.0(16.05)S, 12.1, or Release 12.1(6.09)E.

  Workaround Enter the **shutdown** interface configuration command followed by the **no shutdown** interface configuration command to restore connectivity between the serial interfaces.

- CSCdt90054

  Symptoms A Cisco 7500 series Route Switch Processor (RSP) may display the following error message on the RSP console if the Versatile Interface Processor (VIP) is running at 99 percent capacity:

  ```
  %ATM-3-FAILCREATEVC: ATM failed to create VC(VCD=23, VPI=0, VCI=96) on Interface
  ATM4/1/0, (Cause of the failure: Failed to have the driver to accept the VC)
  ```

  Conditions This symptom is observed on a Cisco 7500 series RSP that has a Cisco Versatile Interface Processor 2-50 (VIP2-50) and an enhanced ATM port adapter (PA-A3). The Cisco 7500 series is running Cisco IOS Release 12.0(12)S1 and has distributed Cisco Express Forwarding (dCEF) enabled.

  Workaround Disable dCEF.

  Alternate Workaround Enter the **shutdown** interface configuration command followed by the **no shutdown** interface configuration command on the ATM interface.

- CSCdu28931

  The following errors may be logged on a Cisco 7206VXR router:

  ```
  %ALIGN-3-CORRECT: Alignment correction made at 0x610D688C reading 0x2018DB0F

  %ALIGN-3-TRACE: -Traceback= 610D688C 610D73B8 605F8FCC 601032B0 606A2A74 60108440
  6010B238 60012858

  %ALIGN-3-CORRECT: Alignment correction made at 0x610D688C reading 0x2017928F

  %ALIGN-3-TRACE: -Traceback= 610D688C 610D73B8 605F8FCC 601032B0 606A2A74 60108440
  6010B238 6001C17C

  %ALIGN-3-CORRECT: Alignment correction made at 0x610D688C reading 0x2018DB0F

  %ALIGN-3-TRACE: -Traceback= 610D688C 610D73B8 605F8FCC 601032B0 606A2A74 60108440
  6010B238 6002E6E8
  ```

  The messages appear every few minutes. The alignment errors affect only packets with Service Advertisement Protocol (SAP) encapsulation. There is no workaround.

- CSCdu53910

  Symptoms After the line protocol for the ATM-Circuit Emulation Services (CES) is enabled, the line protocol may become disabled and remain disabled.

Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.2(2.03).

Workaround There is no workaround.

IP Routing Protocols

- CSCdp25457

  Symptoms A router may unexpectedly lose some routing entries and the neighboring routers that contain all the routing entries with successors even though it has a correct Enhanced Interior Gateway Routing Protocol (EIGRP) topology. The root cause appears to be a flapping Fiber Distributed Data Interface (FDDI) interface. This situation does not occur under normal operating conditions.

  Conditions This symptom is observed on a Cisco router under rare circumstances.

  Workaround Enter the **clear ip eigrp neighbors** [*ip-address*] EXEC command.

- CSCdp71893

  Symptoms An (S,G) entry created by the receipt of data on an interface will have a NULL outgoing interface list (olist). Unless the X-flag is set for this entry, the entry expiration time will not be updated. The entry expiration time will time out and then be recreated by the next data packet. This symptom may increase the CPU usage on routers that process multicast packets for a large number of sources.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.0(8.06).

  Workaround There is no workaround.

- CSCdr31946

  A Cisco router that is running Enhanced Interior Gateway Routing Protocol (EIGRP) with the stub feature on might have a route that is active and not waiting for replies. This situation only occurs in networks where all of the EIGRP neighbors are declared as stub.

  Workaround: Remove the EIGRP stub feature or clear the IP EIGRP neighbors.

- CSCds12599

  Symptoms This fix implements various optimizations implemented for Open Shortest Path First (OSPF), default external link-state advertisement (LSA), and Cisco Express Forwarding (CEF) in Cisco IOS Release 12.0 and Release 12.1. The fixes incorporated here originated from CSCdm83004, CSCdp72309, CSCdr26999, and CSCdr88511.

  Conditions This fix implements various optimizations implemented for OSPF, default external LSA, and CEF in Cisco IOS Release 12.0 and Release 12.1.

  Workaround There is no workaround.

- CSCds36965

  Symptoms When the internal Border Gateway Protocol (iBGP) is redistributed into an Interior Gateway Protocol (IGP) like the Routing Information Protocol (RIP) or the Open Shortest Path First (OSPF) Protocol, the routes show up as being advertised by OSPF and RIP. When the **clear ip route** privileged EXEC command is entered for an iBGP learned route, the route no longer appears in the OSPF and RIP database and is not advertised by either OSPF or RIP.

  Conditions This symptom is observed when a iBGP learned route is cleared by entering the **clear ip route** privileged EXEC command on a Cisco router that is running Cisco IOS Release 12.1(2.03)E.

Workaround Enter either the **clear ip bgp** {* | *address* | *peer-group name*} [soft [in | out]] or the **clear ip route** {*network* [*mask*] | *} EXEC commands to clear this symptom.

Alternate Workaround Remove and reenter the neighbor statements in Border Gateway Protocol (BGP) or reload the router.

- CSCds43050

  A Cisco 6400 node route processor (NRP) may reload with the following error message:

  ```
  %SYS-3-OVERRUN: Block overrun at 627E418 (red zone = 4E205047)
  ```

  This problem may occur when network address translation (NAT) is used. There is no workaround.

- CSCds54722

  Symptoms A router may not readvertise routes that are deemed as conditionally permitted by the **neighbor** *address* **advertise-map** *route-map* **non-exist-map** *route-map* router configuration command to the peer router.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.1 E, 12.1 T, or Release 12.2 and that has Border Gateway Protocol (BGP) enabled.

  Workaround There is no workaround.

- CSCds57882

  In a full mesh of route reflectors, one or two of the route reflectors may have a Border Gateway Protocol (BGP) table with multiple entries for the same route (there should be only one) with multiple tags. Clients of the route reflector still receive the correct BGP information. Virtual Private Network (VPN) routing/forwarding instance (VRF) interfaces on the route reflector may get an incorrect tag.

  Workaround: Clear the BGP session. Clearing the route fixes the tag situation but not the BGP table.

- CSCds61053

  Symptoms A router may reload unexpectedly.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.1(5) and that is using the Enhanced Interior Gateway Routing Protocol (EIGRP).

  Workaround There is no workaround.

- CSCds67623

  Symptoms A router may reboot when all of the following conditions are present:

  – The Resource Reservation Protocol (RSVP) was previously enabled on any BRI interface by entering the **ip rsvp bandwidth** [*interface-kbps* [*single-flow-kbps*]] interface configuration command.

  – There is only one interface of any type that has RSVP enabled.

  – RSVP is disabled on the last remaining interface by entering the **no ip rsvp bandwidth** interface configuration command.

  Conditions This symptom is observed on a Cisco router that is using RSVP on BRI interfaces and that is running Cisco IOS Release 12.1(5)T 12.2, or Release 12.2 T.

  Workaround There is no workaround.

- CSCds80472

  Symptoms Multicast distributed switching does not work on ATM subinterfaces.

  Conditions This symptom is observed on an ATM interface of a Cisco router that is running Cisco IOS Release 12.1(5.01)T and Release 12.2.

Workaround There is no workaround.

- CSCds82506

  Symptoms PPP over ATM (PPPoA) to Layer 2 Tunneling Protocol (L2TP) sessions are not stable with RADIUS on the L2TP network server (LNS) side because numerous IP static routes are configured while there are several ongoing sessions.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.1(4)DC while static routes are looped. The processing on the PPP state machine slows to the point where sessions begin to time out and cause sessions to be unstable.

  Workaround Configured a smaller number of IP static routes.

- CSCds82679

  Symptoms Network Address Translation (NAT) may fail to forward "ICMP Unreachable-fragmentation required" packets (ICMP type 3 code 4) when the packets are sent from the inside to the outside when NAT is configured with overload Port Address Translation (PAT).

  Conditions This symptom is observed on a Cisco router that is using NAT and that is running Cisco IOS Release 12.1(10.1) and earlier releases, 12.1 T, 12.2(0.10) and earlier releases, or Release 12.2(0.07)T.

  Workaround There is no workaround.

- CSCds86131

  A Cisco router may reload if you configure a static Rendezvous Point (RP).

  Workaround: Use static route processing.

- CSCdt00188

  A Cisco router that is running Resource Reservation Protocol (RSVP) over ATM may reload with a bus error in the Forwarding Information Base (FIB) switching code. There is no workaround.

- CSCdt05186

  Symptoms The advertised network disappears and is no longer imported into the appropriate virtual routing and forwarding instance (VRF) by a provider edge (PE) router when a route reflector that provides the best path entry goes down and then comes back up again. Network connectivity is lost when this symptom occurs.

  Conditions This symptom is observed in a Multiprotocol Label Switching (MPLS) Virtual Private Network (VPN) network that has two reflectors. A route reflector that provides the best path entry can go down and then come back up again when a network is advertised by one route reflector with the best path and fails and is subsequently replaced by the other route reflector.

  Workaround Use the same cluster identity (ID).

- CSCdt06780

  On a Cisco router or Catalyst switch, excessive Border Gateway Protocol (BGP) flapping may occur, if Multiprotocol Border Gateway Protocol (MBGP) is enabled and the extended attributes are larger than 255 bytes. There is no workaround.

- CSCdt06855

  Symptoms When the Open Shortest Path First (OSPF) protocol is used between a provider edge (PE) and a customer edge (CE) router in a Multiprotocol Label Switching (MPLS) Virtual Private Network (VPN) environment, type-3 link-state advertisements (LSAs) can be generated at the PE as a result of the redistribution of the internal Border Gateway Protocol (iBGP) route. When the iBGP route goes down, the PE should flush previously generated type-3 LSAs. After the fix for CSCdr35422 is implemented, the PE may fail to flush type-3 LSAs.

Conditions This symptom is observed on a Cisco router that is running 12.1(5)T1 or Release 12.1(5.03)T.

Workaround There is no workaround.

- CSCdt11146

  Symptoms A delay may occur when a receiver attempts to subscribe to a group.

  Conditions This symptom is observed under rare circumstances in certain topologies on a Cisco router that is running Cisco IOS Release 12.0 and Release 12.1.

  Workaround There is no workaround.

- CSCdt15109

  Symptoms Enhanced Interior Gateway Routing Protocol (EIGRP) may send unnecessary updates for external or internal routes.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.1(6).

  Workaround There is no workaround.

- CSCdt19258

  Symptoms When malicious sources spam traffic to class D addresses, a large number of states may be created on multicast routers. These states can be propagated to other domains via the Multicast Source Discovery Protocol (MSDP).

  The patch for this DDTS introduces the new **ip msdp sa-limit** {*peer-name* | *peer-address*} *sa-limit* global configuration command that allows a user to set a limit for the number of source actives (SAs) an MSDP speaker will accept from each of its peers.

  SAs that are in excess of the set limit for the peer are discarded. A rate-limited (once a minute) syslog in the following form will inform the network administrator when SAs are discarded:

  ```
  %MSDP-4-SA_LIMIT: SA from peer 172.12.0.1, RP 172.1.0.1 for (172.1.0.45, 234.1.1.1)
  exceeded sa-limit of 40
  %MSDP-4-SA_LIMIT: SA from peer 172.23.0.3, RP 172.3.99.3 for (172.3.0.55, 234.1.1.3)
  exceeded sa-limit of 50
  ```

  The existing **show ip msdp summary** EXEC command and the **show ip msdp count** EXEC command have been enhanced to show the number of SAs that are learned from each peer.

  Conditions This symptom is observed when malicious sources spam traffic to class D addresses.

  Workaround There is no workaround.

- CSCdt19638

  Under rare circumstances, an updated Border Gateway Protocol (BGP) bestpath may not be propagated to the BGP peers of a router.

  Workaround: Enter the **clear ip bgp * out** EXEC command to updates the peers with the current bestpath attributes.

- CSCdt21533

  Symptoms Subranges that are configured on a Network Address Translation (NAT) pool do not take effect.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.2.

  Workaround There is no workaround.

- CSCdt23240

  Symptoms A router enters a continuous booting loop if more than more pool is defined by entering the **ip nat inside source list** global configuration command.

Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.1(5)T1. This symptom is resolved in Cisco IOS Release 12.1 E.

Workaround To break the continuous booting loop, enter the ROM monitor (ROMmon) mode and boot the router using the boot loader image. Erase the configuration and reenter all the commands that were previously configured except the **ip nat inside source list** global configuration command.

- CSCdt24281

  A Cisco 7200 series router that is running Cisco IOS Release 12.2(0.3) and that has Network Address Translation (NAT) configured may experience a software-forced reload when you enter the **show ip nat translations** EXEC command.

  Workaround: Disable CEF and use other switching methods such as fast switching or process switching.

- CSCdt27148

  Symptoms A software-forced reload may occur on a router.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.2(0.5) after Network Address Translation (NAT) is configured.

  Workaround Configure the **ip nat service skinny tcp port** global configuration command on the router.

- CSCdt30312

  Symptoms Static Network Address Translation (NAT) configuration lines cannot be removed through an HTTP user interface.

  Conditions This symptom is observed on a Cisco router that has static NAT configuration lines.

  Workaround Delete the static NAT configuration lines by connecting through a tty line.

- CSCdt31026

  Symptoms After a router has booted up, Multicast Source Discovery Protocol (MSDP) peers that belong to a mesh group may have a sa-limit of 0. The Source-Active (SA) messages cannot be received or cached from the MSDP peers, and source discovery between the MSDP peers will not occur. This symptom is indicated in the following syslog message:

  ```
  %MSDP-4-SA_LIMIT: SA from peer peer-addr RP rp-addr for (src-addr, group-addr)
  exceeded sa-limit of 0
  ```

  Conditions This symptom is observed on Cisco router that is running Cisco IOS Release 12.0(14.6)S3 or Release 12.0(15)S.

  Workaround Limit the number of Source-Active (SA) messages from a Multicast Source Discovery Protocol (MSDP) peer that the router will allow in the SA cache by entering the **ip msdp sa-limit** {*peer-name* | *peer-address*} *sa-limit* global configuration command or enter the **no ip msdp sa-limit** {*peer-name* | *peer-address*} *sa-limit* global configuration command for each peer that belongs to a mesh group each time after a router reloads.

- CSCdt31100

  Symptoms A Cisco 12000 series may reload because of a watchdog timeout and display a "FIB-2-FIBDOWN" message.

  Conditions This symptom is observed on a Cisco 12000 series that is running Cisco IOS Release 12.0(13.6)ST2 or Release 12.0(14)S1. This symptom is observed if a protocol such as the Intermediate System-to-Intermediate System (IS-IS) Protocol is entered as the protocol argument of the **show ip route** *protocol* EXEC command when there is a large number of routes in the routing table (about 100,000 routes).

Workaround Enter the **show ip route** EXEC command instead of the **show ip route** *protocol* EXEC command.

- CSCdt32880

  Symptoms An incorrect metric may appear in the Enhanced Interior Gateway Routing Protocol (EIGRP) topology table for one or more routes after the metric value is changed on an interface.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.1(4.4), 12.1(4)DC, 12.1(4)DC1, 12.1(4)DB, or a later release.

  Workaround Clear all EIGRP neighbors that have provided the problematic routes using the **clear ip eigrp neighbors** [*ip-address* |*interface*] EXEC command. This command must be entered on the router that has the interface with the altered metric value.

- CSCdt38237

  Symptoms The area border router (ABR) may fail to maxage type-3 link-state advertisements (LSAs) that are generated based on the inter-area route if the inter-area route is lost.

  Conditions This symptom is observed after a router is reload or after the Open Shortest Path First (OSPF) process is cleared.

  Workaround Clear the OSPF process.

- CSCdt41203

  Symptoms A router may reload when a dot1q or Inter-Switch Link (ISL) subinterface that has multicast configured is deleted.

  Conditions This symptom is observed on a Cisco router that has a dot1q or Inter-Switch Link when the following sequence of commands are entered:

```
Router(config)# interface gigabitEthernet 5/0.1
Router(config-subif)# encapsulation dot1Q 1
Router(config-subif)# ip address 10.10.10.2 255.255.255.0
Router(config-subif)# ip sdr listen
Router(config-subif)# ip pim sparse-dense-mode
Router(config-subif)# ^Z
Router# configure

%SYS-5-CONFIG_I: Configured from console by consolet Enter configuration commands,
one per line.  End with CNTL/Z.

Router(config)# no interface gigabitEthernet 5/0.1
```

  Workaround Remove the following multicast commands from the subinterface before deleting the subinterface:

```
Router# configure terminal

Enter configuration commands, one per line.  End with CNTL/Z.

Router(config)# interface gigabitEthernet 5/0.1
Router(config-subif)# no ip sdr listen
Router(config-subif)# no ip pim sparse-dense-mode
Router(config-subif)# exit
Router(config)# no interface gigabitEthernet 5/0.1

% Not all config may be removed and may reappear after reactivating the sub-interface
```

- CSCdt41262

  Symptoms When a route map or a filter list is added to an address family Virtual Private Network (VPN) neighbor, the configuration ends up under a global Border Gateway Protocol (BGP) configuration instead.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.1(5)T1.

Workaround Disable the parser cache by entering the **no parser cache** global configuration command.

- CSCdt41363

  Symptoms The **set ip default next-hop** *ip-address* [*...ip-address*] global configuration command command-line interface (CLI) prevents a user from configuring one of the interfaces on a router as the default next hop. This symptom prevents a user from conditionally setting itself as the next hop in routing updates and does not allow for backward compatibility.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.1, 12.1 T, 12.2, or Release 12.2 T

  Workaround There is no workaround.

- CSCdt43936

  Symptoms When a router redistributes Enhanced Interior Gateway Routing Protocol (EIGRP) into Open Shortest Path First (OSPF) and when EIGRP has more than one successor, it is possible that a change in the feasible (EIGRP) successor does not generate the OSPF for the external link-state advertisement (LSA).

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.1(5a).

  Workaround Enter the **clear ip ospf redistribution** EXEC command to clear the OSP route redistribution.

- CSCdt48480

  Symptoms A Border Gateway Protocol (BGP) filter list may incorrectly permit or deny a path.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.0(14)S.

  Workaround Restart the BGP process.

- CSCdt48824

  Symptoms A provider edge (PE) router does not put a network prefix in the Virtual Private Network (VPN) routing/forwarding (VRF) routing table when the prefix is received from a Route Reflector (RR) client.

  Conditions This symptom is observed on a Cisco 7200 series and a Cisco 7500 series

  Workaround There is no workaround.

- CSCdt57092

  Symptoms Enhanced Interior Gateway Routing Protocol (EIGRP) may accept and attempt to install an external route that was redistributed locally. When this symptom occurs, routes in the routing table may be marked as “possibly down.”

  Conditions This symptom is observed if the route has an administrative distance that is worse than the external EIGRP routes. Such routes may include floating static routes that have an administrative distance that is greater than 170 and there are redundant paths in a network.

  Workaround Apply an inbound distribute list in EIGRP to block the acceptance of the external EIGRP route.

- CSCdt59583

  Symptoms A router that is running 600kbps of multicast video traffic into a Frame Relay interface and out of an ATM LAN Emulation (LANE) interface that has IP Protocol Independent Multicast (PIM) configurations reloads after approximately 18 hours because of a continuous memory leak.

The PIM process in the ATM signaling switched virtual circuits (SVCs) holds increasing amounts of memory and does not release it. This situation occurs because no ATM address is configured on the interface. The incomplete configuration causes the memory leak.

Conditions This symptom is observed on a Cisco router that is running 600kbps of multicast video traffic into a Frame Relay interface and out of an ATM LAN Emulation (LANE) interface that has IP Protocol Independent Multicast (PIM) configurations.

Workaround Configure the IP address on the ATM LANE interface.

- CSCdt66159

  Symptoms When a router is booted with Cisco IOS Release 12.1 using a configuration from Cisco IOS Release 12.0S that contains a peer group with network layer reachability information (NLRI), unicast, and multicast configured, the peer group members are not activated for address-family IPv4 multicast.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.1(05a)E06.

  Workaround There is no workaround.

- CSCdt66933

  Symptoms Open Shortest Path First (OSPF) summary redistribution may not function properly. After the **clear ip ospf redistribution** and the **show ip ospf database external** EXEC commands have been entered, the link-state age reaches a “MAXAGE” and does not come up again.

  Conditions This symptom is observed only when a Cisco router is configured with the **summary-address** *number* command under OSPF and is also configured to have a static route that matches the same summary address.

  Workaround There is no workaround.

- CSCdt71785

  Symptoms Periods of high CPU utilization and a temporary console lock may occur on router that redistributes routes into the Open Shortest Path First (OSPF) Protocol of the routing table is large.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.1(5a)E.

  Workaround There is no workaround.

- CSCdt72474

  Symptoms A software-forced reload may occur on a router.

  Conditions This symptom is observed on a Cisco router when it receives and installs routes that have 25 different subnet masks within the same network into the routing table. The different masks within a network can be displayed by entering the **show ip route** EXEC command.

  Workaround Filter routes that have subnet masks of 31 or 32 by using a prefix list to prevent those routes from being added to the routing table by limiting the number of possible distinct subnet masks to 24.

- CSCdt74249

  Symptoms A software-forced reload may occur on a router and the following messages may be displayed on the console:

  ```
  Aug 26 23:41:21.267: %SYS-2-NOBLOCK: suspend with blocking disabled.
  -Process= "IP Input", ipl= 0, pid= 58
  -Traceback= 601B5AAC 601A27C0 601A28E0 60548D7C 60546884 605463B0 6033CC44 6033BF30
  6033C19C 6033C280 601903E4 601903D0

  Unexpected exception, CPU signal 23, PC = 0x601AD338
  ```

```
$0 : 00000000, AT : 0000000F, v0 : 00000000, v1 : 000003E8
a0 : 0000000A, a1 : 003EF8E0, a2 : 00000000, a3 : 00064BB2
t0 : A0000000, t1 : 00000000, t2 : 0003EF4F, t3 : 40000000
t4 : 00000000, t5 : 0000001C, t6 : 00000400, t7 : 00000004
s0 : 00000000, s1 : 6371FB7C, s2 : 6864BD24, s3 : 63B7ECE4
s4 : 00000000, s5 : 00000000, s6 : 6371F924, s7 : 620C9240
t8 : 00006D7F, t9 : 00000000, k0 : 63BC0B1C, k1 : 601B51A0
gp : 61F03EE0, sp : 631C7180, s8 : 00080000, ra : 601AB95C
EPC : 601AD338, ErrorEPC : 042524C5, SREG : 3400BF03
Cause 00000024 (Code 0x9): Breakpoint exception

-Traceback= 601AD338 601AB95C 601A27D0 601A28E0 60548D7C 60546884 605463B0 6033CC44
6033BF30 6033C19C 6033C280 601903E4 601903D0
```

Conditions This symptom is observed on a Cisco 10000 series that has Protocol-Independent Multicast (PIM) configured and that is running Cisco IOS Release 12.0 SL.

Workaround There is no workaround.

- CSCdt76168

  Symptoms The exterior flag becomes unset on the route that is marked as default in the Enhanced Interior Gateway Routing Protocol (EIGRP).

  Conditions This symptom is observed on a Catalyst 6000 Multilayer Switch Feature Card (MSFC) that is running Cisco IOS Release 12.1(04)E01.

  Workaround Use a floating static default route.

- CSCdt76311

  Symptoms Relearned information is not always consistent with other routers in the network when redundant Rendezvous Points (RPs) for the same group and when the RP mapping information that is generated through a Bootstrap Router (BSR) is manually cleared.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.1(6).

  Workaround There is no workaround.

- CSCdt88382

  Symptoms A router may reload after a watchdog timer expires and the following messages may be displayed on the console before the reload occurs:

  ```
  *** Trace Exception ***
  PC = 0x80653454, Vector = 0xd00, SP = 0x80f5e740
  *** Data TLB Miss Exception ***
  PC = 0xfff161bc, Vector = 0x1200, SP = 0x80f5e708
  ...
  *** Watch Dog Timeout ***
  PC = 0xfff161bc, SP = 0x80f5e380
  ```

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.2(0.3).

  Workaround There is no workaround.

- CSCdt88930

  Symptoms A Cisco 7000 series that has Open Shortest Path First (OSPF) configured may fail to install the default route. The default route will automatically be installed during the next Shortest Path First (SPF) process.

  Conditions This symptom is observed on a Cisco 7000 series that is running Cisco IOS Release 12.1(7).

Workaround Add a static default route that has a higher administrative distance than OSPF and redistribute it through OSPF.

Alternate Workaround A Use one of the following commands:

```
(conf)# ip route 0.0.0.0 0.0.0.0 if-name 200
(conf)# router ospf 1
(router-conf)# default-information originate
(router-conf)# redistribute static subnet
```

Alternate Workaround B Add a fake loopback to OSPF net statements and flap the default OSPF route.

- CSCdt91554

  Symptoms The **ip mroute-cache** command cannot be configured on a router.

  Conditions This symptom is observed on a number of platforms that support multicast fast switching. This symptom does not affect multicast distributed switching (MDS).

  Workaround Configure MDS on the router if possible.

- CSCdt92114

  Cisco Express Forwarding (CEF) may behave inconsistently with routing protocols that use holddown to protect against suboptimal routing. A route in holddown should be used to forward traffic until routing protocol timer expiration and/or convergence. CEF, however, removes the forwarding information from the Forwarding Information Base (FIB) immediately upon the route entering holddown. Process and fast switching will continue to forward traffic as expected. There is no workaround.

- CSCdt93586

  The Open Shortest Path First (OSPF) database may not create the necessary entries to resubmit an OSPF interarea route.

  Workaround: Clear the OSPF process.

- CSCdu00679

  A Cisco router that is running Cisco IOS Release 12.0(13)S2 may reload because of a bus error when receiving a Border Gateway Protocol (BGP) update with an extended as_path length. There is no workaround.

- CSCdu04678

  Symptoms A router may reload after the **show ip igmp groups** command is entered if the command is paused for a prolonged period of time at the “more” prompt and restarted later.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.0(16)S.

  Workaround There is no workaround.

- CSCdu04830

  A router that is running a Cisco IOS release that contains the fix for CSCdr33635 does not allow the user to configure secondary IP addresses on an interface that does not already have a primary IP address. The following are two possible scenarios and their respective workarounds.

  Case 1: A user saves the running configuration that has an interface with both primary and secondary addresses with the **copy running-config** *file* EXEC command and subsequently removes all the addresses on that interface, thus changing the running configuration. If the user attempts to restore the original configuration with the **copy** *saved-file* **running-configuration** EXEC command, the

secondary addresses will not be allowed to be configured. Any attempts to "cut and paste" the display of the output of the **show running-configuration** command will also cause the same problem.

Workaround for Case 1: Issue the **copy** *saved-file* **running-configuration** or perform the cut-and-paste twice.

Alternate workaround for Case 1: Configure the primary address manually before entering the **copy** *saved-file* **running-configuration** EXEC command to copy the saved configuration file into the running configuration file.

Case 2: This case applies to any virtual LAN (VLAN)-capable interface or subinterface that has a primary address and a secondary address. If the router is rebooted with an image that has the version with the earlier fix of CSCdr33635, the previous secondary addresses will not be allowed to be configured and will subsequently be lost on the interface or subinterface immediately after the router is reloaded.

Workaround for Case 2: Copy the startup configuration to running configuration after the reboot without entering the **write memory** command between the two operations. This action will restore the secondary address to the running configuration. This operation must be repeated on every reload.

- CSCdu09372

  Symptoms When the Null0 interface is specified as the default output in local policy routing, the Route Switch Module (RSM) may fail to boot or reboots repeatedly.

  Conditions This symptom is observed on the RSM of a Cisco router that is running Cisco IOS Release 12.1(7).

  Workaround There is no workaround.

- CSCdu12698

  Symptoms A router that has the **ip multicast boundary** *access-list-number* interface configuration command configured on an interface may reload when the access list is defined.

  Conditions This symptom is observed on a Cisco 10720 that is running Cisco IOS Release 12.0(16.05)ST1

  Workaround There is no workaround.

- CSCdu19484

  Symptoms A software-forced reload may occur on a router and the following error message may be displayed:

  ```
  %SYS-3-BADBLOCK: Bad block pointer %SYS-6-BLKINFO: Freespace does not end at end of
  the pool blk
  ```

  Conditions This symptom is observed on a Cisco router that is running the Open Shortest Path First (OSPF) Protocol as the routing protocol. This symptom occurs only if the router receives a corrupted link-state advertisement (LSA).

  Workaround There is no workaround.

- CSCdu21809

  Symptoms If there are multiple traffic engineering (TE) tunnels that start from the same router (router A) and ends on the different routers that are all on the shortest path from router A to the router that advertises the multicast source (source S), Reverse-Path Forwarding (RPF) checks will fail on router A and all multicast traffic from source S will be dropped on router A.

  Conditions This symptom is observed when Protocol-Independent Multicast (PIM) is used over a Multiprotocol Label Switching (MPLS) and TE network when there is a tunnel to the router that is advertising the source network.

Workaround There is no workaround.

- CSCdu24560

  The **ip pim nbma-mode** interface configuration command may not work correctly when it is used in a hub and spoke network configuration. In a hub and spoke configuration, a hub router has connections to all spoke routers, but the spoke routers are not connected among themselves. The spoke routers are joined to multicast traffic through the nonbroadcast multiaccess (NBMA) interface of the hub router even if the traffic path goes across to another spoke router. The hub router forwards traffic received on the NBMA interface out to all spoke routers on the NBMA interface.

  This function does not work correctly in IP multicast process switching (on all platforms) and in IP multicast distributed switching (MDS) on a Cisco 7500 series router with Versatile Interface Processor (VIP) line cards. This problem was observed in a network with Frame Relay interfaces that are configured with the **ip pim nbma-mode** interface configuration command but is not limited to Frame Relay interfaces.

  Workaround: Configure IP multicast fast switching (but not distributed switching) on the affected interfaces.

- CSCdu31988

  Under unusual timing circumstances, the Enhanced Interior Gateway Routing Protocol (EIGRP) may issue an error message stating “Spurious Memory Access” if the next hop to a route disappears while an update is queued to be sent to a neighbor. There is no workaround.

- CSCdu41998

  A Cisco 7200 Network Services Engine (NSE-1) that is running Cisco IOS Release 12.1(7)E may experience a software-forced reload after a static entry is configured on top of a dynamic network address translation (NAT). There is no workaround.

ISO CLNS

- CSCdt20528

  Symptoms A Cisco 12000 series may reload because of a bus error.

  Conditions This symptom is observed on a Cisco 12000 series that is running Cisco IOS Release 12.0(14)S.

  Workaround There is no workaround.

- CSCdt86138

  Symptoms On two routers that have two peer-to-peer parallel adjacencies between them, a new link-state packet (LSP) is not created when the link with the lowest metric goes down. This symptom may cause a loss of connectivity between the two routers.

  Conditions This symptom is observed on two Cisco routers that are running Cisco IOS Release 12.1(7).

  Workaround Force an LSP generation by entering the **clear clns *** EXEC command or the **clear isis *** EXEC command.

- CSCdt97590

  Symptoms If a Layer 2-only interface goes down on a router that is running the Intermediate System-to-Intermediate System (IS-IS) protocol and if that router is using route leakage to redistribute the network on that interface into Layer 1, the network may not be removed from the Layer 1 link-state packet (LSP) on that router.

Conditions This symptom is observed on a Cisco 12000 series that is running Cisco IOS Release 12.0(14)S.

Workaround Enter the **clear ip route** {*} EXEC command. The LSP should be properly regenerated.

- CSCdu16728

  Symptoms A router may reload when Intermediate System-to-Intermediate System (IS-IS) is enabled.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.2(0.21)T, 12.1(8)E, or Release 12.1(8.05)E2.

  Workaround There is no workaround.

- CSCdu21894

  Symptoms A router that resides on a network with Intermediate System-to-Intermediate System (IS-IS) and Open Shortest Path First (OSPF) running concurrently with default administrative distances configured may reload when the **clear ip route** * EXEC command or the **router ospf** *process-id* global configuration command is entered and when a subnet prefix is shared by both IS-IS and OSPF.

  Conditions This symptom is observed on a Cisco router that resides on a network that has Intermediate System-to- Intermediate System (IS-IS) and Open Shortest Path First (OSPF) running concurrently with default administrative distances configured.

  Workaround Change the administrative distance under the **router isis** [*tag*] global configuration command.

Miscellaneous

- CSCdk46554

  Symptoms When a crashinfo buffer is created, all commands that are entered before a reload are saved and stored in the buffer. Rivest, Shamir, and Adleman (RSA) or Digital Signature Standard (DSS) keys that are meant to be stored in NVRAM may be displayed in the crashinfo buffer.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.0.

  Workaround There is no workaround.

- CSCdm22863

  Symptoms An OC48 Packet over SONET (POS) line card may reload after a series of "%FIB-3-FIBSEQ: Out of sequence" messages such as the following are displayed:

  ```
  %FIB-3-FIBSEQ: Out of sequence. State 1391 Rcvd 1395
  ```

  Conditions This symptom is observed on an OC48 POS line card of a Cisco 12000 series that is running Cisco IOS Release 12.0(3.02)S

  Workaround Upgrade to Cisco IOS Release 12.0(14.1)S or Release 12.0(13.6)S02. When this symptom occurs, reload the microcode on the line card.

- CSCdm65973

  Symptoms An enhanced ATM port adapter (PA-A3) may report a higher than expected number of cyclic redundancy check (CRC) errors on an ATM interface for one or more virtual circuits (VCs). The root cause of the problem is that the affected versions of Cisco IOS are counting packet bytes

which were received with CRC errors, rather than counting packets with errors. This condition makes the CRC error counter many more times higher than the actual value. The same behavior is also observed with abort and giant errors.

Conditions This symptom is observed on a PA-A3 port adapter of a Cisco router that is running Cisco IOS Release 12.0(5.02)T1.

Workaround Troubleshoot the cause of the CRC errors.

- CSCdp03592

  Symptoms A Cisco uBR924 router may lose a H.323 configuration when it is reloaded after it has been configured to use an H.323 gatekeeper to place phone calls. The following three lines were added to the configuration of the cable interface on the Cisco uBR924:

  ```
  h323-gateway voip interface
  h323-gateway voip id gklocal ipaddr 6.3.0.2 1719
  h323-gateway voip h323-id sample@cisco.com
  ```

  After the router is rebooted, the commands may not be processed correctly because the commands are applied to the interface before the interface acquires an IP address from Dynamic Host Configuration Protocol (DHCP).

  Conditions This symptom is observed on a Cisco uBR924.

  Workaround Reenter the missing configuration.

- CSCdr00116

  Symptoms A Cisco multichannel T1/E1 port adapter does not support the switching of Multiprotocol Label Switching (MPLS) packets.

  Conditions This symptom is observed on a Cisco multichannel T1/E1 port adapter of a Cisco router.

  Workaround There is no workaround.

- CSCdr05505

  Symptoms When an Integrated Services Adapter (ISA) card is reloaded from a software engine to a hardware engine, the connection identity (ID) that was used in the software engine before conflicts with the connection ID number that is newly created by the hardware engine.

  Conditions This symptom is observed on an ISA card of a Cisco router that is running Cisco IOS Release 12.0(9).

  Workaround Do not reload the card with a hardware engine. Create several IP Security (IPSec) security associations (SAs), delete the IPSec SA session that has a connection ID value of “1”, and reload the engine.

- CSCdr24609

  Symptoms The Enhanced Availability Drop and Insert (EADI) feature may cause packets to be lost a digital voice network module for the Cisco 3600 series when the digital voice network module is reloaded. Although the impact on voice is negligible, the controller may record 2-3 seconds of slips when the reload occurs.

  Conditions This symptom is observed on a digital voice network module of a Cisco 3600 series.

  Workaround There is no workaround.

- CSCdr27644

  Symptoms Interoperability issues may be observed when Context-based Access Control (CBAC) is used with Web Cache Communication Protocol (WCCP).

Conditions This symptom is observed when CBAC is used with Web Cache Communication Protocol (WCCP) and Network Address Translation (NAT). Under these conditions, do not disable inspection in the fast path by entering the **no ip inspect fast** interface configuration command as there is an interoperabilty issue. The default action is on.

Workaround There is no workaround.

- CSCdr39332

  When a single T1 or E1 link in an Inverse Multiplexing over ATM (IMA) environment has surpassed the differential delay limit on a Cisco 3600 series router, the other "good" T1 or E1 links may become deactivated and the IMA group will run on the single T1 or E1 link with the excess delay. The expected behavior is that the "bad" T1 or E1 link with the added delay would be deactivated and the three "good" T1 or E1 links would remain operational. The problem affects only the T1 and E1 links. There is no workaround.

- CSCdr45850

  Symptoms The cable modem on a router may reload when access list numbers 100 or 101 are configured.

  Conditions This symptom is observed on a Cisco uBR900 series that is running Cisco IOS Release 12.1(2)T or Release 12.2.

  Workaround Use access list numbers other than 100 or 101.

- CSCdr47266

  Symptoms Peer discover fails when the qm_timer expires.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.1(2).

  Workaround There is no workaround.

- CSCdr47479

  Symptoms A Cisco 7500 series may not recognize a Versatile Interface Processor 4 (VIP4).

  Conditions This symptom is observed on a Cisco 7500 series that has an Inverse Multiplexing over ATM (IMA) port adapter.

  Workaround There is no workaround.

- CSCdr49601

  Symptoms Reception issues may be observed on a Gigabit Ethernet Interface Processor (GEIP) and the GEIP may pause indefinitely.

  Conditions This symptom is observed on the GEIP of a Cisco 7500 series that has distributed Cisco Express Forwarding (dCEF) enabled.

  Workaround Disable dCEF on the GEIP interface.

- CSCdr56944

  Symptoms A Cisco AS5300 that is used to terminate ISDN calls may reload with a bus error at the acc_search_type process.

  Conditions This symptom is observed on a Cisco AS5300 that is running Cisco IOS Release 12.0(7)T.

  Workaround There is no workaround.

- CSCdr65691

  Symptoms A segmentation violation (SegV) exception may occur when the docsDevNmAccessControl object is set to "1".

Conditions This symptom is observed on a Cisco uBR900 router that is running Cisco IOS Release 12.1(3)T.

Workaround There is no workaround.

- CSCdr70402

  Symptoms An authentication, authorization, and accounting (AAA) accounting start record does not include Route Processor Module (RPM) attributes for asynchronous calls.

  Conditions This symptom is observed on a Cisco AS5800 that is running Cisco IOS Release 12.0(8.02)T.

  Workaround There is no workaround.

- CSCdr72112

  Symptoms Digital Signature Standard (DSS) keys generated on a router that is running Cisco IOS Release 12.0(11) cannot be used or exchanged on a router that is running Cisco IOS Release 12.1(2).

  Conditions This symptom is observed on a Cisco router when it is upgraded from Cisco IOS Release 12.0(11) to Release 12.1(2).

  Workaround There is no workaround.

- CSCdr74889

  Symptoms A Cisco 3640 may fail to make outgoing ISDN calls after working correctly for some time. The following message indicates the cause of this symptom:

  ```
  BRI0/0: In state F7, Received code Power-up BRI0/0 : Unexpected indication (1C) in f7
  code
  ```

  Conditions This symptom is observed on a Cisco 3640 router that is running Cisco IOS Release 12.0(7)XK1 or 12.1(2)T and that has 2 10/100 Ethernet 2-WAN-card-slot network module (NM-2FE2W) and a 1-port ISDN BRI (S/T) WAN Interface Card (WIC-1B-S/T)

  Workaround Reload the router.

- CSCdr76950

  Symptoms When H.235 security is configured on a gateway, it generates and includes an H.235 crypto token in the request messages that are sent to the gatekeeper. This process allows the gatekeeper to authenticate the gateway. However, when the gateway is generating a crypto token, it inadvertently frees the wrong memory and reloads.

  Conditions This symptom is observed on a Cisco router that is used as a gateway and that is running Cisco IOS Release 12.1(5)XM.

  Workaround Do not enable security on the gateway.

- CSCdr79309

  Symptoms When a create Packet Data Protocol (PDP) request is sent to a Cisco Gateway GPRS Support Node (GGSN), the MSISDN header field is incorrectly parsed.

  Conditions This symptom is observed on a Cisco Gateway GPRS Support Node (GGSN).

  Workaround There is no workaround.

- CSCdr84440

  Symptoms A router may reload because of a bus error at PC 0x60352FFC(pot1e1_safe_start), address 0x0.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.0(8.02).

  Workaround There is no workaround.

- CSCdr85273

  Symptoms When port 1 of a digital voice port adapter (PA-VXB or PA-VXC) is configured for ISDN or Q-signaling (QSIG), the D-channel may go down under stress conditions and many not recover.

  Conditions This symptom is observed on a Cisco router that has a PA-VXB or a PA-VXC port adapter that is configured for ISDN or QSIG.

  Workaround Add a 2-port MIX multichannel T1/E1 port adapter with CSU/DSU (PA-MCX-2TE1) and configure ISDN on the PA-MCX-2TE1 ports.

- CSCdr93493

  Some channels of a digital voice port lock up in the EM_PARK state after a period of normal operation. The output of the **show voice call** [**summary**] privileged EXEC command shows that the channel is in the EM_PARK state. The output of the **show voice port** [**summary**] privileged EXEC command shows that the channel operation status is up while in_status and out_status are in idle.

  Workaround: Reload the system.

- CSCdr93906

  Symptoms A Cisco AS5300 may accept a Token Ring that should be rejected.

  Conditions This symptom is observed on a Cisco AS5300 when it is used with a digital customer loop (DCL) Open Settlements Protocol (OSP) server.

  Workaround There is no workaround.

- CSCdr94685

  Symptoms An agent-set control unit (ASCU) gateway may not come up because of T1 timeouts when running the Airline Line Control (ALC) protocol.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.1(2)T. This symptom does not occur when Cisco IOS Release 12.0(5)T is used.

  Workaround There is no workaround.

- CSCds05452

  Symptoms IP packets intermittently fail to pass through a Cisco 4700 series router if you add source-bridge spanning to the Token Ring interface to allow single route explorers (SREs) to be passed into the router in situations where you need to bridge IP with and without Routing Information Field (RIF) and need to pass Systems Network Architecture (SNA) traffic between a Token Ring and Ethernet.

  Conditions This symptom is observed on a Cisco 4700 series router that is running Cisco IOS Release 12.1(3). This symptom does not affect the Cisco 3620 router.

  Workaround There is no workaround.

- CSCds07957

  Symptoms A router may fail to route all packages after the crypto map interface configuration command is configured in the required amount of time.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.1(3.03)T or Release 12.2.

  Workaround There is no workaround.

- CSCds08196

  Symptoms It may not be possible to use autoinstall on a Cisco 2500 series over a Frame Relay network. The configuration cannot be downloaded from a TFTP server.

Conditions This symptom is observed on a Cisco 2500 series that is running Cisco IOS Release 12.1 T, 12.2, or Release 12.2 T.

Workaround Users may use autoinstall over High-Level Data Link Control (HDLC) instead of frame relay encapsulation.

- CSCds08280

  A Cisco 7500 series router provisioned as a Multiprotocol Label Switching (MPLS) Virtual Private Network (VPN) Provider Edge (PE) router and connected to Customer Edge (CE) routers through Virtual Interface Processor (VIP) interfaces may experience a VIP reload while the router is performing distributed Cisco Express Forwarding (dCEF) under the following (transient) conditions:

  – You have toggled MPLS off/on by entering the **no tag-switching ip** global configuration command.

  – You have removed the Tag Distribution Protocol (TDP) router ID by removing the loopback interface with an IP address in the TDP router ID.

  Workaround: Do not use the **no tag-switching ip** global configuration command while passing traffic through the router.

- CSCds09499

  Symptoms Cisco IOS Software allocates calls to modems that are in the disconnecting state when it fails to find a free modem. Cisco IOS Software sends a terminate signal to a modem and after two seconds assumes that the modem is back to idle even if it does not receive an idle signal from the modem. This assumption is incorrect for modems taking longer to terminate, and for modems that have failed. This situation results in a RingNoAnswer (RNA) condition and a lower call success rate (CSR).

  Conditions This symptom is observed on a Cisco AS5300 that is running Cisco IOS Release 12.0, 12.1 T, and Release 12.2.

  Workaround There is no workaround.

- CSCds10123

  Symptoms A memory leak may occur on a Cisco 6400 series during the PPP authentication process. The memory leak is most noticeable when the Cisco 6400 series is terminating a large number of PPP sessions and there is a high level of PPP authentication processing.

  Conditions This symptom is observed on a Cisco 6400 series that is running Cisco IOS Release 12.1(1)DC1 or 12.1(3)DC1when the Cisco 6400 series is terminating a large number of PPP sessions or when there is a high level of PPP authentication processing.

  Workaround There is no workaround.

- CSCds15443

  Symptoms When a Cisco 6400 acts as a tag switching edge router, it may stop running the Tag Distribution Protocol (TDP) after a reboot. A neighboring Cisco router may also fail to recognize the Cisco 6400 as a TDP neighbor after the reboot occurs and forwarding equivalence classes (FECs) that are sent through the Cisco 6400 are marked as untagged.

  Conditions This symptom is observed on a Cisco 6400 that is used as a provider edge (PE) router. The Cisco 6400 is connected to a Node Route Processor (NRP) on a Cisco router through an Ethernet interface on the Cisco 6400.

Workaround Enter the **shutdown** interface configuration command followed by the **no shutdown** interface configuration command on the Ethernet interface of the Cisco 6400. If the procedure of shutting down and bringing the Ethernet interface back up again does not work, reboot the Cisco 6400.

- CSCds16810

  Symptoms CPU utilization on a Cisco AS5300 may increase by 35 percent even when no users are dialed into the system.

  Conditions This symptom is observed on a Cisco AS5300 access server that is running Cisco IOS Release 12.1(2a) and that has an 8-port T1/PRI port adapter.

  Workaround There is no workaround.

- CSCds19683

  Symptoms The following output may be displayed on the console port on a router:

  ```
  %SYS-3-CPUHOG: Task ran for 49272 msec (0/0), process = Auto Config insertion process,
  PC = 602AFF20
  ```

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.1(4)DC when the router is booted with an image that has a configuration with a large number of subinterfaces. This symptom does not affect the normal operation of the router.

  Workaround There is no workaround.

- CSCds23164

  Symptoms A Cisco 7500 series that has a Spatial Reuse Protocol (SRP) interface and that is running distributed Cisco Express Forwarding (dCEF) may not correctly process the Access Control Lists (ACLs) that are applied to the SRP interface.

  Conditions This symptom is observed on a Cisco 7500 series that has a SRP interface and that is running dCEF. This symptom is observed with Cisco IOS Release 12.0(12)S.

  Workaround Disable dCEF on the SRP interface by entering the **no ip route-cache distributed** interface configuration command or run centralized CEF by entering the **ip cef** global configuration command.

- CSCds23828

  Modular quality of service (QoS) command line interface (CLI) allows router to set IP precedence on matching outbound Multiprotocol Label Switching (MPLS) packets, which corrupts the outbound packets. There is no workaround.

- CSCds27962

  IP precedence is not set on multicast packets using input Committed Access Rate (CAR) with an access list. This situation does not exist if Cisco Express Forwarding (CEF) is turned off on an interface that is configured with the **rate-limit** interface configuration command. Unicast packets work correctly with CEF and precedence set. There is no workaround.

- CSCds28537

  Symptoms The digital signal processor (DSP) on a Cisco ICS7700 multiservice route processor (MRP) may stop responding and display the following message if the Cisco ICS7700 is oversubscribed with fax calls:

  ```
  ASSERTION FAILED: file "../src-m860-les/if_ipm_c54x_idma.c", line 537
  %SYS-2-BADSHARE: Bad refcount in datagram_done, ptr=8109E46C, count=0
  %IPM_C54X-3-HOST_XMIT_BLOCKED: Host is unable to transmit packets to DSP 1
  ```

  No further calls can go through the Cisco ICS7700 after this symptom occurs.

Conditions This symptom may occur if 24 calls are sent continuously to the Cisco ICS7700 while the Cisco ICS700 has only one packet voice and data module (PVDM-20) that can handle 15 fax calls.

Workaround Reload the Cisco ICS7700.

- CSCds29453

  Symptoms More than 40 percent of voice calls may fail to connect after 240 calls have been placed. An invalid automatic number identification (ANI) is seen in the logs of the **debug aaa** EXEC command.

  Conditions This symptom occurs when channel-associated signaling (CAS) Feature Group B (FGB) authentication, authorization, and accounting (AAA) is in use and the **answer-address** dial peer configuration command is entered on the plain old telephone service (POTS) dial peer for the ANI.

  Workaround There is no workaround.

- CSCds32644

  Symptoms A router may refuse to negotiate any cryptomap template other than the first cryptomap template. Multiple dynamic cryptomap templates that are within the same dynamic cryptomap template set do not work.

  Conditions This symptom is observed on a Cisco router when multiple dynamic cryptomap templates are used.

  Workaround Specify each template with a separate name and add each template to the cryptomap individually. For example, instead of specifying:

```
crypto dynamic-map label 10
set transform-set proposal1
match address 101
crypto dynamic-map label 20
set transform-set proposal1
match address 102
!
```

  specify:

```
crypto dynamic-map label1 10
set transform-set proposal1
match address 101
crypto dynamic-map label2 10
set transform-set proposal1
match address 102
!
crypto map to-london 10 ipsec-isakmp dynamic label1
crypto map to-london 20 ipsec-isakmp dynamic label2
```

- CSCds36857

  Symptoms A Cisco Express Forwarding (CEF) for a directly connected route and host on a directly connected interface may point to an incorrect next hop. The following is the route entry and CEF entry for 192.168.0.10:

```
Router # show ip route 192.168.0.10
Routing entry for 192.168.0.8/30
  Known via "connected", distance 0, metric 0 (connected, via interface)
  Redistributing via ospf 1
```

```
  Advertised by ospf 1 subnets
  Routing Descriptor Blocks:
  * directly connected, via Serial8/0/0
      Route metric is 0, traffic share count is 1
Router # show ip cef 192.168.0.10
0.0.0.0/0, version 19, cached adjacency 192.168.0.4
0 packets, 0 bytes
  via 192.168.0.4, 0 dependencies, recursive
    next hop 192.168.0.4, Vlan215 via 192.168.0.4/32
    valid cached adjacency
```

The CEF entry points to an IP address that has been configured as the default gateway.

Conditions This symptom is observed in a network that has two Cisco routers: Router A (192.168.0.9.30) and router B (192.168.0.10/30). Both of the routers are running either Cisco IOS Release 12.1(2)E or Release 12.2.

Workaround Disable CEF by entering the **no ip route-cache cef** global configuration command on each interface.

- CSCds37028

  Symptoms Very low throughput may be observed on a Cisco 1700 series when IP Security (IPSec) is used with generic routing encapsulation (GRE) on a hardware encryption card. The throughput that is observed is significantly lower than when direct IPSec is used. Packets may also be process-switched instead of being fast-switched.

  Conditions This symptom is observed on a Cisco 1700 series when IPSec is used with GRE on a hardware encryption card.

  Workaround There is no workaround.

- CSCds37169

  Symptoms After IP Cisco Express Forwarding (CEF) is enabled on a Route Switch Module (RSM) and the RSM is reloaded, the interfaces show that the **no ip route-cache cef** interface configuration command is enabled. This symptom causes the CPU to run at 99 percent.

  Conditions This symptom is observed on a Cisco RSM that is running Cisco IOS Release 12.0(5)T1.

  Workaround Manually change the configuration.

- CSCds37541

  The slot 1 analog voice interface card (VIC) ports (Foreign Exchange Office (FXO), recEive and transMit (E&M), etc.) of a Cisco ICS7750 Multiservice Route Processor (MRP) becomes unusable after you use the **show diag** EXEC command. This situation occurs when the VIC uses the packet voice digital signal processor (DSP) module (PVDM) in a PVDM slot1 (the second PVDM slot). This situation also occurs in the upper 8 ports of a 16-port Foreign Exchange Station (FXS) card.

  Workaround: Use the PVDM in slot 0 for a 2-port analog VIC. For example, if two 2-port FXO cards are on the MRP, plug in a PVDM-8 or a higher PVDM (PVDM with 2 or more DSPs) into slot 0. There are no known problems caused by using the **show diag** EXEC command for this configuration. Reboot the MRP for a 16-port FXS card.

- CSCds38055

Symptoms When an operation, administration, and maintenance (OAM) F5 end to end cell is received over permanent virtual circuit (PVC) configured for data (normal operation), the Segmentation and Reassembly (SAR) component returns the same buffer descriptor twice; one on OAM status queue, the other on the data status queue of the corresponding PVC. Early packet discard (EPD) and UNDF are reported for such descriptors.

Conditions This symptom is observed on a Cisco 3600 that is running Cisco IOS Release 12.1(4.02)T or Release 12.2.

Workaround There is no workaround.

- CSCds38712

  Symptoms Class-Based Weighted Fair Queueing (CBWFQ) may not correctly classify Multiprotocol Label Switching (MPLS) packets that are transmitted into an MPLS Traffic Engineering (TE) tunnel interface.

  Conditions This symptom is observed on a Cisco router that has an MPLS TE tunnel interface and that is running Cisco IOS Release 12.0(11)ST, 12.1(5)T, or Release 12.2.

  Workaround There is no workaround.

- CSCds41114

  A Cisco AS5300 series universal access server that is acting as a voice gateway reloads with a bus error at PC 0x60C0C384, address 0x20. There is no workaround.

- CSCds42128

  Symptoms The state of a file can be altered by a write, a delete, or a rename operation at the same time when it is opened for a read operation; however, a simultaneous write, delete, or rename operation cannot be performed on a file while the file is opened for a write operation.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.1(4)DB, 12.1, 12.2, or Release 12.0 S.

  Workaround There is no workaround.

  Any operation that can possibly change the state of a file like writing, deletion, renaming can be performed on a file simultaneously when it is open for a read but not when it is open for a write.

- CSCds45666

  Symptoms A Cisco Route Switch Module (RSM) may reload because of a bus error exception.

  Conditions This symptom is observed on a Cisco RSM that is running Cisco IOS Release 12.1(2) and that is configured for triggered Routing Information Protocol (RIP).

  Workaround There is no workaround.

- CSCds47297

  Symptoms An encapsulation change on a permanent virtual circuit (PVC) is not reflected in the output of the **show atm vc** EXEC command.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.1(2.03).

  Workaround There is no workaround.

- CSCds48735

  Symptoms Voice support on a Versatile Interface Processor 4 (VIP4) may cause a Cisco 7500 series to reload.

  Conditions This symptom is observed on a Cisco 7500 series that has a VIP4 and that is running Cisco IOS Release 12.2(1). This symptom is observed after 5-6 hours of stress testing.

Workaround There is no workaround.

- CSCds49790

  Symptoms If a static IP route is configured to point to a multilink group interface, IP traffic does not route through that interface and the following configuration does not work:

  ```
  ip route x.x.x.x y.y.y.y multilink1
  ```

  Conditions This symptom is observed on the multilink group interface of a Cisco 7500 series that is running Cisco IOS Release 12.0 S.

  Workaround Use a static route that points to the next-hop address. For example:

  ```
  ip route x.x.x.x y.y.y.y z.z.z.z
  ```

  "z.z.z.z" is the IP address of the peer router.

- CSCds52300

  Symptoms An "IPC SLAVE LOG" message may appear when a Cisco 7500 image is loaded on a Cisco 7500 series.

  Conditions This symptom is observed on a Cisco 7500 series that has a 2-port T1, E1, high capacity, enhanced digital voice port adapter (PA-VXC-2TE1+), a 2-port T1, E1 enhanced digital voice port adapter (PA-VXB-2TE1+), or a one-port enhanced digital voice port adapter (PA-VXA-1TE1-24+ or PA-VXA-1TE1-30+).

  Workaround There is no workaround.

- CSCds52580

  Symptoms When a Fast Ethernet interface on a Cisco 1700 series is shut down (down/down), the link-down keepalives traps continue to sent every ten seconds.

  Conditions This symptom is observed on a Cisco 1700 series that has a Fast Ethernet interface and that is running Cisco IOS Release 12.1(2).

  Workaround Enter the **no keepalive** interface configuration command or the **no snmp trap link-status** interface configuration command.

- CSCds52900

  Symptoms For ISDN data calls, when a PRI group is configured Cisco IOS software assigns a High-Level Data Link Control (HDLC) channel for each time slot.

  For ISDN voice calls that are in a PRI group, the time slots do not need a HDLC channel. However, Cisco IOS software assigns HDLC channels for each time slot as soon as a PRI group is created regardless of whether the time slots are used for data or voice calls.

  Conditions This symptom is observed on a Cisco router that has an 8-port MIX multichannel T1/E1 port adapter that has CSU/DSU (PA-MCX-8TE1) HDLC controller. This symptom does not occur if a ds0 group is created for voice calls.

  Workaround There is no workaround.

- CSCds53640

  Symptoms A router that is functioning as a Multiprotocol Label Switching (MPLS) Traffic Engineering (TE) headend router may reload when tunnels come up.

  Conditions This symptom is observed on a Cisco 12000 series that is running Cisco IOS Release 12.0(11)ST. The reload usually occurs under stress conditions (for example when there are 500 tunnels coming up in a short time span). The reload occurs only when prefixes that were routed over physical links and transitioned to being routed over tunnels. There will be an intermediate state whereby a prefix can be loadshared over multiple links (such as tunnel links or physical links).

Workaround There is no workaround.

- CSCds54518

  Symptoms The digital signal processor (DSP) may timeout if an 8, 4, or 2-port single-wide port adapter card is removed and the router may reload if the port adapter card is reinserted. This symptom is observed while voice traffic is present.

  Conditions This symptom is observed on a Cisco router that has an 8, 4, or 2-port single-wide port adapter card while voice traffic is present.

  Workaround If a user wants to perform an online insertion and removal (OIR) on an 8, 4, or 2-port single-wide port adapter card during a call, the user has to shut down the port to clear the call before the card can be removed.

- CSCds55017

  Symptoms A DISCONNECT message may not be forwarded across a plain old telephone service (POTS) call leg. When an E1 Q Signaling (QSIG) controller is out of service, and a Cisco router receives an incoming call from a PBX, the controller does not send a DISCONNECT message to the PBX. Instead, the PBX initiates a DISCONECT message after 20 seconds with a "recovery on timer expiry" cause message. If the signaling connection is not successfully set up, H.323 does not initiate disconnect procedures. If the H.323 terminating gateway is unreachable, then a DISCONNECT message is returned with a "service or option unavailable" cause message after the H.225 connection timer expires. The cause message may prevent a PBX from rerouting the call.

  Conditions This symptom is observed on a Cisco 3600 series that is running Cisco IOS Release 12.1(3a)XI02

  Workaround There is no workaround.

- CSCds55742

  Symptoms A MIX-Multichannel port adapter (PA-MCX) on a Cisco 7200 series may display the following message:

  ```
  00:05:32: %VTSP-3-DSP_TIMEOUT: DSP timeout on event 6: DSP ID=0x1: DSP error stats,
  chnl info(5, 12, 0)
  ```

  Conditions This symptom is observed on a Cisco 7200 series that has a PA-MCX and that has T1 channel-associated signaling (CAS) Voice over IP (VoIP) configured when eight T1 channels are stress tested for about two hours.

  Workaround There is no workaround.

- CSCds56390

  A Cisco voice gateway that is using a channel-associated signaling (CAS) interface and Tool Command Language (TCL) Interactive Voice Response (IVR) 2.0 application may leak memory that causes a Cisco router to reload. There is no workaround.

- CSCds56409

  Symptoms When packets are forwarded over a generic routing encapsulation (GRE) tunnel with Cisco Express Forwarding (CEF) and NetFlow enabled, NetFlow egress records are not created. This behavior does not match normal fast switching behavior.

  Conditions This symptom is observed on a Cisco 7200 series that is running Cisco IOS Release 12.1.

  Workaround There is no workaround.

- CSCds57037

Symptoms On a Cisco 7200 series Response Time Reporter (RTR) that has an Inter-Switch Link (ISL) trunk to a Token Ring/software network that is configured with several subinterfaces for different IP subnets, stations on one subnet may fail to send a ping to stations on the other subnet through the Cisco 7200 series RTR when the packet size ranges from 4036 to 4043 bytes and IP process switching is enabled on the TR-ISL interfaces.

Conditions This symptom is observed on a Cisco 7200 series RTR that has an ISL trunk to a Token Ring/software network that is configured with several subinterfaces for different IP subnets.

Workaround Disable IP process switching on the TR-ISL interfaces by entering the **ip route-cache** interface configuration command. Use IP fast switching instead.

- CSCds57642

  Symptoms If traffic congestion occurs on an ATM interface, the subsequent packet that belongs to a new virtual circuit (VC) that does not have an entry in the tx_ring or txc_ring is held in the "hold_pak forever" state and not get rescheduled. This symptom causes a wedge on the output queue.

  Conditions This symptom is observed on the ATM interface of a Cisco router.

  Workaround Enter the **shutdown** interface command followed by the **no shutdown** interface configuration command to clear the queue temporarily.

- CSCds58082

  Symptoms About 0.25 percent of call detail records (CDRs) have a disconnect cause code of 0x11 (busy) that have a non-zero call duration.

  Conditions This symptom is observed on a Cisco AS5300 that is running Cisco IOS Release 12.1(4.04)T2 or Release 12.2.

  Workaround There is no workaround.

- CSCds58617

  Symptoms A Cisco 4500 series may lose IP connectivity to other servers within a Token Ring.

  Conditions This symptom is observed on a Cisco 4500 series when the router is upgraded from Cisco IOS Release 11.7 to Release 12.0(11).

  Workaround Ensure that the LAN Network Manager (LNM) is turned off.

- CSCds58760

  Symptoms When modem recovery action is disabled, modems are still downloaded regardless of the state of the recovery configuration. The recovery mechanism may consider the recovery configuration when call failures exceeds the configured threshold.

  Conditions This symptom is observed on a Cisco AS5300 that is running Cisco IOS Release 12.0(6).

  Workaround There is no workaround.

- CSCds58786

  Symptoms When an automated test configures a recEive and transMit (E&M) port with certain nondefault configurations, the port fails for all other tests until the router is reloaded again. This situation does not occur when the test is run manually.

  Conditions This symptom is observed on a Cisco 1700 series that is running Cisco IOS Release 12.1.

  Workaround There is no workaround.

- CSCds60043

Symptoms Policy routing does not work when Cisco Express Forwarding (CEF) is enabled and when there is a route in the routing table for the packet destination IP address. Policy routing is not applied when there is a default route in the routing table. The policy route-map must be applied on an ATM interface.

Conditions This symptom is observed on a Cisco 1700 series that is running Cisco IOS Release 12.1.

Workaround Disable CEF.

- CSCds60445

  Symptoms A router may reload when an attempt is made to pass some Supplemental Q Signaling (QSIG) services.

  Conditions This symptom is observed on a Cisco AS5300.

  Workaround There is no workaround.

- CSCds60991

  Symptoms SUSPEND and RESUME messages are not generated on the incoming leg of a call.

  Conditions This symptom is observed in a network in which subscriber A is on the AXE side and subscriber B is on the public switched telephone network (PSTN). When subscriber A calls subscriber B, AXE sends the call to the Cisco AS5300 and Cisco SC2200 signaling controller which then switches the call in Voice over IP (VoIP) and sends it to the PSTN. When subscriber B hangs the call for a moment, a SUSPEND message is sent from the PSTN to the Cisco SC2200. However, the Cisco SC2200 does not send the SUSPEND message to the AXE.

  There is a Q.931 message call SUSPEND on the outgoing gateway from the Cisco SC2200 that is sent to the incoming gateway. The incoming gateway receives this message as a STATUS message and responds by sending a MESSAGE TYPE NOT SUPPORTED message to the outgoing gateway.

  However, the call is not cleared and subscriber B receives the call again. A RESUME message is then sent from the PSTN to the Cisco SC2200. The Cisco SC2200 does not send the RESUME message to the AXE. On the outgoing gateway, there is a Q.931 message call RESUME from the Cisco SC2200 that is sent to the incoming gateway. The incoming gateway receives this message as a status message and responds by sending a MESSAGE TYPE NOT SUPPORTED message to the outgoing gateway. However, the call is still active until the RELEASE message is received.

  Workaround There is no workaround.

- CSCds62917

  Symptoms Number translation does not work on a directory gatekeeper (DGK) location request (LRQ) forwarding is used.

  Conditions This symptom is observed on a H.323 gatekeeper that is running Cisco IOS Release 12.2(1)T.

  Workaround There is no workaround.

- CSCds63017

  Symptoms An interface that receives mobile IP registration requests goes into the throttle mode when authentication, authorization, and accounting (AAA) server response slows down.

  Conditions This situation is observed when there are more registrations coming in than the number of registration replies that Home Agent (HA) can send (exceeding the input buffer of the interface).

  Workaround Use traffic shaping to reduce the number of registrations coming into the HA. This workaround allows HA to process received registrations to free up the input buffers of the interface.

- CSCds63034

Symptoms A router may miss the first transmit kick-off interrupt in the ATM driver and cause a queue to buildup and permanent virtual circuit (PVC) drops to occur.

Conditions This symptom is observed on a Cisco MC3810 that is running Cisco IOS Release 12.1.

Workaround There is no workaround.

- CSCds63987

  Symptoms A Cisco 2611 may reload because of a segmentation violation (SegV) exception.

  Conditions This symptom is observed on a Cisco 2611 that is running Cisco IOS Release 12.1(4).

  Workaround There is no workaround.

- CSCds63993

  Symptoms A race condition may cause an H.323 call control block (CCB) to be left dangling when TCP connection delay occurs. This situation can be detected in the output of the **show call active voice** command, which will show the IP leg call in the active state when there is no active call.

  Conditions The race condition may occur when an attempt to establish a TCP connection is not successful and the TCP connection establishment times out because of a delay in the TCP connection. The gateway will attempt to disconnect the call from the time out condition. If the TCP connection is successfully established while the gateway is waiting for a disengage request (DRQ) message then the IP call leg will dangle as a result.

  Workaround Increase the H.225 establish time to accommodate a delay in the establishment of a TCP connection by configuring the **voice class h323** *number* global configuration command and the **h225 timeout tcp establish** *seconds* voice class configuration command.

- CSCds64788

  Symptoms During a Home Agent (HA) redundancy operation, the standby HA does not download all bindings from an active HA.

  Conditions This symptom is observed when there is a large number of mobility bindings (more than 32,000).

  Workaround There is no workaround.

- CSCds65613

  Symptoms After a router is configured with Home Agent (HA) redundancy using the Hot Standby Router Protocol (HSRP). the router may reload when it is booting up.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.1(2) or a later release when HA is configured using the HSRP protocol.

  Workaround Shut down the interfaces in the HSRP group of the HA and on other HAs in the redundancy group and boot up the router. After the router boots up, reenable the interfaces that were previously shut down.

- CSCds66249

  Symptoms When both the **isdn global-disconnect** interface configuration command and the **isdn network-failure-cause** interface configuration command are configured, the **isdn network-failure-cause** interface configuration command will replace the received disconnect cause code.

  Conditions This symptom is observed on a Cisco AS5300 that is running Cisco IOS Release 12.1(3)XI02.

  Workaround There is no workaround.

- CSCds67878

Symptoms A Cisco 3660 that is configured for E1 R2 signaling on a voice trunk may reload.

Conditions This symptom is observed under rare conditions on a Cisco 3660 that is running Cisco IOS Release 12.1 or Release 12.2.

Workaround There is no workaround.

- CSCds68004

  Symptoms A Cisco Multipath Channel (CMPC) configuration on a mainframe channel port adapter (XCAP) or an ESCON channel port adapter (CPA) may cause a read failure on a Flash disk.

  Conditions This symptom is observed on a Flash disk.

  Workaround Use a Flash card instead of a Flash disk.

- CSCds68034

  Symptoms A device or interface that is connected to the CPU via a PCI bus may not be recognized at discovery time. The device or interface becomes unusable and a message is displayed. Some platforms may not boot because of the inability to detect a required device or interface. This symptom may persist even after a reboot occurs.

  Conditions This symptom is observed on a Cisco router and is unlikely to affect normal system operation.

  Workaround There is no workaround. However, repeated reboots or online insertion and removals (OIRs) may cause the device or interface to be recognized.

- CSCds68071

  Symptoms Calls that are made from a vendor-specific software to a vendor-specific PBX fails.

  Conditions This symptom is observed on a Cisco AS5300 that is running Cisco IOS Release 12.1(4.04)T3.

  Workaround There is no workaround.

- CSCds68142

  Symptoms A Cisco 7500 series that is running distributed Cisco Express Forwarding (dCEF) with the **debug mpls packet** EXEC command enabled may show any debug output from the **debug** EXEC command on the console.

  Conditions This symptom is observed on a Cisco 7500 series that has dCEF enabled.

  Workaround There is no workaround.

- CSCds68176

  Symptoms A router may exhibit poor performance, pause indefinitely, and display error messages that are similar to the following:

  ```
  00:38:13: %SYS-2-LINKED: Bad enqueue of 0 in queue 6218D0D8
   -Process= "<interrupt level>", ipl= 4, pid= 31
   -Traceback= 603B6DA4 603B4928 60379CC4 6133667C 613370B8 61344810 61345154
  ```

  Conditions This symptom is observed on a Cisco 1700 series that is running Cisco IOS Release 12.1(4).

  Workaround There is no workaround.

- CSCds68744

  Symptoms IP packets that are fast-switched between the two ATM LAN Emulation (LANE) subinterfaces that are greater than 1494 bytes in size may be corrupted.

Conditions This symptom is observed on a particle-based platform that has two ATM subinterfaces that are running LANE. One of the ATM subinterfaces is in a bridge group with a Bridge-Group Virtual Interface (BVI) that is configured to do IP routing and the other ATM subinterface is configured to perform IP routing.

Workaround There is no workaround.

- CSCds69267

  Symptoms A router may reload after 120 calls.

  Conditions This symptom is observed on a Cisco 7200 series that has an 8-port multiservice interchange multichannel T1 or E1 port adapter (PA-MCX-8TE1) that is configured with a T1 PRI line and Voice over Frame Relay (VoFR). The Cisco 7200 series is running Cisco IOS Release 12.1(5.1)T.

  Workaround There is no workaround.

- CSCds69325

  If you use the **mgcp modem passthru** {**ca**} controller configuration command, Pulse Code Modulation (PCM) switchover for fax passthrough does not work properly. Fax calls fail during the training phase.

  Workaround: Use the **mgcp modem passthru** {**cisco**} controller configuration command.

- CSCds69500

  Symptoms A H.245 message is dropped if the H.245 message size exceeds 300 bytes if H.245 tunneling is enabled and if H.245 procedures are initiated. This symptom prevents an endpoint from receiving a tunneled H.245 message that exceeds 300 bytes in size.

  Conditions This symptom is observed when a Cisco IOS Release 12.1(5)T image is tested.

  Workaround If the message is greater than 300 and smaller than 350 bytes use Cisco IOS Release 12.1(5)T. There is no workaround if the message is greater than 350 bytes.

- CSCds70691

  Symptoms The interface type of packets that are received on a PA-A3-8T1/E1 port adapter interface are not recognized.

  Conditions This symptom is observed on a Route Switch Processor (RSP8).

  Workaround There is no workaround.

- CSCds71058

  Symptoms A Cisco AS5800 may reload because of an alignment error and display the following message:

  ```
  %ALIGN-1-FATAL: Corrupted program counter pc=0x0, ra=0x6046097C, sp=0x628D9C38
  ```

  Conditions This symptom is observed on a Cisco AS5800 that is handling V.120 digital calls and that has IP Cisco Express Forwarding (CEF) enabled. This symptom is observed when the Cisco AS5800 is running Cisco IOS Release 12.1(5)T or a later release.

  Workaround There is no workaround.

- CSCds71116

  Symptoms ISDN hairpinned calls are not completed on a Cisco AS5800.

  Conditions This symptom is observed with ISDN hairpinned calls on a Cisco AS5800. ISDN nonhairpinned, nonhairpinned, and modem hairpinned calls function normally.

  Workaround There is no workaround.

- CSCds71124

  Symptoms A loop may be formed when a router has IP tunnels configured. This symptom will cause an indefinite stack recursion when a packet is switched because of the recursive route lookups. This symptom may eventually cause the stack to overflow and the router to reload.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.0(13)S, 12.0(15)S, and Release 12.1(5)T1.

  Workaround Configure static routes for the tunnel destinations.

- CSCds72416

  Symptoms A AS5300 may pause indefinitely and display an error message on the console.

  Conditions This symptom is observed on a Cisco AS5300 that is running the c5300-is-mz.capA8 image of Cisco IOS Release 12.1(4.4)T2.

  Workaround There is no workaround.

- CSCds72459

  Symptoms When Rivest, Shamir, and Adleman (RSA) signature authentication is used for IP Security (IPSec), the router exchanges certificates with the IPSec peer if the router has not previously negotiated with this peer. In this case, the router correctly verifies the peer certificate and checks for the appropriate certificate revocation list (CRL) to ensure that the peer certificate has not been revoked.

  In subsequent negotiations with the same peer, the router may fail to obtain and check the appropriate CRL. This behavior may cause the router to negotiate an IPSec connection with a peer that has a revoked peer certificate.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.1(4).

  Workaround Reload the router.

- CSCds72634

  Symptoms When Multiprotocol Label Switching (MPLS) is enabled on an ATM interface, a spurious access may occur if a bind response is received from a Tag Distribution Protocol (TDP)/Label Distribution Protocol (LDP) neighbor for which a matching request cannot be found.

  Conditions This symptom is observed after a large routing topology change has occurred and the router may fail to process Bind response messages immediately. This symptom may cause the router to reload unexpectedly. The likelihood of a reload increases if a default route of 0.0.0.0/0 exists in the network.

  Workaround There is no workaround.

- CSCds72715

  When you perform an online insertion and removal (OIR) on a trunk card, a corresponding D channel configuration is lost.

  Workaround: Manually reconfigure the interface after performing the OIR.

- CSCds73763

  A Cisco 2600 or 3600 series router or a Cisco MC3810 multiservice access concentrator with a full load of voice calls may occasionally reload when you use the **clear counters** EXEC command. This situation also affects the Cisco Catalyst 4000 voice/WAN gateway line card. There is no workaround.

- CSCds74032

On a Cisco router that is running Cisco IOS Release 12.1, if you remove the crypto map from an interface and then remove the IP address, the router may reload.

Workaround: Reverse the order of the steps; remove the IP address first and then remove the crypto map.

- CSCds74636

  A Cisco 2600 or 3600 series router with a Voice/WAN interface card multiflex trunk module T1 line VWIC-xMFT-T1 or VWIC-xMFT-E1 module may experience line code violation (LCV) and parity code violation (PCV) errors. A hardware (vendor) caveat in the framer used on the VWIC-MFT modules may cause the chip to select incorrect nonadaptive receive equalizer settings. There is no workaround.

- CSCds75021

  Symptoms A Cisco 8230 router that has the Cisco WAN Manager (CWM) enabled may not be able to add interfaces or subinterfaces to the route processor module (RPM) card. The CWM is affected by this condition because the **interface** *interface-type* configuration command requires a reference to the slot number being used.

  Conditions This symptom is observed on a Cisco 8230 router that has the CWM enabled.

  Workaround Use a command or script that does not use the slot number in referencing an interface or subinterface. The slot number is assumed to be the slot/card that you are issuing the command to.

- CSCds75405

  Symptoms When Cisco Express Forwarding (CEF) is configured, the Forwarding Information Base (FIB) table may conflict with static host routes that are specified in terms of an output interface and Layer 2 address resolution protocols (ARP, map lists, etc.). The Layer 2 address resolution protocol adds adjacencies to CEF, which in turn creates a corresponding host route entry in the FIB table. This entry is called an adjacency prefix. If these adjacency prefix entries are also configured by a static host route, a conflict occurs.

  In Cisco IOS Release 12.0 and 12.0 S, the static host route is overwritten by the adjacency prefix. When the adjacency is removed, the static host route is not readded to the FIB table.

  Conditions This symptom is observed in Cisco IOS Release 12.0, 12.0 S, 12.1, and Release 12.2.

  Workaround Clear the routing table using the **clear ip route** {*} EXEC command to restore the static host routes.

  In Cisco IOS Release 12.1, the static host route is not overwritten by the adjacency prefix. This situation breaks the operation of Layer 2 address resolution protocols such as map lists. There is no workaround.

- CSCds75669

  Symptoms A DECnet route does not follow the bridging path when Concurrent Routing and Bridging (CRB) is tested.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.1(5.3).

  Workaround There is no workaround.

- CSCds76314

  Symptoms A permanent virtual circuit (PVC) may go from the active status to the inactive status and display "%ATMCES-1-ERRCREATEVC" error messages.

  Conditions This symptom is observed if the following actions occur:

  - The following sequence of commands is entered on a subinterface:

```
(config-subif)# shut
(config-subif)# shutdown
(config-subif)# no shut
(config-subif)# no shutdown
```

  - The PVC configuration mode is entered and then exited by entering the **end** command.

  Workaround Reconfigure the PVC or reload the router.

- CSCds76508

  Symptoms When a broadcast-and-unknown server (BUS) is oversubscribed, RSAR 3.2.1.2 may drop packets continuously without recovering. When this symptom occurs, LAN Emulation (LANE) clients or any permanent virtual circuits (PVCs) will go down and all incoming traffic will be dropped.

  Conditions This symptom is observed on a Catalyst 5000 series that is running Cisco IOS Release 12.1(4)E2 or Release 12.0(13)W5(19).

  Workaround There is no workaround.

- CSCds76567

  Symptoms Some trunks may go up or down intermittently after a connection trunk is configured on a Cisco 7200 series.

  Conditions This symptom is observed on a Cisco 7200 series.

  Workaround There is no workaround.

- CSCds77081

  On a Cisco AS5400 series universal access server or a Cisco AS5850 universal access server that is running Cisco IOS Release 12.2, after an unsuccessful call on a modem, the modem gets locked and is not available for further calls. There is no workaround.

- CSCds77309

  A Cisco router may reload if you use the **ip inspect name** global configuration command to configure Simple Mail Transfer Protocol (SMTP). There is no workaround.

- CSCds77339

  Symptoms A Call Distributor Application Programming Interface (CDAPI) buffer leak may occur. Raw CDAPI buffers are held up permanently and the number of buffers that are held up increases with the number of call attempts.

  Conditions This symptom is observed on a Cisco AS5800 that is running Cisco IOS Release 12.1(05)XM01 in a channel-associated signaling to Voice over IP to channel-associated signaling (CAS-VOIP-CAS) setup.

  Workaround There is no workaround.

- CSCds77787

  Symptoms On a network in which device A is connected to device B through a Cisco 3600 series that is configured for transparent bridging from Ethernet to Token Ring interfaces using a Bridge-Group Virtual Interface (BVI), a ping cannot be sent from device B on the Token Ring to the BVI or device A. Device B can ping device A only after device A pings device B and populates the Address Resolution Protocol (ARP) cache on device B. It is not possible for device B to ping the BVI interface.

Conditions This symptom is observed in a network in which device A is connected to device B through a Cisco 3600 series that is configured for transparent bridging from Ethernet to Token Ring interfaces using a BVI.

Workaround There is no workaround.

- CSCds78455

  Symptoms The debug output for segmented messages is incorrect.

  Conditions This symptom is observed on a Cisco router that has segmentation enabled for Q Signaling (QSIG). This symptom does not affect the normal operation of the router.

  Workaround There is no workaround.

- CSCds78766

  Symptoms A digital signal processor (DSP) of a Cisco 2600 series or Cisco 3600 series may pause indefinitely. Subsequent calls that are made after the DSP pauses will not complete. The following output is displayed when the show voice call summary EXEC command:

```
PORT         CODEC     VAD VTSP STATE             VPM STATE
============ ======== === ===================== ========================
1/0/0        g726r32    n  S_CONNECT             S_TRUNKED
1/0/1        g726r32    n  S_CONNECT             S_TRUNKED
1/1/0        g726r32    n  S_CONNECT             S_TRUNKED
1/1/1        -          -  -                     FXSLS_ONHOOK
2/0/0        g726r32    n  S_CONNECT             FXOGS_OFFHOOK
2/0/1        None       n  S_SETUP_FAIL          -          -  S_SETUP_IND_NO_DSP
```

  Conditions This symptom is observed on a a Cisco 2600 series or Cisco 3600 series that has a 2-port voice network module (NM-2V) with Foreign Exchange Office (FXO) modules. The router has to be reloaded for the DSP to be returned to normal working condition.

  Workaround There is no workaround.

- CSCds79580

  Symptoms The system Cisco Access Manager (CAM) entries that are created by Multiprotocol over Asynchronous Transfer Mode (MPOA) are not removed when an ATM module is removed, reset, reloaded, or when the ATM card pauses indefinitely.

  Conditions This symptom is observed on Catalyst 5000 series and Catalyst 6000 series platforms.

  Workaround Reload the Catalyst switch.

  Alternate Workaround For a Catalyst switch that has a network management processor (NMP), use Catalyst OS (CatOS) Release 4.5(12), 5.5(7), 6.1(3), 6.2(1) or a later release. For a Catalyst switch that has an ATM line card, use an image from Cisco IOS Release 12.0(14)W5(20) or a later release.

- CSCds79849

  Symptoms A Cisco 7200 series may display a "%SYS-3-CPUHOG" error message when the **clear counters** EXEC command is entered.

  Conditions This symptom is observed on a Cisco 7200 series that is configured with a large number of PPP sessions.

  Workaround There is no workaround.

- CSCds81746

Symptoms The output of the **show ip bgp vpnv4 vrf** *vrf-name* **summary** EXEC command shows all Border Gateway Protocol (BGP) peer routers including those that are not related to a specific Virtual Private Network (VPN) routing/forwarding instance (VRF).

Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.1(4.06).

Workaround There is no workaround.

- CSCds81783

  Symptoms A Cisco 7200 series may reload and display the following error message and stop encrypting traffic:

  ```
  00:09:13: %ISA-1-NOMEMORY: isa_prcoess_hipri_rx: no mr creation failed for slot 3
  00:09:13: %ISA-1-NOMEMORY: isa_prcoess_hipri_rx: no mr creation failed for slot 3
  00:09:13: %ISA-1-NOMEMORY: isa_prcoess_hipri_rx: no mr creation failed for slot 3
  00:09:13: %ISA-1-NOMEMORY: isa_prcoess_hipri_rx: no mr creation failed for slot 3
  ```

  Conditions This symptom is observed on a Cisco 7200 series that has an Integrated Services Adapter (ISA) module. This symptom is observed when a rate of 26,000 frames per second of a frame size of 256 bytes is sent.

  Workaround Reload the router.

- CSCds82520

  Symptoms A Cisco AS5300 Voice over IP (VoIP) gateway may reload because of a bus error.

  Conditions This symptom is observed on a Cisco AS5300 VoIP gateway that is running the Cisco IOS c5300-is-mz.capA11 image.

  Workaround There is no workaround.

- CSCds82862

  Symptoms A Cisco 4500 series uses process switching instead of fast switching to process outgoing AppleTalk packets.

  Conditions This symptom is observed on a Cisco 4500 series that is running Cisco IOS Release 12.1(6.06), 12.1(5.03)T, or Release 12.2.

  Workaround There is no workaround.

- CSCds82932

  Symptoms When the “clid_authen_col_npw” Tool Command Language (TCL) script is used and when automatic number identification (ANI) authentication fails, the account number and personal identification number (PIN) have to be entered. If the caller chooses not to enter the account number after being prompted do so, there will be no account number value and the ANI will be used as the username. The username shows up as the failed ANI for the accounting records for the three following call legs: answer/telephony, answer/Voice over IP (VoIP), and originate/telephony. The account number that is entered by the caller should be used for the username, as in the accounting record of the Voice over IP (VoIP) leg.

  Conditions This symptom is observed on a Cisco voice gateway that is running Cisco IOS Release 12.1(5)T.

  Workaround There is no workaround.

- CSCds84305

  Symptoms Sustained CPU usage of 30 percent may be observed on a Cisco 3600 series.

  Conditions This symptom is observed on a Cisco 3600 series that has a 32-port Asynchronous Network Module (NM-32A) when a reverse Telnet is made to the NM-32A.

Workaround There is no workaround.

- CSCds84767

  Symptoms A router may become irresponsive.

  Conditions This symptom is observed on a Cisco AS5300 if the **no settlement** global configuration command is entered after certificates are reenrolled.

  Workaround There is no workaround.

- CSCds84980

  Symptoms The maximum transmission unit (MTU) of a Bridge-Group Virtual Interface (BVI) changes from 1500 to 1514 after a Cisco MC3810 is reloaded.

  Conditions This symptom is observed on a Cisco MC3810 that has a multiflex trunk (MFT) module and that is running Cisco IOS Release 12.0(7)T.

  Workaround There is no workaround.

- CSCds85089

  Symptoms A memory leak may occur on a router.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.1 or Release 12.1 T and that has IP Security (IPSec) and multilink enabled.

  Workaround Disable fast switching.

- CSCds85196

  Symptoms Network Based Application Recognition (NBAR) commands such as the **ip nbar protocol-discovery** interface configuration command can be enabled even when Cisco Express Forwarding (CEF) is not enabled.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.0 S, 12.1E or Release 12.2 T

  Workaround Enable CEF by entering the **ip cef enable** global configuration command before enabling NBAR.

- CSCds85371

  Symptoms In a hub-and-spoke Virtual Private Network (VPN) environment, if a new crypto map instance is added on the hub router while the crypto map is applied to the interface, all clear traffic will be stopped before the crypto peer or the access control list (ACL) is defined.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.1(4)E in a hub-and-spoke VPN environment.

  Workaround Remove the crypto map from the interface, add the new map instance, and reapply the crypto map to the interface.

- CSCds85981

  Symptoms A Cisco 2621 that is connected back-to-back to another router using an Ethernet crossover cable may display an up/up state for the connected router even when the other router has been administratively down.

  Conditions This symptom is observed on a Cisco 2621 that is running Cisco IOS Release 12.1(5).

  Workaround There is no workaround.

- CSCds87133

  Symptoms Traceback messages may be displayed and a voice port for a PRI group may not be created.

Conditions This symptom is observed when a Route Switch Processor (RSP) PRI group is configured. This symptom occurs if the PRI group is removed and later reconfigured.

Workaround There is no workaround.

- CSCds87164

  Symptoms The BRI Layer 1 of a Cisco 1700 series will remain in the DEACTIVATED state when the Cisco 1700 series is loaded with a o3sv3y (voice) image. Sometimes, Layer 1 will come up but Layer 2 will be in the ESTABLISH_AWAITING_TEI state.

  Conditions This symptom is observed on a Cisco 1700 series that is running Cisco IOS Release 12.2(0.01).

  Workaround If there are no voice ports on the Cisco 1700 series, use the bnr2sy (data-only) image.

- CSCds87245

  Symptoms The Cisco MGX8260 rejects a create connection (CRCX) command that contains a list of codec as returned after an initial CRCX command is sent to a Cisco AS5300 and forwarded by the virtual switch controller (VSC) that controls the Cisco AS5300. The Cisco MGX8260 rejects the CRCX command because Cisco IOS Software returns a codec list to Media Gateway Control Protocol (MGCP) CRCX command using a dotted notation such as the following:

  ```
  a=rtpmap:96 G.726-24/8000/1
  ```

  The correct syntax should be:

  ```
  a=rtpmap:96 G726-32/8000
  ```

  Conditions This symptom is observed on a Cisco AS5300 and a Cisco MGX8260 that is running Cisco IOS Release 12.1(5)T.

  Workaround Enter the **mgcp sdp notation undotted** global configuration command to set undotted notation for encoding in the Shelf Discovery Protocol (SDP). The configuration of this command will cause the Cisco IOS software to produce a list of codecs that the Cisco MGX8260 will accept.

- CSCds88174

  Symptoms The keepalive feature may not work as expected.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.1(4).

  Workaround Disable Internet Security Association and Key Management Protocol (ISAKMP) keepalives.

- CSCds88436

  Symptoms Several interfaces may not come up after distributed weighted fair queueing (DWFQ) is enabled on channelized interfaces on a Versatile Interface Processor (VIP).

  Conditions This symptom is observed on the Cisco Versatile Interface Processor of a Cisco router that is running Cisco IOS Release 12.0 S or Release 12.0 ST.

  Workaround There is no workaround.

- CSCds88559

  Symptoms A software-forced reload may occur on a Cisco AS5300.

  Conditions This symptom is observed on a Cisco AS5300 that is running the c5300-is-mz.capA12 image of Cisco IOS Release 12.1(4.4)T2.

  Workaround There is no workaround.

- CSCds88604

  Symptoms A software-forced reload may occur on a Cisco AS5300.

Conditions This symptom is observed on a Cisco AS5300 that is running the c5300-is-mz.capA12 image of Cisco IOS Release 12.1(4.4)T2.

Workaround There is no workaround.

- CSCds88619

  Certain errors (such as excessive Ethernet collisions) may cause a Cisco uBR900 series router to reload. There is no workaround.

- CSCds89515

  Symptoms Distributed Cisco Express Forwarding (dCEF) may be disabled on a Cisco 12000 series because of a low-memory condition during a large routing update (for example, while booting up).

  Conditions This symptom is observed on a Cisco 12000 series that is running Cisco IOS Release 12.0(14)S.

  Workaround Reduce the maximum path in Border Gateway Protocol (BGP) to reduce amount of information Cisco Express Forwarding (CEF) propagates to the line cards, or reduce TCP window size to reduce the speed of incoming BGP updates.

  Alternate Workaround Enter the **ip cef linecard ipc memory** *kbps* interface configuration command. The amount of line card memory is limited to 50 percent of the total memory. This command allows a user to allocate a larger amount of line card memory to be allocated to the queueing for CEF routing to update messages. The command allows the route processor to free memory by releasing CEF updates more quickly and it prevents the low-memory condition from occurring on the route processor.

- CSCds89712

  Symptoms Static routes that are redistributed into the Routing Information Protocol (RIP) may not appear in the RIP database and will not be advertised to any neighbor after the interface that the static route points to goes up.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.1(5a).

  Workaround Clear the routing table entry by entering the **clear ip route** privileged EXEC command.

- CSCds89937

  Symptoms On an originating Cisco universal access server that is running Cisco IOS Release 12.2(1) and a terminating Cisco universal access server that is running Cisco IOS Release 12.0(7)T, the negotiated packet size of the voice codec is the default size instead of the size specified by the configuration.

  Conditions This symptom is observed in a network that has an originating Cisco universal access server that is running Cisco IOS Release 12.2(1) and a terminating Cisco universal access server that is running Cisco IOS Release 12.0(7)T.

  Workaround There is no workaround.

- CSCds90359

  Symptoms The CISCO-MODEM-MGMT-MIB MIB may not be supported.

  Conditions This symptom is observed on a Cisco 3620 that is running the c3620-js-mz.121-5.T image of Cisco IOS Release 12.1(5)T.

  Workaround There is no workaround.

- CSCds90497

Symptoms A large burst of traffic that could exhaust the receive buffers on a Cisco 1-port ATM OC-3c network processor module (NP-1A) controller may cause the interface to pause indefinitely on the receive side. This condition can be cleared by entering the **shutdown** interface configuration command followed by the **no shutdown** interface configuration command on the interface.

Conditions This symptom is observed on a Cisco 4500 series that has a NP-1A network processor module controller and that is running Cisco IOS Release 12.0(12).

Workaround Enter the **atm ilmi-keepalive** interface configuration command. This workaround may not always be effective.

- CSCds90558

  Symptoms The CCH323_CT process may hold 144 MB of memory on a Cisco AS5800 universal access server that is acting as a terminating gateway.

  Conditions This symptom is observed in a network in which two Cisco AS5800 universal access servers are used; one as an originating and the other as a terminating gateway. The two Cisco AS5800 universal access servers are running the c5800-p4-mz.122-0.1 image of Cisco IOS Release 12.2(1). No call drops or other side effects were observed when this symptom occurs.

  Workaround There is no workaround.

- CSCds90614

  When a Modem ISDN channel aggregation (MICA) modem goes to a “bad” state during an active call, the corresponding line and asynchronous interface data structures may fail to clear. This situation may result in incorrect accounting records being generated.

  Workaround: Enter the **clear interface async** EXEC command to reset the interface and line data structures.

  Alternate workaround: Enable PPP link control protocol (LCP) keepalive on the interface (for example, using the **keepalive** *15* interface configuration command on the applicable asynchronous, group-asynchronous, dialer, or virtual-template). This workaround may cause the interface line to clear automatically when the modem goes bad.

- CSCds90758

  Symptoms A Cisco enhanced ATM port adapter (PA-A3-xx) may not be able to provide correct traffic shaping if a combination of peak cell rate (PCR)/sustainable cell rate (SCR)/maximum burst size (MBS) for variable bit rate (VBR) virtual circuits (VCs) is used in such a way that the “Limit” calculated according to Generic Cell-Rate Algorithm (GCRA) (specified in ATM Forum TM4.0), comes out to be greater than 0xFFFFFF (Hex) or 16777215 (decimal) value. This symptom occurs because of a limitation on the Cisco PA-A3-xx port adapter.

  Conditions This symptom is observed on the Cisco PA-A3 port adapter of a Cisco router that is running Cisco IOS Release 12.1(5a).

  Workaround There is no workaround.

- CSCds91021

  Symptoms A Toolkit Command Language (TCL) interactive voice response (IVR) 2.0 application script that is running on a Cisco voice gateway may abort during a call with the “language not specified in the configuration” error message.

  Conditions This symptom occurs if the TCL IVR 2.0 script contains the “infotag set med_language 1” command if language 1 is not specified using the command-line interface (CLI) of the Cisco voice gateway.

  Workaround Remove the “infotag set med_language 1” command from the TCL IVR 2.0 script or configure a language using the CLI of the call application.

- CSCds91489

  Symptoms A Cisco AS5300 may reload if the **no aaa group server** global configuration command is entered several times for the same server group.

  Conditions This symptom is observed on a Cisco AS5300 that is running Cisco IOS Release 12.1(5)T or Release 12.2.

  Workaround Avoid entering the **no aaa group server** global configuration command repeatedly for the same server group. As soon as a server group is not used for any further RADIUS server communication (after all Radius replies have been received), the server group will disappear.

- CSCds91873

  Symptoms The Cisco DistributedDirector may reload and display traceback messages when a configuration change is made while the Cisco DistributedDirector is operating under a heavy load.

  Conditions This symptom is observed if a configuration is changed on a Cisco DistributedDirector while it is operating under a heavy load.

  Workaround There is no workaround.

- CSCds92115

  Symptoms When a call is made from a Cisco gateway to a public switched telephone network (PSTN) or PBX analog phones through a high density voice network module (NM-HDV), the call setup is established but speech does not pass through. Complete silence is observed at both ends of the call.

  Conditions This symptom is observed when a call is made from a Cisco gateway to a PSTN or PBX analog phone through a NM-HDV voice network module.

  Workaround To correct this symptom, install an analog Foreign Exchange Station (FXS) module on the Cisco gateway.

- CSCds92116

  Symptoms A Cisco AS5800 may reload after about 1000 calls.

  Conditions This symptom is observed on a Cisco AS5800 when ISDN to channel-associated signaling (CAS) or from CAS to ISDN hairpinned calls are made,

  Workaround There is no workaround.

- CSCds92491

  Symptoms When IP Security (IPSec) peers are configured with Access Control List (ACL) entries that do not match, but one ACL includes the other ACL, one of the following two situations occurs:

  Correct behavior occurs if the IPSec peer with the more restrictive ACL initiates the connection, and then offers a more restrictive IPSec proxy. This proxy is accepted by the IPSec peer with the less restrictive ACL, if the less restrictive ACL completely covers the more restrictive offered IPSec proxy.

  Incorrect behavior occurs if the IPSec peer with the less restrictive ACL initiates the connection, and then offers a less restrictive IPSec proxy. This proxy is accepted by the IPSec peer with the more restrictive ACL. The IPSec peer with more restrictive ACL should reject the less restrictive offered IPSec proxy.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.0(14) or Release 12.1(5) when IPSec peers are configured with ACL entries that do not match.

  Workaround Ensure that the IPSec ACL entries match correctly on both sides and are exact mirror images of each other.

- CSCds92631

Symptoms Bindings cannot be created if a router is acting as both a Home Agent (HA) and a Foreign Agent (FA).

Conditions This symptom is observed on a Cisco router that is acting as both a Home Agent (HA) and a Foreign Agent (FA).

Workaround There is no workaround.

- CSCdt01390

  Symptoms E1 alarms are not working according to standards that are specified in International Telecommunication Union-Telecommunications Standards Section (ITU-T) G.704. When a faulted multiframe alignment frame signal is detected, the router does not detect the alignment fault event and send a console message in response to the faulted alignment frame signal.

  Conditions This symptom is observed on a Cisco 3600 series that is running Cisco IOS Release 12.1(3a)XI02.

  Workaround There is no workaround.

- CSCdt01608

  Symptoms After a Cisco AS5300 is upgraded, the voice port that were created by the initial Cisco IOS software version for Non-Facility Associated Signaling (NFAS) group members may lose that association.

  Conditions This symptom is observed on a Cisco AS5300 after it is upgraded from Cisco IOS Release 12.1(2a)T2 to Release 12.1(5)T.

  Workaround There is no workaround.

- CSCdt01706

  Symptoms When the **copy ftp://** command is entered to download an image from a FTP server, the image is downloaded several times. In a network that has slow links, this method of download cause the operation to take longer than it would if the image was downloaded only once.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.1(4). This symptom does not affect Cisco IOS Release 12.0.

  Workaround There is no workaround.

- CSCdt01822

  Symptoms A Cisco 7200 series may pause indefinitely if Cisco Appliance Server Architecture (CASA) is used together with Cisco Express Forwarding (CEF).

  Conditions This symptom is observed on a Cisco 7200 series that is running Cisco IOS Release 12.1(4)DB, 12.1(4)DC, 12.1(4.04)E, 12.1(4.04), 12.1(4.004)AA, 12.1(4.04)T, or a later release.

  Workaround Disable CEF.

- CSCdt02190

  Symptoms Committed access rate (CAR) with an access control list (ACL) does not function on a Gigabit Inter-Switch Link (ISL) subinterface for output.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.1(4)E.

  Workaround Use CAR for all traffic.

- CSCdt02925

  Symptoms A Cisco router may reload

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.1(05.03)T reloads when the following events occur:

  - The router is used as relay agent between a Dynamic Host Configuration Protocol (DHCP) client and a DHCP server. The client sends a DHCPDISCOVER message through an unnumbered interface to the relay agent.
  - The relay forwards the DHCPOFFER and DHCPACK messages from the server to the client on an unnumbered interface and adds a static host route to the client.
  - The same client sends another DHCPDISCOVER message through the same setup (which may happen when the client goes down and comes back up) or the same client sends DHCPDISCOVER for renewing the lease. The relay agent, while forwarding the DHCPACK message again, tries to delete an existing host route and the router reloads.

  Workaround There is no workaround.

- CSCdt03141

  A Cisco AS5300 series universal access server that is running the c5300-is-mz.capA12 image (based on Cisco IOS Release 12.1(4.4)T2) may reload by bus error. There is no workaround.

- CSCdt03301

  Symptoms When you enter the **show mpls forwarding-table** EXEC command, CPU utilization may approach 100 percent. This situation may lead to various performance-related problems.

  Conditions This symptom is observed when the Multiprotocol Label Switching (MPLS) forwarding table contains several thousand forwarding entries for Traffic Engineering (TE) tunnels. When the CPU load gets that high, some of TE tunnels may flap.

  Workaround The condition can be greatly alleviated by running the command with automore enabled.

- CSCdt03441

  Symptoms A Cisco access server may reload with a bus error in rm_rpm_resource_allocate_success.

  Conditions This symptom is observed on a Cisco access server that is running the Resource Pooling feature.

  Workaround There is no workaround.

- CSCdt03851

  Symptoms On a Cisco router, few security associations (SAs) come down and recover immediately.

  Conditions This symptom is observed when you create multiple IP Security (IPSec) tunnels (500) with an Internet Key Exchange (IKE) lifetime of 86,400 seconds and an IPSec lifetime of 180 seconds. All 500 IKE SAs are established. Over a period of time, with continuous traffic, few IKE SAs (around 1 to 5) come down and recover immediately. This situation occurs prior to IKE rekeying, and the router does recover by itself, so there is no functional impact. The IKE SAs begin terminating any time there is a retransmission during quick mode (QM). The retransmissions continue after QM finishes successfully. After 4 attempts, QM deletes the IKE SAs.

  Workaround There is no workaround.

- CSCdt04301

  Symptoms The **show users** EXEC command reports the active time that a call has been connected instead of the idle time for the call.

  Conditions The conditions under which this symptom occurs are not known at this time.

  Workaround There is no workaround.

- CSCdt04645

Symptoms A line card to route processor queue can grow too large causing malloc failures on the line card.

Conditions This symptom is observed on a Cisco 12000 series router that is configured with Engine 2 line cards.

Workaround There is no workaround.

- CSCdt04658

  Symptoms Open Settlement Protocol (OSP) calls fail during a Secure Socket Layer (SSL) handshake to a third-party SSL server because of a rejected certificate.

  Conditions The conditions under which this symptom occurs are not known at this time.

  Workaround There is no workaround.

- CSCdt05020

  A Cisco Versatile Interface Processor 2-50 (VIP2-50) card with two channelized T1 PRI port adapters (PA-2CT1/PRI) reloads when you load the rsp-a3jsv-mz image in Cisco IOS Release 12.2(0.2). There is no workaround.

- CSCdt05144

  Symptoms A Cisco 3600 series may not generate any command output when you enter the **show access-list** *access-list-number* EXEC command.

  Conditions This symptom is observed on a Cisco 3600 series router that is running Cisco IOS Release 12.1(5)T.

  Workaround Insert a space after the *access-list-number* argument.

- CSCdt05148

  Symptoms The information in RADIUS Attribute 44 (Accounting Session ID) in an access-request and in an accounting-request must be the same but is not.

  Conditions This symptom is observed in Cisco IOS Release 12.1(4)DC1.

  Workaround There is no workaround.

- CSCdt05360

  Symptoms A Cisco 3640 router pauses indefinitely.

  Conditions This symptom is observed after many spurious memory accesses.

  Workaround There is no workaround.

- CSCdt05398

  Symptoms A Secure Shell (SSH) session pauses indefinitely.

  Conditions This symptom is observed after you enter the **show tech-support** EXEC command or the **configure network** EXEC command on a Cisco 12000 series router.

  Workaround There is no workaround.

- CSCdt05449

  Symptoms When you enable IP Cisco Express Forwarding (CEF), a bus error may occur.

  Conditions The conditions under which this symptom occurs are not known at this time.

  Workaround There is no workaround.

- CSCdt05544

Symptoms After firmware has reloaded unexpectedly, configured interfaces may go into a loopback mode.

Conditions This symptom is observed on a 8-port multichannel E1 port adapter (PA-MC-8E1).

Workaround Unconfigure the loopback from the interfaces one by one

Alternate Workaround Enter the **shutdown** controller configuration command followed by the **no shutdown** controller configuration command on the controller on which the interfaces are configured.

- CSCdt05612

  Symptoms A Cisco AS5300 reloads because of a bus error.

  Conditions This symptom is observed on a Cisco AS5300 that is running the c5300-is-mz image of Cisco IOS Release 12.1(4.4)T2, that is functioning as a Voice over IP (VoIP) ingress gateway, and that is configured with two E1 R2 trunks.

  Workaround There is no workaround.

- CSCdt05873

  Symptoms Acknowledgements of RADIUS resource accounting packets may not be processed correctly, causing the accounting record to be improperly send again. When you enable the **debug radius** command, messages such as the following may be seen:

  ```
  RADIUS: Received from xxx.xxx.xxx.xxx - un-sane packet
  ```

  Other RADIUS accounting packets work normally.

  Conditions This symptom is observed on a Cisco AS5400.

  Workaround Disable the Resource Accounting feature.

- CSCdt06261

  Symptoms If a recursive route, for example from Border Gateway Protocol (BGP), is resolved using the default route and if a route that is more specific to the recursive prefix should subsequently be inserted into the database, Cisco Express Forwarding (CEF) may fail to reresolve the recursive route to use this new route rather than the default route.

  Conditions This symptom is observed during route flaps in which the original route that a recursive route resolves to temporarily disappears. The recursive route is then left permanently resolved through the default route even after the original route reappears.

  Workaround Clear the recursive route using the **clear ip route** {*network* [*mask*]} EXEC command. This will force the rediscovery and reresolution of the recursive route.

- CSCdt06737

  Symptoms On a Cisco AS5300 that is functioning as an originating gateway and another Cisco AS5300 that is functioning as a terminating gateway, when you use interactive voice response (IVR) to let the originating gateway send an answer to an originating PBX after the called party is off hook, the parties cannot hear each other because the originating switch does not send an answer to the originating gateway.

  Conditions This symptom is observed when the originating gateway is running Cisco IOS Release 12.1(4.4)T2, the terminating gateway is running Cisco IOS Release 12.0(7)T, and the originating gateway incoming dial-peer is configured as follows:

  - **dial-peer voice** *tag* **pots** global configuration command
  - **application** *name* dial-peer configuration command (with 17931 as the *name*)
  - **incoming called-number** *string* dial-peer configuration command (with 17931T as the *string*)

Workaround There is no workaround.

- CSCdt06784

  Symptoms When Feature Group-D (FGD) is functioning with multifrequency (MF) tones and automatic number identification (ANI), there is no option to control if an access server reports address signaling codes with ANI.

  Conditions This symptom is observed on a Cisco AS5300 and a Cisco AS5800.

  Workaround There is no workaround.

- CSCdt06869

  Symptoms An input Q wedge may occur on a Cisco 3640 router.

  Conditions This symptom is observed on a Cisco 3640 router that is running Cisco IOS Release 12.1(4) and occurs during normal operation.

  Workaround There is no workaround. A temporary workaround, reload the router until the symptom occurs again.

- CSCdt07008

  Symptoms A codec list that is returned after a create connection (CRCX) request lacks consistency and order.

  Conditions This symptom is observed when a CRCX request is sent to a Cisco AS5300.

  Workaround There is no workaround.

- CSCdt07130

  Symptoms If you remove a traffic engineering (TE)-related configuration state for one or more TE tunnels while displaying the TE tunnels, an error message that reports a spurious memory access may be generated, or in very rare circumstances, a system may reload.

  Conditions This symptom is observed in Cisco IOS software that is not based on Cisco IOS Release 12.0 S and that is running Multiprotocol Label Switching traffic engineering (MPLS TE) when you attempt to unconfigure TE tunnels while simultaneously displaying TE tunnels using the **show mpls traffic-eng tunnels** EXEC command.

  Workaround There is no workaround.

- CSCdt08445

  Symptoms A Multilink PPP (MLP) over ATM session may not recover.

  Conditions This symptom is observed after an interface flaps, or you enter the **shutdown** interface configuration command followed by the **no shutdown** interface configuration command on an interface.

  Workaround To recover the connection, reconfigure the **dialer pool-member** interface configuration command on the permanent virtual connection (PVC). To ensure that the symptom does not occur again, configure the **no keepalive** interface configuration command on the dialer interface that is used for MLP.

- CSCdt08550

  Symptoms A Layer 2 class of service (COS) on a Fast Ethernet Inter-Switch Link (ISL) and dot1q subinterfaces may not to send out expected packages.

  Conditions This symptom is observed in Cisco IOS Release 12.2(3) and Release 12.2(3)T.

  Workaround There is no workaround.

- CSCdt08679

If you change a policy-map configuration during a heavy traffic load, a Versatile Interface Processor (VIP) may display an "output stuck" error. The VIP may stop forwarding packets until it is reset automatically. This situation is specific to a Frame Relay configuration when there are permanent virtual circuits (PVCs) that are shaped using Distributed Traffic Shaping (DTS). This situation occurs when all the PVCs are congested and you make a change to the policy map.

Workaround: Shut down the physical interface before changing the policy map, then reenable the interface.

- CSCdt08905

  Symptoms You may not be able to use the command-line interface (CLI) because a voice resource cannot be debugged.

  Conditions This symptom is observed on a Cisco AS5800.

  Workaround There is no workaround.

- CSCdt08932

  Symptoms A router may reload when you unconfigure class-based weighted fair queueing (CBWFQ)/low latency queueing (LLQ) from a dialer.

  Conditions This symptom is observed in a Multilink PPP (MLP) configuration when a member link is not an ISDN link but another link, such as PPP over ATM (PPPoATM).

  Workaround There is no workaround.

- CSCdt09214

  Symptoms The following traceback may occur:

  ```
  %ALIGN-3-SPURIOUS: Spurious memory access made at 0x60443C00 reading 0x40
  %ALIGN-3-TRACE: -Traceback= 60443C00 6040C4F8 6010F9EC 60113834 00000000 00000000
  00000000 00000000
  ```

  Conditions This symptom is observed in Cisco IOS Release 12.1(5.3)T when you use the idle timer on a dialer interface that is configured for PRI.

  Workaround There is no workaround.

- CSCdt09262

  Symptoms High CPU utilization that is caused by process CCH323_CT may occur on a Cisco AS5300. After you have removed all the calls that were processed by the Cisco AS5300, the CCH323_CT process continues to run high, and no calls can be established.

  Conditions This symptom is observed after hours of processing calls on a Cisco AS5300 router that is configured as a terminating gateway (TGW).

  Workaround There is no workaround. For the TGW to accept calls again, reload the Cisco AS5300.

- CSCdt09293

  Symptoms A Cisco 3640 router may reload when the priority bandwidth that is allocated to voice calls is less than the minimum required amount.

  Conditions This symptom is observed when you use link fragmentation and interleaving (LFI) over ATM links.

  Workaround Allocate the minimum priority bandwidth for voice calls.

- CSCdt09605

  A Cisco AS5400 series universal access server that is running Cisco IOS Release 12.2 may reload while running voice calls. There is no workaround.

- CSCdt09622

Symptoms Engine 2 Packet-over-SONET (POS) line cards on a Cisco 12000 series router may be severely affected and may reset if hundreds of Multiprotocol Label Switching (MPLS) traffic engineering (TE) tunnel interfaces are unconfigured simultaneously.

Conditions This symptom is observed under heavy stress conditions such as the presence of several Border Gateway Protocol (BGP) and Open Shortest Path First (OSPF) routes and heavy line rate traffic.

Although the symptom is observed on Engine 2 POS line cards, it is platform independent and may occur on any Cisco router that is running MPLS with TE tunnels.

Workaround There is no workaround.

- CSCdt10027

  Symptoms When distributed Multilink PPP (dMLP) is enabled, the PPP multilink fails on Link Control Protocol (LCP) negotiation, and serial links that are not members of the multilink bundle may be brought down.

  Conditions The conditions under which this symptom occurs are not known at this time.

  Workaround There is no workaround.

- CSCdt10151

  Symptoms RADIUS sends the h323-conf-id vendor-specific attribute (VSA) for all Cisco platforms even though H.323 is not supported for most Cisco platforms, which may cause incompatible communication between RADIUS servers and Cisco IOS software.

  Conditions The conditions under which this symptom occurs are not known at this time.

  Workaround There is no workaround.

- CSCdt10213

  Symptoms A Cisco Serving GPRS Support Node (SGSN) does not handle flow label management correctly.

  Conditions This symptom is observed when packet data protocol is deleted.

  Workaround There is no workaround.

- CSCdt10512

  A Cisco AS5300 series universal access server that is running channel-associated signaling (CAS) to Signaling System 7 (SS7) calls or CAS to H.323 calls may reload unexpectedly because of a bus fault at “ccFreeRawMsgInfo”. There is no workaround.

- CSCdt10604

  Symptoms A Resource Reservation Protocol (RSVP) session may not be installed on a Cisco 7500 series interface.

  Conditions This symptom is observed on a Cisco 7500 series router that is running Cisco IOS Release 12.1, Release 12.1 E, Release 12.2, or Release 12.2 T when class-based weighted fair queueing (CBWFQ) is enabled on the interface and both the **ip rsvp bandwidth** and **service-policy output** interface configuration commands are enabled on the interface.

  Workaround There is no workaround.

- CSCdt10760

  Symptoms When you run a Network Service Engine 1 (NSE-1) with Parallel Express Forwarding (PXF) enabled, some packets may not be forwarded if they are routed via the default route. This situation causes PXF to be disabled.

  Conditions This symptom is observed on a Cisco 7200 series router.

Workaround Disable PXF and enable Cisco Express Forwarding (CEF).

- CSCdt11072

  Symptoms A token object identifier (OID) that is sent back may not be the token OID that was originally received, which results in call setup failure.

  Conditions This symptom is observed when you interoperate with a gatekeeper in the signaling mode (nondirectory gatekeeper), and the gatekeeper is configured to use security. The OID that is sent back from the Cisco gateway may not be the token OID that was originally received.

  Workaround There is no workaround.

- CSCdt11190

  Symptoms A Cisco 7513 router may reload when you modify the policy-map default-class queue size, and the following message may appear:

  ```
  %ALIGN-1-FATAL: Illegal access to a low address addr=0x20, pc=0x60417FBC,
  ra=0x60417FC4, sp=0x62D26360
  ```

  Conditions This symptom is observed on a Cisco 7513 router that is running the rsp-isv-mz image of Cisco IOS Release 12.1(5)T1 and that is configured with an enhanced ATM DS3 port adapter after exiting the class configuration mode.

  Workaround There is no workaround.

- CSCdt11282

  Symptoms An IP security (IPSec) tunnel continues to flap.

  Conditions This symptom is observed when traffic is running between two IPSec peers and on one peer you enter the **crypto card shut 5** command (when a hardware encryption card is installed in slot 5) and the **microcode reload** global configuration command.

  Workaround Do not enter the **crypto card shut** command while traffic is running. If you do shut down the hardware encryption card, first stop the traffic. Before you bring the hardware encryption card back up again, enter the **clear cry sa** and **clear crypto isakmp** EXEC commands on both peers.

- CSCdt11426

  Symptoms An image with k8 or k9 in the image name reloads on startup because the crypto subsystem does not recognize k8 or k9 as a valid name.

  Conditions The conditions under which this symptom occurs are not known at this time.

  Workaround There is no workaround.

- CSCdt11491

  Symptoms A Cisco 800 router reloads when a telephone goes offhook.

  Conditions This symptom is observed when the Cisco 800 router is configured with a plain old telephone service (POTS) port that is configured for a leased line. The router reloads when the telephone that is connected to the POTS port goes offhook.

  Workaround There is no workaround.

- CSCdt11570

  Symptoms 128-bit Microsoft Point-to-Point Encryption (MPPE) encryption does not function on hardware in an Integrated Services Module (ISM).

  Conditions This symptom is observed on a Cisco 7100 series router.

  Workaround There is no workaround.

- CSCdt11656

Symptoms Fair-queue queue-limit modifications are not retained on a Cisco 7513 router.

Conditions This symptom is observed on a Cisco 7513 router that is running the rsp-isv-mz image of Cisco IOS Release 12.1(5)T1 and that is configured with an enhanced ATM DS3 port adapter after you have modified the fair-queue queue-limit value. The new value takes affect and is displayed in the running configuration, but after the router had reloaded, the modifications are lost and the value reverts to the default value.

Workaround There is no workaround.

- CSCdt11779

  Symptoms Noise is heard on a Foreign Exchange Station (FXS).

  Conditions This symptom is observed when Voice over IP (VoIP) calls go through a Cisco ICS7700 series Multiservice Route Processor (MRP), and a call is made from one FXS to a second FXS. Noise is heard periodically at the second FXS after the call is answered.

  Workaround There is no workaround.

- CSCdt11794

  Symptoms A Translational Lookaside Buffer (TLB) store exception may occur.

  Conditions This symptom is observed when the **dir disk** *number* EXEC command, where *number* is the number of the PCMCIA slot, is entered at the ROMMON prompt while there is an ATA disk in that PCMCIA slot of a High End System (HES).

  Workaround There is no workaround.

- CSCdt12269

  Symptoms A Cisco router may reload with a bus error and displays the following error message:

  ```
  System returned to ROM by bus error at PC 0x2057A4C, address 0x0
  ```

  Conditions This symptom is observed during a Simple Network Management Protocol (SNMP) walk.

  Workaround There is no workaround.

- CSCdt12337

  Symptoms Systems Network Architecture Switching Services (SNASw) may send a topology database update (TDU) to its network node server (NNS) with the LAST_FRSN_SENT field set to 0. A zero value causes the NNS to purge all the previously registered TF vectors (TGVs) for that end node (EN). This situation may result in an “80140001” sense code for a logical unit (LU) session setup.

  Conditions The conditions under which this symptom occurs are not known at this time.

  Workaround There is no workaround.

- CSCdt12338

  Symptoms A Cisco 7500 series router that is configured with TC-ATM (Tag-Controlled ATM) interfaces and that has the Multi-VC feature enabled may stop forwarding traffic to the prefixes that are reachable via the Multi-VC feature when distributed Cisco Express Forwarding (dCEF) is enabled.

  Another symptom is that the output of the **show ip cef vrf** *vrf-name ip-prefix* EXEC command does not display the tag rewrite correctly when the Border Gateway Protocol (BGP) nexthop is reachable via the Multi-VC feature. This symptom is just a cosmetic problem and no workaround is necessary.

  Conditions These symptoms are observed after some time in an environment where the Interior Gateway Protocol (IGP) routes are flapping frequently.

Workaround There is no workaround.

- CSCdt12679

  On a Cisco router with continuous traffic flowing through an IP Security (IPSec) tunnel, if you try to change the **crypto ipsec transform-set** *transform-set-name transform1* global configuration command (with *intranetset* as the *transform-set-name* and *ah-md5-hmac esp-des* as *transform1*) to include *comp-lzs*, the router displays the following error message and reloads:

  ```
  -Traceback= 61410F08 613F79A4 613F7BF4 613F9BFC 60452CA4 60452C90
  *** System received a Bus Error exception *** signal= 0xa, code= 0x10, context=
  0x6204c400 PC = 0x6047d87c, Cause = 0x420, Status Reg = 0x34008002 rommon 2 >
  ```

  Workaround: Do not modify the transform set. Stop the traffic, negate the existing transform set, and use a new transform set with the additional required options. Be sure that the transform set is not being used by any crypto map before removing the transform set.

- CSCdt12932

  Symptoms The output of the **show voice dsp** EXEC command is incorrect and impedes troubleshooting of digital signal processors (DSPs). This situation does not affect proper voice operation on the router.

  Conditions This symptom is observed on a Cisco 7200 series router that is running Cisco IOS Release 12.1(3)XI.

  Workaround There is no workaround.

- CSCdt13084

  Symptoms A disconnect message with a progress indicator may be sent to a router, which causes the router to reload.

  Conditions This symptom is observed when you dial an unresolved number on a Public Switched Telephone Network (PSTN) and hang up.

  Workaround There is no workaround.

- CSCdt13277

  Symptoms Memory is depleted when you use **compression connections** commands or when you toggle distributed fast switching with compression.

  Conditions This symptom is observed when you reinitialize compression on a router without disabling compression.

  Workaround There is no workaround.

- CSCdt14705

  Symptoms When an ip inspect command is configured for TFTP and the size of the file that is transferred is smaller than 512 bytes (and thus needs only a single packet), the return acknowledgement (ACK) packet is discarded. This situation greatly impacts the configuration file of a Data-Over-Cable Service Interface Specifications (DOCSIS) cable modem.

  This behavior does not occur when the size of the file that is transferred is 512 bytes or larger.

  Conditions The conditions under which this symptom occurs are not known at this time.

  Workaround There is no workaround.

- CSCdt14805

  Symptoms A Cisco 3640 router may enter into a loop after it has reloaded.

  Conditions This symptom is observed on a Cisco 3640 router that is running Cisco IOS Release 12.1(5)T or a later release when the exception logging size is not configured.

Workaround Configure the exception logging size using the **logging exception** *size* configuration command.

- CSCdt15070

  Symptoms Inbound and outbound calls are dropped because of a glare condition when the Foreign Exchange Office End Ground Start (FXOGS) voice processor module (VPM) Finite State Machine (FSM) disconnects both calls as a result of an illegal event in the FSM. The output of the **debug vpm error** command displays the following error message:

  ```
  [FXOGS_ONHOOK, E_HTSP_EVENT_TIMER]  -> ERROR: INVALID INPUT.
  ```

  Conditions This symptom is observed on a Cisco router when an inbound call and outbound call are placed on an Foreign Exchange Office (FXO) Ground Start line.

  Workaround There is no workaround.

- CSCdt15096

  Symptoms A Cisco IOS voice gateway may reload with the following error message when user authentication is occurring:

  ```
  %ALIGN-1-FATAL: Illegal access to a low address
  ```

  Conditions This symptom is observed when you use the tool command line (TCL) interactive voice response (IVR) 2.0 application.

  Workaround There is no workaround.

- CSCdt15649

  Symptoms A Cisco 7200 series router when reloads you boot up the router with an image of Cisco IOS Release 12.2.

  Conditions This symptom is observed on a Cisco 7200 series router that is configured with a C7200-I/O-GE+E or C7200-I/O-2FE I/O controller.

  Workaround There is no workaround.

- CSCdt15765

  Symptoms A router that is running Systems Network Architecture Switching Services (SNASw) may reload because of memory corruption.

  Conditions The conditions under which this symptom occurs are not known at this time.

  Workaround There is no workaround.

- CSCdt16039

  Symptoms A router may display the following error message because an invalid event occurs when the Foreign Exchange Office End Ground Start (FXOGS) Finite State Machine (FSM) is in the "FXOGS_WAIT_ONHOOK" state.

  ```
  [FXOGS_WAIT_ONHOOK, E_DSP_SIG_0000] -> ERROR: INVALID INPUT
  ```

  Conditions This symptom is observed on a Cisco router that is running Foreign Exchange Office (FXO) Ground Start.

  Workaround There is no workaround.

- CSCdt16296

  Symptoms Because of an illegal memory access, spurious memory accesses may occur on a router, or the router may reload.

  Conditions This symptom is observed when you use the **ip rtp header-compression** interface configuration command under stress conditions.

Workaround There is no workaround.

- CSCdt16389

  Symptoms A Cisco 7204VXR reloads because of a bus error at PC 0x613C4348, address 0x47C, when you attempt to store voice mail (that is, you attempt to light the message indicator) at a remote site telephone.

  Conditions This symptom is observed in a topology with a Cisco 7204VXR at the headend and Cisco 2600 series routers a remote site, running Voice over IP (VoIP) and Q Signaling (QSIG) to PBXs. The voice mail is located on a PBX at the headend.

  Using #175, an extension number, and #11 causes the same effect as having the router reload.

  The **debug isdn q931** and **debug isdn q921** EXEC commands do not reveal any useful information.

  Workaround There is no workaround.

- CSCdt16456

  Symptoms An incoming call may be rejected because of a requested circuit or channel is not available.

  Conditions This symptom is observed in a high call rate situation when a bearer (B) channel is incorrectly associated with an idle modem and is stuck in this state indefinitely.

  Workaround There is no workaround.

  As a temporary workaround, busyout the DS0 timeslot that is stuck or you enter the **shutdown** interface configuration command followed by the **no shutdown** interface configuration command on the interface with the DS0 timeslot that is stuck. However, this temporary workaround may lead to locking out modems from being used to take calls and may eventually lead to resources being completely unavailable, which is an unrecoverable situation.

- CSCdt16652

  Symptoms A Cisco AS5850 may reload.

  Conditions This symptom is observed when Channel Associated Signaling (CAS) is configured on T1 or E1 controllers.

  The Cisco AS5850 may reload when a T1 or E1 CAS controller goes down before the system has taken more than 3348 CAS or ISDN analog calls. This symptom occurs about once every 80 to 160 times a T1 or E1 controller goes down.

  Workaround There is no workaround.

- CSCdt16697

  Symptoms The following vendor-specific attributes (VSAs) cannot be send:

  - h323-credit_time
  - h323_return_code
  - h323_prompt_id
  - h323_redirect_number
  - h323_preferred_language
  - h323_time_and_day
  - h323_redirect_ip_addr
  - h323_billing_model
  - h323_currency

When you attempt to send any one of the above-mentioned VSAs, the following message is generated:

```
authentication: av-send error
Tcl_Eval Failed in action=act_Setup code=1 code=ERROR
IVR TCL script failure
Result: authentication error
```

Conditions The conditions under which these symptoms occur are not known at this time.

Workaround There is no workaround.

- CSCdt17100

  Symptoms High CPU utilization may occur on a DistributedDirector. This situation causes the watchdog timer to expire and DistributedDirector to reboot.

  Conditions These symptoms are observed when you enable the multiple resource record (RR) feature, and DistributedDirector is configured to return multiple resource records (RRs) in Domain Name System (DNS) answers.

  Workaround Disable the multiple RR feature.

- CSCdt17126

  Symptoms Internet Key Exchange (IKE) phase2 mail fail.

  Conditions This symptom is observed when crypto access control lists (ACLs) that are used for several tunnels overlap (that is, the ACLs contain one another).

  Workaround There is no workaround.

- CSCdt17151

  Symptoms A Cisco router may generate the following message because the event "E_HTSP_CONNECT" is not a valid event when the Foreign Exchange Office End Ground Start (FXOGS) Finite State Machine (FSM) is in the "FXOGS_WAIT_ONHOOK" state.

  ```
  [FXOGS_WAIT_ONHOOK, E_HTSP_CONNECT] -> ERROR: INVALID INPUT
  ```

  This situation does have a harmful effect on a call because the call is in the process of being disconnected anyway.

  Conditions This symptom is observed on a Cisco router that is running Foreign Exchange Office (FXO) Ground Start. The FSM generates an error because of a race condition that queues a connect and a disconnect event one right after the other.

  Workaround There is no workaround.

- CSCdt18129

  Symptoms Link control protocol (LCP) negotiation fails and a distributed Multilink PPP (dMLP) bundle never comes up with all its associated member links.

  Conditions This symptom is observed when you configure dMLP on the serial links that belongs to an 8-port multichannel E1 port adapter (PA-MC-8E1).

  Workaround There is no workaround.

- CSCdt18352

  Symptoms Some images are too large to fit in the available Flash memory.

  Conditions This symptom is observed

  Workaround Use a smaller image.

- CSCdt18421

Symptoms A Cisco Catalyst 5000 series switch does not work properly because of a memory leak of packet buffers that are used for keepalive packets from the Cisco Catalyst 5000 series switch to a router.

Conditions This symptom is observed on a Catalyst 5000 series switch that is running Cisco IOS Release 12.1 T or Release 12.1 E and that is using Multicast Multilayer Switching (MMLS) in conjunction with Layer 3 switching hardware. MMLS is disabled by default on the Cisco Catalyst 5000 series switch. If you enable MMLS on the switch, MMLS causes the management interface or virtual LAN for MMLS to wedge the input queue. This situation does not impact Cisco Catalyst 6000 series switches.

Workaround There is no workaround.

- CSCdt18436

  Symptoms When Fast Ethernet gets throttled on a Cisco AS5400, it may remain throttled even after all the packets in the input hold queue are processed.

  Conditions This symptom is observed on a Cisco AS5400 that is running Cisco IOS Release 12.1 T and that has terminating digital Multilink Point-to-Point protocol (MLPPP) calls with Layer 2 Tunneling Protocol (L2TP) or a Virtual Private Dialup Network (VPDN).

  Workaround Clear the Fast Ethernet interface.

- CSCdt18447

  Symptoms During a large routing table update (for example, when the **clear ip bgp *** EXEC command is entered), the CPU utilization may increase dramatically.

  Conditions This symptom is observed when the Cisco Express Forwarding (CEF) Event Logger feature is enabled.

  Workaround Turn off part of the Event Logger feature using the **ip cef table event-log traceback depth 0** global configuration command.

- CSCdt18454

  When a Cisco router is connected to a PBX and the router needs to send a B3 signal to indicate busy status, the PBX does not interpret this B signal and consequently the PBX does not send the busy tone. If you connect the router to a central office switch, the switch sends the busy tone after receiving the B3 signal. However, there are some PBXs that do not interpret the B signals correctly. There is no workaround.

- CSCdt19154

  Symptoms A phase1 security associations (SAs) setup can take more than one minute because of a delay with the transmission of Domain Name System (DNS) requests, which eventually leads to a timeout of the DNS requests.

  Conditions This symptom is observed when Rivest, Shamir, and Adelman (RSA) encryption authentication is used in an Internet Key Exchange (IKE), and if the DNS is not configured, nor disabled.

  Workaround There is no workaround.

- CSCdt19563

  Symptoms Spurious memory accesses and tracebacks may occur. The router may also reload.

  Conditions These symptoms are observed when modular quality of service command-line interface (MQC) based features are configured in a Frame-Relay environment.

  Workaround There is no workaround.

- CSCdt19792

Symptoms TCP sessions cannot be initiated with an IP Security (IPSec) peer.

Conditions This symptom is observed when the server or client is a Cisco 2600 series or Cisco 3600 series router that is using the following encryption hardware devices:

- AIM-VPN/BP-DES/3DES VPN Encryption AIM for a Cisco 2600 series router.
- NM-VPN/MP-DES/3DES VPN Encryption NM for a Cisco 3620 or Cisco 3640 router.
- AIM-VPN/HP-DES/3DES VPN Encryption AIM for a Cisco 3660 router.

This condition does not occur when software encryption is used.

Workaround TCP sessions must be run across the local (unencrypted) link.

- CSCdt19861

  Symptoms Modem passthrough calls on a Cisco AS5300 may fail.

  Conditions This symptom is observed when you configure “codec g711u” under the dial peer router.

  Workaround There is no workaround.

- CSCdt20095

  Symptoms When a call is placed to a network access server (NAS) that is running T1 channel-associated signaling (CAS) Feature Group B (FGB), the following message is displayed several times:

  ```
  CDAPI: cdapi_create_raw_msg(): FOR_RAW_MSGS queue is empty.
  ```

  The Call Distributor Application Programming Interface (CDAPI) memory buffer pool is empty, and the call does not go through.

  Conditions This symptom is observed on releases earlier than Cisco IOS Release 12.2.

  Workaround There is no workaround.

- CSCdt20127

  Symptoms A spurious memory access occurs in H.323 because of unavailable raw message buffers and a missing null pointer check.

  Conditions This symptom is observed when no ISDN interfaces are configured. The Call Distributor Application Programming Interface (CDAPI) raw message buffers are created only when an ISDN interface is configured.

  Workaround Enable ISDN on at least one of the interfaces

- CSCdt20213

  Symptoms When an APN (Access Point Name) is configured with access control list (ACLs) for uplink traffic, the input queue on a Gn interface (that is, an interface between two General Packet Radio Service Support Nodes [GSNs] within the same Public Land Mobile Network [PLMN]) may become full.

  Conditions This symptom is observed when a MS (Mobile Subscriber) keeps sending traffic that violates the access.

  Workaround Do not configure ACLs under the APN.

- CSCdt20363

  Symptoms A progress indicator (PI) appears in the a PRI setup message and a Cisco AS5300 then disconnects the line, which causes callback dialout to fail. “Invalid information element” appears in the STATUS message.

  Conditions This symptom is observed when a Cisco AS5300 attempts to use a certain vendor callback function.

Workaround There is no workaround.

- CSCdt21096

  Symptoms The following Foreign Exchange Station (FXS) loopstart state machine errors are displayed in the output of the **debug vpm error** command:

  ```
  [S_TRUNKED, E_DSP_INTERFACE_INFO] -> ERROR: INVALID INPUT
  [S_TRUNKED, E_HTSP_VOICE_CUT_THROUGH] -> ERROR: INVALID INPUT
  ```

  Conditions This symptom is observed when a trunk flaps during capabilities negotiation. These events should be ignored in the loopstart state machine. The errors do not affect trunk establishment or subsequent calls on that trunk.

  Workaround There is no workaround.

- CSCdt21758

  Symptoms A Cisco 7500 series router may stop receiving Multiprotocol Label Switching (MPLS) packets on Versatile Interface Processor 2 (VIP2) modules after an online insertion and removal (OIR) event. All MPLS packets are dropped silently, and no counters are incremented.

  Conditions This symptom is observed on a Cisco 7500 series router that is configured for Cisco Express Forwarding (CEF)—not distributed CEF (dCEF)—and MPLS. The connectivity is restored after dCEF is enabled.

  Workaround Use dCEF globally and disable it on per interface basis if needed.

- CSCdt21963

  Symptoms Internet Key Exchange (IKE) messages may not properly encrypt and decrypt, causing the security associations (SAs) to be deleted.

  Conditions This symptom is observed on a Cisco 7100 series router that functions in a large scale hub-and-spoke IP security (IPSec) Virtual Private Network (VPN) environment with 500 peers when there are simultaneous IKE sessions terminating on the same gateway.

  Workaround There is no workaround.

- CSCdt23290

  Symptoms A cable modem (CM) incorrectly increases docsBpiCmTEKAuthPends. When the CM receives an Authorization Invalid message with an error code “0” (which indicates “no information”) from a cable modem termination system (CMTS), the CM incorrectly determines that it is not unsolicited only because the error code is not “3”’ (which indicates “unsolicited”).

  Conditions The conditions under which these symptoms occur are not known at this time.

  Workaround There is no workaround.

- CSCdt23426

  Symptoms The image description name may not be accurate when read by a Simple Network Management Protocol (SNMP) management station for uBR920 images.

  Conditions The conditions under which these symptoms occur are not known at this time.

  Workaround There is no workaround.

- CSCdt23641

  Symptoms When interface bundling is not enabled on a Cisco uBR7200 series router, a cable modem (CM) can successfully ping the cable modem termination system (CMTS) interface (default route) and the secondary IP address of the CMTS cable modem interface 6/0:

  ```
  interface Cable6/0
  ip address 192.168.5.1 255.255.255.0 secondary
  ip address 172.16.1.1 255.255.255.0
  ```

However, when interface bundling is enabled on the Cisco uBR7200 series router, the CM can not ping the CMTS interfaces because the Address Resolution Protocol (ARP) does not function: the CM receives the ARP request and then sends a reply, but the CMTS never sees the reply, which causes a failure.

Conditions This symptom is observed when interface bundling is enabled on the Cisco uBR7200 series router.

Workaround There is no workaround.

- CSCdt24018

  Symptoms Baseline Privacy Interface (BPI) does not function.

  Conditions The conditions under which this symptom occurs are not known at this time.

  Workaround There is no workaround.

- CSCdt24323

  Symptoms A Cisco 827 router cannot obtain the IP address from a Dynamic Host Configuration Protocol (DHCP) server through its ATM interface.

  Conditions This symptom is observed when the Cisco 827 router is configured as a DHCP client.

  Workaround Enter the **shutdown** interface configuration command followed by the **no shutdown** interface configuration command on the bridge virtual interface (BVI).

- CSCdt24601

  Symptoms Address filter commands may be dropped on a Cisco Versatile Interface Processor 2-50 (VIP 2-50) and the following error message may be displayed:

  ```
  %CBUS-3-CMDDROPPED
  ```

  Conditions This symptom is observed on a VIP 2-50 that is running Cisco IOS Release 12.1(6) or Release 12.2(1).

  Workaround There is no workaround.

- CSCdt24717

  Symptoms A Cisco 7500 series router reloads when a virtual-template is configured with Compressed Real-Time Traffic Protocol (CRTP) or Compressed TCP (CTCP).

  Conditions This symptom is observed when distributed Cisco Express Switching (dCEF) is enabled and a virtual-template with CRTP or CTCP, or both, is configured on the Route Switch Processor (RSP).

  Workaround Disable CEF and dCEF.

- CSCdt25184

  Symptoms Stack Group Bidding Protocol (SGBP) may not function.

  Conditions This symptom is observed when you use SGBP in conjunction with TACACS or RADIUS server directed requests. Directed requests are configured using the **tacacs-server directed-request** or the **radius-server directed-request** global configuration commands and can be used to strip the domain name from the user name.

  Workaround There is no workaround.

- CSCdt25287

  On a Cisco 2600 or 3600 series router that is running Cisco IOS Release 12.2(0.5) with performance monitoring (PM) inverse multiplexing over ATM (IMA) network modules, if there are two IMA groups configured, the second activated group causes the first activated group to drop all the outgoing packets. There is no workaround.

- CSCdt25526

  Symptoms A Cisco 3600 router may reload constantly.

  Conditions This symptom is observed when the Cisco 3600 router is configured with an ATM25 module and the **ip route-cache flow** interface configuration command is enabled.

  Workaround There is no workaround.

- CSCdt26015

  Symptoms Connection trunks configured between the voice ports on two Cisco routers may not be established.

  Conditions This symptom is observed on T1 line channel-associated signaling (CAS) recEive and transMit (E&M) wink-start voice ports between a Cisco 7206VXR router that is configured with a Network Processing Engine 300 (NPE-300) and a PA-VXB-2TE1+ or a PA-VXC-2TE1+ port adapter and a Cisco 3640 router that is configured with a NM-HDV network module.

  Workaround Use Cisco IOS Release 12.1(5)T on the Cisco 3640 router.

- CSCdt26146

  A Cisco terminal gateway may increment the lost packet counter when dual tone multifrequency (DTMF) tones are sent. There is no workaround.

- CSCdt26725

  Symptoms When a new call comes into a network access server (NAS) and the internal data structure for the call statistics is initialized, a message indicating a spurious memory access may be generated.

  In the unusual situation when exceptions are enabled using the **exception spurious interrupt 1 exception dump** *ip address* **exception protocol ftp** global configuration command, the router may reload.

  Conditions These symptoms are observed in Cisco IOS Release 12.2(1).

  Workaround Do not enable exceptions when the router is providing service.

- CSCdt26899

  Symptoms **Show snasw** commands do not function properly.

  Conditions This symptom is observed on a Native Service Point (NSP).

  Workaround Enter a command that is not a **show snasw** command after you have entered a **show snasw** command. Doing so, will enable the **show snasw** command to function properly. The second command does not even have to be a valid router command.

- CSCdt27202

  Symptoms The authentication, authorization, and accounting (AAA) “fax” named authentication method list does not function.

  Conditions This symptom is observed on a Cisco AS5300.

  Workaround Use the “H.323” named authentication method list.

- CSCdt27293

  Symptoms Memory management difficulties may occur and an access server may pause indefinitely.

  Conditions This symptom is observed in Cisco IOS Release 12.2(5)XM

  Workaround Reboot the access server.

- CSCdt27446

  Symptoms The **ip local-pool** global configuration command does not function.

Conditions This symptom is observed on an uBR920 cable modem that is running Cisco IOS Release 12.1 T.

Workaround There is no workaround.

- CSCdt28919

  Symptoms A Cisco gateway may send incorrect digital signal processor (DSP) playout parameters to the DSP, which disrupts audio.

  Conditions This symptom is observed under a heavy load.

  Workaround There is no workaround.

- CSCdt29082

  Symptoms Packets are acted upon twice by the interface service policy.

  Conditions This symptom is observed when the interface does not have an IP address configured and the subinterface/data-link connection identifier (DLCI)/permanent virtual circuit (PVC) on which packets are routed does not have a service policy configured.

  Workaround There is no workaround.

- CSCdt29175

  Symptoms When you use a 2 10/100 Fast Ethernet 2 WAN Card Slot Network Module (NM-2FE2W) and the Fast Ethernet port that is not manually configured for 100 full duplex, the **show interface fastethernet** *number* EXEC command (with 0/0 as the number) and the **show controllers fastethernet** *number* EXEC command (with 0/0 as the number) shows two different outputs regarding the operation mode. The **show interface fastethernet** EXEC command shows the port as 100 full, while the **show controllers fastethernet** EXEC command shows the port as 100 half duplex.

  Conditions These symptoms are observed when you use auto sensing mode. The symptoms do not occur when you do not use auto sensing and when the port is configured manually.

  Workaround There is no workaround.

- CSCdt29190

  Symptoms The nas_port on RADIUS reports vendor-specific attributes (VSAs) on all calls on controller 0. This includes calls from controllers other than controller 0. This condition may cause incorrect Call Detail Records (CDR) records.

  Conditions This symptom is observed on a Cisco AS5300.

  Workaround There is no workaround.

- CSCdt29210

  Multiprotocol Label Switching (MPLS) to IP packets are corrupted if they match an input or output Committed Access Rate (CAR) rule for which the action is to set the IP precedence field or the IP Differentiated Services Code Point (DSCP) field. There is no workaround.

- CSCdt29354

  Symptoms When a High Availability (HA) switchover is performed on a Cisco Catalyst 6000 switch that has redundant Multilayer Switch Feature Cards (MSFC2) and HA enabled, the traffic recovers for a short period of time and then stops and never resumes on a WS-X6101 ATM module. The message “waiting for semaphore release” is displayed on the console of the ATM module until the module is reset.

Conditions This symptom is observed when the WS-X6101 ATM module is running Cisco IOS Release 12.1(5a)E3.

Workaround Upgrade to Cisco IOS Release 12.1(8)E.

- CSCdt29388

  Symptoms The **voip-incoming translaton-rule** global configuration command-line interface (CLI) command does not perform the number translation on incoming Session Initiation Protocol (SIP) calls.

  Conditions The conditions under which this symptom occurs are not known at this time.

  Workaround There is no workaround.

- CSCdt29407

  Symptoms The web console status does not display on a Cisco 6400 series platform.

  Conditions This symptom is observed when half-size and full-size Node Route Processors (NRPs) or OC-12 cards are inserted in the same slot pair.

  Workaround Pair half-size cards with half-size cards and full-size cards with full-size cards. Pair means: slot 1 with slot 2, slot 3 with slot 4, slot 5 with slot 6, and slot 7 with slot 8.

- CSCdt29414

  Symptoms A tracebacks occurs when a DS0 group is removed from a controller.

  Conditions This symptom is observed on a Cisco 3600 series router.

  Workaround There is no workaround.

- CSCdt29483

  Symptoms The CCH323_CT process may hold abnormally high memory.

  Conditions This symptom is observed after a few days of load or stress testing on a Cisco AS5800 with about 420 E1-R2 voice calls terminated using G.729 and Media Server support for interactive voice response (IVR) scripting debit card applications.

  Workaround There is no workaround.

- CSCdt29490

  Symptoms An ISDN PRI line may not come up after a Cisco AS5400 reloads. The ISDN Layer 2 stays down.

  Conditions This symptom is observed on a Cisco AS5400 that has an ISDN PRI line configured and is connected to a live PRI line.

  Workaround Create a loopback on another PRI line to enable the live line to come up.

- CSCdt29836

  Symptoms A Multiservice Route Processor 200 (MRP200) may reload.

  Conditions This symptom is observed on a Multiservice Route Processor 200 (MRP200) that is configured with a packet voice or fax digital signal processor (DSP) module-20 (PVDM-20) (5 DSP modules) when you change the time-division multiplexing (TDM) clock configuration from two network clocks to one network clock using the **dial-tdm-clock** global configuration command.

  Workaround There is no workaround.

- CSCdt29838

  Symptoms When a crypto map is deleted while traffic that matches it is being sent, a router may reload. The crypto map may be deleted from the command-line interface (CLI), or if it is a dynamic crypto map, it may be deleted automatically.

Conditions This symptom is observed in Cisco IOS Release 12.2.

Workaround There is no workaround.

- CSCdt30562

  Symptoms The modular quality of service command-line interface (MQC) **set atm-clp** policy-map class command does not mark the Cell Loss Priority (CLP) bit.

  Conditions The conditions under which this symptom occurs are not known at this time.

  Workaround There is no workaround.

- CSCdt30601

  Symptoms User Datagram Protocol (UDP) traffic is dropped by a receiver, and UDP applications such as Simple Network Management Protocol (SNMP), voice, or Dynamic Host Configuration Protocol (DHCP) may fail.

  Conditions This symptom is observed when an IP security (IPSec) is present.

  Workaround There is no workaround.

- CSCdt30629

  Resource Pool Manager Servers (RPMS) messages are not processed often enough, so messages are dropped because of queue overflow, which results in call count synchronization issues on the RPMS. There is no workaround.

- CSCdt31155

  Symptoms A router that is configured with a 100-MB Flash card reloads upon attempting to use the Flash card, or when you enter the **show flash** EXEC command.

  Conditions This symptom is observed when the router cannot read the 100-MB Flash card as slot 0 but only as disk 0.

  Workaround Use a 20-MB Flash card.

- CSCdt31521

  A Multiprotocol Label Switching (MPLS) router that has several Border Gateway Protocol (BGP) routes (Virtual Private Network (VPN) version 4 or IP version 4) may experience a memory leak if the route to the Border Gateway Protocol (BGP) neighbor flaps. The memory leak is about 100 bytes per BGP route for each route flap. An unusually large amount of memory is consumed by Tag Forwarding Information Base (TFIB) tag rewrites. The output of the **show memory summary | include TFIB** command indicates the presence of a memory leak. There is no workaround.

- CSCdt31688

  Symptoms When you configure destination and incoming dial peer patterns, valid patterns such as “111#.T” are rejected as incorrect.

  Conditions This symptom is observed in Cisco IOS Release 12.1(5)XM and Release 12.2.

  Workaround Use a wildcard character such a “*.”

- CSCdt31726

  Symptoms An incorrect disconnect cause 63 (not implemented) may be set in a call detail record (CDR) stop record and shown in the output of the **show call history voice record** EXEC command.

  Conditions The conditions under which this symptom occurs are not known at this time.

  Workaround There is no workaround.

- CSCdt31789

  Symptoms Calls may disconnect automatically 10 seconds after the initial seizure of a trunk.

Conditions This symptom is observed on a Cisco 2600 series or Cisco 3600 series router or a Cisco MC3810 with a T1 recEive and transMit (E&M) trunk that is configured with the **signal immediate** voice-port configuration command and that has the Digital Number Identification Service (DNIS) option enabled.

Workaround There is no workaround.

- CSCdt32356

  Dynamic Network Address Translation (NAT) using the **cable-modem dhcp-proxy** {**nat** *pool-name*} cable interface command does not function correctly. IP addresses or subnet masks and default gateways are not assigned correctly, if at all. After the command is entered, the address assigned to the NAT pool does not respond to Address Resolution Protocol (ARP). The pool (IP address) that is created is from the cable modem scope rather than the customer premises equipment (CPE) scope. This behavior causes an unroutable IP address to be assigned to the NAT pool. There is no workaround.

- CSCdt32774

  Line cards on a Cisco 12000 Internet Router that is running Cisco IOS Release 12.0(14.6)S1 and that has Multiprotocol Label Switching (MPLS) configured may reload in a stress environment. When one line card that has an interface on which MPLS is configured is reloaded manually, other line cards may experience a bus error. The router displays the following message on the console or in the log:

  ```
  %LCINFO-3-CRASH:Line card in slot <slot num> crashed
  ```

  Workaround: Do not include a static recursive route to a Border Gateway Protocol (BGP) peer router.

- CSCdt32871

  Symptoms Excessive CPU utilization may occur on a router because of a large number of alignment corrections, as displayed in the output of the **show alignment** EXEC command.

  Conditions This symptom is observed on a router that is configured for Layer 2 Tunneling Protocol (L2TP).

  Workaround There is no workaround.

- CSCdt32970

  Symptoms After you enable distributed Cisco Express Switching (dCEF) on a multilink interface, a the Route Switch Processor (RSP) reloads.

  Conditions This symptom is observed when IP header compression (Compressed Real-Time Traffic Protocol [CRTP] or Compressed TCP [CTCP]) is not configured.

  Workaround Configure IP header compression on the multilink interface.

- CSCdt32976

  Symptoms A caller from the Public Switched Telephone Network (PSTN) may hear a short burst of loud noise when the user on the Voice over IP (VoIP) side answers the call.

  Conditions This symptom is observed when you use a VIC-2FXO-M1 interface card with caller ID enabled.

  Workaround Disable the caller ID functionality.

- CSCdt32991

  Symptoms Packets are intercepted by TCP but not directed to the cache engine, as they should.

Conditions This symptom is observed on a Cisco Catalyst 6000 series switch when the Web Cache Communication Protocol (WCCP), Layer 2 redirection mode, and TCP intercept mode is enabled.

Workaround There is no workaround.

- CSCdt33202

  Symptoms A Voice over Frame Relay (VoFR) call fails with a cause code "0xAC."

  Conditions This symptom is observed when you attempt to make a VoFR call that originates on a Cisco MC3810 that is running Cisco IOS Release 12.1(5)T with the G.729ar8 codec and you attempt to terminate the call on a Cisco 1750 router that is running Cisco IOS Release 12.1(5)T. The Cisco 1750 router cannot negotiate successfully with the G.729ar8 codec.

  Workaround Run the G.729r8 codec on the Cisco MC3810, although doing so takes up a full digital signal processor (DSP).

- CSCdt33487

  A timing issue occurs when a new fax call comes into an originating gateway, and the terminating gateway has not finished a "clear down" from the fax. This situation occurs only when you use a trunk connection and does not occur when you use a switched connection. There is no workaround.

- CSCdt33850

  A race condition may occur when a CONNECT message immediately follows an ALERTING message so that ringback never ceases even after the call is connected. This situation does not happen if there is enough time between the CONNECT message and the ALERTING message.

  Workaround: Remove the **voice call send-alert** global configuration command so that a PROGRESS message is sent instead of an ALERTING message.

- CSCdt34048

  Symptoms Querying Simple Network Management Protocol (SNMP) variables regarding compression statistics may cause a Cisco 3600 series router to reload.

  Conditions This symptom is observed when a Data Compression Advanced Integration Module (AIM) is installed in slot 1 of a Cisco 3660 router.

  Workaround Move the Data Compression AIM to slot 0.

- CSCdt34198

  Symptoms A call between two Cisco routers that are configured to use the Open Settlement Protocol (OSP) is disconnected with a disconnect cause of "0x0" (uninitialized) or "0x2C" (no_req_circuit), which results in the call being disconnected and Call Detail Records (CDRs) being generated. However, the OSP transaction remains. If the transaction counter increases to the limit of 2000, no more calls are processed by the gateway.

  Conditions The conditions under which these symptoms occur are not known at this time.

  Workaround Use the **shutdown** command followed by the **no shutdown** command inside the settlement configuration. This workaround resets the counter to 0.

- CSCdt34815

  Symptoms When you perform an online insertion and removal (OIR) of a network module, the router displays some tracebacks on removal and reloads on insertion of the network module.

  Conditions This symptom is observed on a Cisco 3600 series router when T1 interfaces on a NM-2W, NM-1FE1R-2W, or NM-2FE-2W network module are configured for channel groups.

  Workaround There is no workaround.

- CSCdt34919

Symptoms A Cisco router that is running Cisco IOS Release 12.2(0.5b) with the DistributedDirector image may reload.

Conditions This symptom is observed on a Cisco 4500 series router.

Workaround Enable the **no ip director cache** command

- CSCdt35224

  With generic routing encapsulation (GRE) over IP Security (IPSec) configured between two routers, GRE packets are sent in the clear instead of being dropped when there is no IPSec security association (SA) established. This situation is a security concern. There is no workaround.

- CSCdt35689

  Symptoms A router reloads.

  Conditions This symptom is observed when a proxy receives a call and is not registered with a gatekeeper, or the registration is lost.

  Workaround There is no workaround.

- CSCdt36204

  Symptoms You cannot access a Cisco 1700 series router via Telnet.

  Conditions This symptom is observed once you install a Virtual Private Network (VPN) module.

  Workaround There is no workaround.

- CSCdt36262

  Symptoms Web Cache Communication Protocol (WCCP) Cisco Express Forwarding (CEF) packet redirection is not supported on a Cisco 7100 series router. When CEF is enabled with WCCP, no packets are redirected.

  Conditions The conditions under which this symptom occurs are not known at this time.

  Workaround Disable CEF, or move WCCP redirection to a different router.

- CSCdt36296

  Symptoms When you enable the access list option of the Mobile IP Home Agent feature on a virtual template using the **ip mobile foreign-service home-access** *acl* interface configuration command, the Packet Data Serving Node (PDSN) reloads when a session is opened and closed.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.1(3)XS with a PDSN.

  Workaround Disable the **home-access** *acl* option in the virtual template.

- CSCdt36362

  A Cisco AS5800 series Router shelf reloads intermittently when the **show modem** EXEC command line interface (CLI) is executed. There is no workaround.

- CSCdt36418

  Symptoms A service policy is accepted when it should not, and a Route Switch Processor (RSP) may reload.

  Conditions This symptom is observed with a very specific type of service policy. The policy must have priority enabled in the first class, and the kbps assigned to the priority class must be exactly equal to the interface or permanent virtual circuit (PVC) rate. In such cases, this policy should be denied as an invalid policy. Instead, the policy is accepted, and if subsequent classes try to allocate bandwidth by entering the **bandwidth** interface configuration command, the RSP reloads. Attaching a policy of this type should be avoided.

Workaround There is no workaround.

- CSCdt36569

  Symptoms The output state may be stuck on some member links of a multilink bundle.

  Conditions This symptom is observed when the bundle is flapped under heavy traffic.

  Workaround There is no workaround.

- CSCdt37067

  Symptoms A Cisco 3600 series router may reload while running Inter-Switch Link (ISL) and IP Security (IPSec) with Authenticated Header (AH), Encapsulating Security Protocol (ESP) and IP compression on a Fast Ethernet port.

  Conditions This symptom is observed on a Cisco 3600 series router that is running Cisco IOS Release 12.1(6) or Release 12.0 T.

  Workaround Use 802.1q encapsulation on the port, or reduce the number of transforms on the IPSec tunnel.

- CSCdt37135

  Symptoms A Gigabit Ethernet interface on a Cisco 7200 series router may stop transmitting packets. The output queue remains stuck at 40/40.

  Conditions This symptom is observed under very heavy load conditions.

  Workaround Enter the **clear interface gigabitethernet** *number* privileged EXEC command or enter the **shutdown** interface configuration command followed by the **no shutdown** interface configuration command on the affected interface.

- CSCdt37605

  Symptoms The Address Resolution Protocol (ARP) entry for an active virtual IP address may get overwritten when a network transition occurs.

  Conditions This symptom is observed when the burned-in address (BIA) feature or configurable MAC addresses are used. Hosts send packets to a MAC address that is not listened for by the active router. This situation is especially noticeable on Bridge Group Virtual Interface (BVI) interfaces but may also occur on Ethernet and Token Ring interfaces.

  Workaround There is no workaround.

- CSCdt37629

  Symptoms A Cisco Versatile Interface Processor 2-50 (VIP2-50) or VIP4-80 may reload when it has a Multi-Channel T3 port adapter (PA-MC-T3) in one slot of the VIP with any other PA in another slot of the VIP and when traffic is sent through the PA-MC-T3 close to the line rate.

  Conditions This symptom is observed with two PAs in a VIP4-80 with distributed Multilink Point-to-Point protocol (MLPPP).

  Workaround Do not send traffic close to the line rate.

- CSCdt37671

  Symptoms A Cisco router that is running Hot Standby Router Protocol (HSRP) may reload with a memory corruption.

  Conditions This symptom is observed when changes are made to the HSRP configuration.

  Workaround There is no workaround.

- CSCdt38499

A Cisco AS5300 universal access server that is running Cisco IOS Release 12.1(5)T may reload repeatedly with the following error message:

```
System returned to ROM by bus error at PC 0x0, address 0x0
```

The following alignment errors are also detected:

```
BKK: %ALIGN-3-SPURIOUS: Spurious memory access made at 0x60B82FC8 reading 0x48
```

There is no workaround.

- CSCdt38658

  Symptoms Packets are not forwarded on the shortcut when they are destined to IP addresses on which a Multiprotocol over ATM (MPOA) client is bound.

  Conditions The conditions under which this symptom occurs are not known at this time.

  Workaround There is no workaround.

- CSCdt38663

  Symptoms A Cisco router reloads because of a a signal trap (SIGTRAP) exception.

  Conditions The conditions under which this symptom occurs are not known at this time.

  Workaround There is no workaround.

- CSCdt38708

  Symptoms A 1500-byte IP packet with three Multiprotocol Label Switching (MPLS) labels cannot be received on a Fast Ethernet or Gigabit Ethernet interface because the packet is counted as a giant packet and dropped

  Conditions This symptom is observed on a Cisco 7200 series and Cisco 7500 series router.

  Workaround There is no workaround.

- CSCdt38813

  Symptoms When a gateway handles signal-only calls and when there is no Real-Time Transport Protocol (RTP) or when a Control Protocol (RTCP) session is needed, the RTP or RTCP ports are reserved, and the RTCP socket are created. These ports and sockets are not deallocated at the end of the call, resulting in RTCP sockets leaks or depletion. Once the leak or depletion occurs, the normal calls that need RTP or RTCP sockets are not available, and the calls have no audio.

  Conditions The conditions under which these symptoms occur are not known at this time.

  Workaround There is no workaround.

- CSCdt38814

  Symptoms The wrong power supply type is returned as a result of a ciscoEnvMonSupplySource Simple Network Management Protocol (SNMP) query.

  Conditions This symptom is observed on a Cisco 3660 router.

  Workaround There is no workaround.

- CSCdt39468

  Symptoms A router ignores any configured progress_ind dial-peer configuration commands.

  Conditions This symptom is observed when a Cisco router receives a progress indicator information element (IE) with a reserved value (not a standard value as found in the Q.931 specification).

  Workaround There is no workaround.

- CSCdt39480

If you test Q Signaling (QSIG) supported services, a Cisco router reloads while forwarding a call. There is no workaround.

- CSCdt40191

  Symptoms The Cisco IOS ubr7200-ik8s.mz and ubr7200-ik8st.mz images do not build.

  Conditions The conditions under which this symptom occurs are not known at this time.

  Workaround There is no workaround.

- CSCdt40308

  Symptoms Some ports may get stuck on a Cisco AS5850.

  Conditions This symptom is observed under certain load stress conditions with Resource Management and Cisco Resource Pool Manager Server (RPMS) configured.

  Workaround There is no workaround.

- CSCdt40530

  Symptoms A memory leak may occur on a Cisco LS1010 Lightstream ATM switch or a Cisco Catalyst 8540 switch whenever access is made to some Private Network-Network Interface (PNNI) tables.

  Conditions This symptom is observed on a Cisco LS1010 Lightstream ATM switch or a Cisco Catalyst 8540 switch that is running Cisco IOS Release 12.0(13)W5(19) or an earlier release when used with a Network Management System (NMS) that is running Simple Network Management Protocol (SNMP).

  Workaround Use a command-line interface (CLI) for determining any PNNI information and disable the NMS polling of PNNI tables.

- CSCdt40776

  For Cisco IOS Release 12.1(5)T Route Switch Processor (RSP) images, a two-port T1/E1 High-Capacity Enhanced Digital Voice Port Adapter (PA-VXC-2TE1) or a two-port T1/E1 Moderate-Capacity Enhanced Digital Voice Port Adapter (PA-VXB-2TE1) that is plugged into slot 6 or a higher number slot, the **pri-group** controller configuration command does not generate a voice-port configuration entry or a correct voice-port entry. The output of the **show voice port** privileged EXEC command also gives incorrect information.

  Workaround: Move the voice port adapter to slots 1-5.

- CSCdt40792

  If you perform an online insertion and removal (OIR) on a two-port T1/E1 High-Capacity Enhanced Digital Voice Port Adapter (PA-VXC-2TE1+) or a 2 Port T1/E1 Moderate-Capacity Enhanced Digital Voice Port Adapter (PA-VXB-2TE1+) from a Cisco 7200 series router and insert an eight-port multiservice interchange (MIX) multichannel T1/E1 Port Adapter (PA-MCX-8TE1), a PA-MCX-4TE1 port adapter, or a PA-MCX-2TE1 port adapter, the route may reload.

  Workaround: Do not swap a PA-VXC-2TE1+ or PA-VXB-2TE1+ with a PA-MCX-x8TE1 port adapter.

- CSCdt40849

  Symptoms When an R2-to-Voice over IP (VoIP) call is placed and a user-busy cause code (cause value 17 or hex 11) is returned by the VoIP leg, the proper B register (B3) signal is not returned on the R2 trunk.

  Conditions This symptom is observed on a Cisco 2600 series or Cisco 3600 series router that is running Cisco IOS Release 12.2(2.3) or an earlier release when the router is configured for E1 multifrequency controlled R2 (MFCR2) trunks.

Workaround There is no workaround.

- CSCdt40950

  When you use the **shutdown** command on a settlement during heavy call volume, a transaction handle may become temporarily invalid. Subsequent interactive voice response (IVR) call setup on the same transaction may cause the gateway to reload. There is no workaround.

- CSCdt41278

  Symptoms An incorrect sysobject ID is returned.

  Conditions This symptom is observed when you query a Telco image of a Cisco 3600 router using Simple Network Management Protocol (SNMP).

  Workaround There is no workaround.

- CSCdt41343

  Symptoms A Cisco router may reload during the bootup process.

  Conditions This symptom is observed when a syslog server and syslog source interface have been defined before the source interface has been parsed and the configuration of the router is directly written from TFTP to non-volatile RAM (NVRAM) memory or you upgrade from Cisco IOS Release 12.0 to Release 12.1 or Release 12.2.

  Workaround Place the syslog server and syslog source interface configurations after the source interface itself. To do this, you must edit the configuration offline, copy it to NVRAM memory, and then reboot the router.

- CSCdt41378

  Symptoms A Cisco 3640 router with an NM-4T network module that is connected back-to-back through a serial interface to another Cisco 3640 router with another NM-4T network module starts to drop packets in the input queue of the DCE side of the serial interface.

  The number of packets dropped in the input queue coincides exactly with the number of packets marked as “no buffer” in the output of the **show interfaces serial** *interface* privileged EXEC command. Throttles and input errors are also reported on the serial interface. The number of input errors coincides with the number of overruns. This situation does not affect the DTE side of the connection.

  Conditions This symptom is observed after approximately two weeks of normal operation.

  Workaround Reload the router. Momentarily shutting down the interface does not work.

- CSCdt41623

  When you use a Cisco Label Switch Controller (LSC) as an edge Label Switch Routers (LSR) in a particular configuration, some XtagATM interfaces are not operational. There are no Tag Distribution Protocol (TDP) neighbor relationships over the XtagATM interfaces. This situation only occurs when you use a PA-A3 port adapter ATM card as the Virtual Switch Interface (VSI).

  Workaround: Use the **shut** command followed by the **no shut** command on both sides of the XtagATM connection.

- CSCdt41835

  Symptoms An input police function that is configured with the modular quality of service command-line interface (MQC) fails to drop Multiprotocol Label Switching (MPLS) packets when configured to do so.

  In addition, packets are getting punted to the Route Switch Processor (RSP) instead of being discarded by the Versatile Interface Processor (VIP), which results in the RSP performing the input police function again and attendant police accounting problems.

If you configure an input committed access rate (CAR) rule via the **rate-limit** interface configuration command, the same symptoms occur.

Conditions These symptoms are observed on a Cisco 7500 series router that is configured with a VIP interface performing distributed switching of MPLS packets.

Workaround There is no workaround.

- CSCdt42247

  Symptoms When a back-to-back sweep ping is performed on a Cisco 7500 series router that is configured with a Route Switch Processor (RSP), the packets that arrive at the RSP may be corrupted and a ping failure may occur because of an Internet Control Message Protocol (ICMP) checksum error. When this condition occurs, packets can still be switched in the path that is using distributed Cisco Express Forwarding (dCEF).

  Conditions This symptom is observed for links that have distributed Link Fragmentation and Interleaving (dLFI) or distributed Multilink PPP (dMLP) configured.

  Workaround There is no workaround.

- CSCdt42254

  Symptoms In a Multiprotocol Label Switching (MPLS) or Virtual Private Network (VPN) environment, there is no support for forwarding data to cable interfaces. Packets forwarded from the MPLS or VPN core to the cable interfaces which are in a VPN routing or forwarding instance (VRF) are silently dropped.

  Conditions This symptom is observed on a Cisco uBR7200 series router.

  Workaround Configure a summary-only route in Border Gateway Protocol (BGP) and suppress advertisement of any more specific routes pointing to such an interface.

- CSCdt42255

  Symptoms A Cisco voice gateway may reload when a call is disconnected.

  Conditions This symptom is observed after performing a valid call transfer.

  Workaround There is no workaround.

- CSCdt42256

  Symptoms An approximately 13-percent packet drop may occur with Internet Mix (IMIX) traffic.

  Conditions This symptom is observed on a Cisco router that is running distributed Multilink PPP (dMLP) when traffic is moving at the line rate.

  Workaround There is no workaround.

- CSCdt42328

  Symptoms A Cisco 1700 series router reloads during an autoinstall operation. Duplicate address error messages are displayed just before the router reloads.

  Conditions This symptom is observed when a Cisco 1700 series router is reloaded without a startup configuration. This situation occurs because the Dynamic Host Configuration Protocol (DHCP) client code attempts to dereference a NULL pointer when the offered address from the DHCP server is a duplicate of an address that is assigned elsewhere in the network.

  Workaround There is no workaround.

- CSCdt42520

  Symptoms Polling CmCpeTable causes a Cisco router CPU usage to go up to 80 to 96 percent for 3 to 5 minutes on a uBR7246 router that is running Cisco IOS Release 12.0(14)SC compared to 12 percent when the router is running Cisco IOS Release 12.0(11).

Conditions This symptom occurs because in Cisco IOS Release 12.0(14)SC, for every Simple Network Management Protocol (SNMP) request for cdxCmCpeEntry, a new sorted cable modem (CM) or customer premises equipment (CPE) list is generated in order for the router to search for the right entry to return.

Workaround Use another method to find out the CM or CPE information.

- CSCdt42813

  A Cisco AS5300 series universal access server that is running Cisco IOS Release 12.1(6.3) with heavy traffic and Resource Pool Manager Servers (RPMS) enabled may pause indefinitely. There is no workaround.

- CSCdt43095

  Symptoms It is not possible for a router to boot, format, read, or write from an Advanced Technology Attachment (ATA) vendor-specific card. The symptoms that are observed may be intermittent and random and typically appear in one of two forms. When Cisco IOS software is used, the message "ATA_Status time out waiting for x" where x is a digit may be displayed. When booting from the ROM monitor (ROMmon) mode, a "loadprog" error message or the "ATA_Status time out waiting for x" message may be displayed.

  Conditions These symptoms are observed on a router that is using a bad ATA vendor-specific card under a variety of conditions in Cisco IOS Release 12.1(5.0.4)PI2, Release 12.1(5.1), Release 12.1(5.1)PI2, Release 12.1(5.3)T, Release 12.1(5.6)E, Release 12.1(5.6)EC, Release 12.1(6)E1, and later releases. This symptom affects 48 MB and 128 MB cards from a specific vendor.

  Workaround Replace the bad ATA vendor-specific card with one that operates in the normal response time.

- CSCdt43540

  Symptoms A Gateway GPRS Support Node (GGSN) reloads and produces a stack trace with an infinite loop through the GPRS Tunneling Protocol (GTP) software.

  Conditions These symptoms are observed on R1.4 and later versions of the General Packet Radio Service (GPRS) software in Cisco IOS software and impacts all process switching, fast switching and Cisco Express Forwarding (CEF) switching.

  The symptoms occur when the Serving GPRS Support Node (SGSN) sends a request to create a Packet Data Protocol (PDP) context or a request to update a PDP context to the GGSN with a flawed GPRS Support Node (GSN) address in any of the GSN address Information Elements for signaling or data. Such an address is considered flawed if there is already a next-hop route for this same address on the GGSN pointing to the GTP virtual-access interface. After this flawed address is installed and used for returning packets to the SGSN, these packets are sent through the GTP virtual-access interface an infinite number of times, causing the GGSN to reload.

  Workaround There is no workaround.

- CSCdt43617

  Symptoms A bus error exception occurs and the router reloads.

  Conditions This symptom is observed when a request to create a Packet Data Protocol (PDP) context requires a dynamic address and RADIUS authentication. When the RADIUS server returns with a negative response before the Dynamic Host Configuration Protocol (DHCP) returns with an address, the router reloads.

  Workaround There is no workaround.

- CSCdt43714

Symptoms A session cannot be established.

Conditions This symptom is observed when a Cisco router that is running Systems Network Architecture Switching Services (SNASw) adds "CV 0x2A" to the activate logical unit (ACTLU) positive response that is forwarded to a host, indicating a session takeover.

Workaround There is no workaround.

- CSCdt43923

  Symptoms A Cisco 7200 series router does not terminate data on a channel group with a 64K data connection.

  Conditions This symptom is observed when the Cisco 7200 series router is configured with channel-associated signaling (CAS) for voice and when a channel group and a time-division multiplexing (TDM) group are configured on the same T1 controller.

  Workaround There is no workaround.

- CSCdt44024

  Symptoms The **set mpls experimental** policy-map configuration command does not function in a service policy.

  Conditions The conditions under which this symptom occurs are not known at this time.

  Workaround There is no workaround.

- CSCdt44029

  Symptoms A Cisco router pauses indefinitely when you run header compression.

  Conditions This symptom is observed when you use Real-Time Transport Protocol (RTP) and configure header compression by using the **ip rtp header-compression** interface configuration command.

  Workaround Disable header compression by entering the **no ip rtp header-compression** interface configuration command.

- CSCdt44159

  Symptoms After a router reloads, an H.323 voice gateway may get registered with a gatekeeper that is different from the gatekeeper that it was registered with before the router reloaded, and the command-line interface (CLI) that specifies the gatekeeper IP address under the interface may disappear.

  Conditions The conditions under which this symptom occurs are not known at this time.

  Workaround After the router has reloaded, add the gatekeeper configuration command that is listed in the startup configuration to the running configuration.

- CSCdt44794

  Symptoms The output of the **show atm pvc** privileged EXEC command does not correlate with packet output drop values from the **show interfaces** privileged EXEC command.

  Conditions This symptom is observed when permanent virtual circuit (PVC) queueing is configured on an ATM interface.

  Workaround Enter the **show queueing interface atm** command to display PVC drops in the matching Layer 3 queue.

- CSCdt44895

  Symptoms A Cisco 4500 series or Cisco 7500 series router immediately displays a traceback message in the managed timer after you configure Cisco Express Forwarding (CEF) in global configuration mode.

On a Cisco 3640 router or a Cisco 4500 series, Cisco 7200 series, or Cisco 7500 series router that is configured with CEF, a spurious memory access may occur in the Forwarding Information Base (FIB) feature switch when a lot of traffic passes through the Cisco Appliance Services Architecture (CASA).

Conditions These symptoms are observed when CEF is configured.

Workaround There is no workaround.

- CSCdt44927

  Symptoms An output committed access rate (CAR) rule for packets that are switched from Mulitprotocol Label Switching to IP cannot mark the IP precedence or IP differentiated services code point (DSCP) values.

  Conditions The conditions under which this symptom occurs are not known at this time.

  Workaround There is no workaround.

- CSCdt44951

  If you use the **shutdown** command followed by the **no shutdown** on the ATM interface of a Cisco 3660 router, the **service-policy output** command is removed from the permanent virtual circuit (PVC) of the subinterface. You cannot reconfigure the service policy on the subinterface.

  Workaround: Delete the policy map; then reconfigure and reattach the policy map on the PVC of the subinterface.

- CSCdt45083

  Symptoms A Cisco AS5300 may fail an egress Continuity Test (COT).

  Conditions This symptom is observed in the transponder and loopback modes.

  Workaround There is no workaround.

- CSCdt45145

  Upon a failover of a redundant Network Switch Processor (NSP), some PVCs on the Network Route Processor (NRP) might stop transmitting cells over the ATM interface.

  Workaround: Issue a **shut** command followed by a **no shut** command on the subinterface (not on the main interface).

  Alternate workaround: Remove and reapply the PVCs (using CLI commands) and reboot the NRP.

- CSCdt45629

  Under stress scenarios in which a high number (>1000) of Tag Virtual Circuits (TVCs) is set up on an interface, some TVCs might not be set up successfully and the following message is printed:

  ```
  %TCATM-4-RESOURCE_LIMIT: VC resource exhausted (for the interface that is used)
  ```

  There is no workaround.

- CSCdt45665

  Symptoms Multiprotocol Label Switching (MPLS) traffic cannot be forwarded over a Generic Routing Encapsulation (GRE) tunnel. The traffic is dropped at the imposition router.

  Conditions The conditions under which this symptom occurs are not known at this time.

  Workaround There is no workaround.

- CSCdt46056

  Symptoms Cisco Express Forwarding (CEF) may incorrectly delete a prefix that is marked as “is subnetted” from its forwarding table.

Conditions This symptom is observed when the routing process modifies a prefix marked as “is subnetted’ and if there is a matching subnetted prefix in the forwarding table.

Workaround There is no workaround.

- CSCdt46111

  Symptoms Some set actions disappear from a service policy when you reload the router.

  Conditions This symptom is observed when you use modular quality of service command-line interface (MQC).

  Workaround Reenter the commands after the router has reloaded.

- CSCdt46380

  Symptoms A Versatile Interface Processor (VIP) on a Cisco 7500/RSP series router that is running Cisco IOS Release 12.1(5a)E4 may reload with the following error message:

  ```
  %ALIGN-1-FATAL: Illegal access to a low address
  ```

  Conditions This symptom is observed on Frame-Relay interfaces that have distributed quality of service (QoS) enabled.

  Workaround There is no workaround.

- CSCdt46493

  Symptoms Per-user compression attributes are not applied to ISDN users.

  Conditions This symptom is observed even when virtual profiles are enabled.

  Workaround There is no workaround.

- CSCdt46602

  When you use the **isdn incoming-voice** {**voice**} interface configuration command, an information message is not passed from end to end in an active state for the basic-net3 switch type. Optional information elements (IEs) (KEYPAD, DISPLAY, cause) are not passed in an active state for primary-net5 switch type. There is no workaround.

- CSCdt46734

  An Open Connect Client physical unit 2.0 (PU2.0) station rejects Systems Network Architecture Switching Services (SNASw) segment interleaving, returning a sense code of 80070000. There is no workaround.

- CSCdt46941

  The configuration of the **isdn negotiate-bchan** [**resend-setup**] interface configuration command on the serial interface (D-channel) of an Non-Facility Associated Signaling (NFAS)/ Redundant Link Manager (RLM) group in a Thundervoice configuration will cause multiple setups to be sent for a call in the event of a Continuity Testing (COT) failure. This may cause the Cisco SC2200 Signaling Controller and the gateway to associate different setup messages with the call and may subsequently cause the call to fail. There is no workaround.

- CSCdt47111

  On a Cisco router that is running Cisco IOS releases later than Release 12.1(3a)T4 (including Release 12.1(3a)XI), progress indicators are not passed end-to-end. Among other things, this situation means that the calling party does not hear progress tones from the terminating switch, but from the originating gateway router. There is no workaround.

- CSCdt47161

Symptoms If a Voice over IP (VoIP) leg of a call is not established while RADIUS accounting is enabled, the Telephony Stop record that is generated contains the collected pin number as the username value. This value is different from the value of the username in a Telephony Stop record if the VoIP leg of a call is established. If the VoIP leg of a call is established, the username value is the calling number.

Conditions The conditions under which this symptom occurs are not known at this time.

Workaround There is no workaround.

- CSCdt47374

  Symptoms A virtual interface resets when a Simple Network Management Protocol (SNMP) query for interface information causes a bus error exception, and the following error message is generated:

  ```
  %LINK-3-UPDOWN: Interface Virtual-Access1, changed = state to up
  %LINK-3-UPDOWN: Interface Virtual-Access2, changed = state to up
  -Traceback=3D 607FBE24 607EDCE8 60345AF0 6036E1B0 6036C0B8 6036C1CC = 6036C358 602A9
  274 602A9260
  ```

  ```
  *** System received a Bus Error exception ***
  signal=3D 0xa, code=3D 0x10, context=3D 0x60eb7020
  PC =3D 0x602ea33c, Cause =3D 0x4820, Status Reg =3D 0x34008002
  ```

  Conditions This symptom is observed on a Cisco 6400 series Node Route Processor (NRP).

  Workaround There is no workaround.

- CSCdt47613

  Symptoms A Cisco Transaction Connection (CTRC)/Systems Network Architecture (SNA) switch router may reload.

  Conditions This symptom is observed after the router fails to connect to the host.

  Workaround There is no workaround.

- CSCdt47730

  Symptoms A Cisco 6400 series Node Route Processor (NRP) loses the Open Shortest Path First (OSPF)-neighbor relationship with a Cisco 6400 series Node Switch Processor (NSP), and XtagATM interfaces are down.

  Conditions These symptoms are observed in a configuration that uses the NSP as a Label Switch Router (LSR) and the NRP as a Label Edge Router (LER), if the NSP is reloaded while the NRP is up.

  These symptoms disappear when the NRP is reloaded subsequently. Occasionally, when you reload the NSP, the NRP reloads unexpectedly

  Workaround Reload the NRPs after a you have reloaded the NSP.

- CSCdt47765

  Symptoms On a Cisco ICS 7750 Integrated Communication System Multiservice Route Processor (MRP) 200, the system may reload when you use the **tdm clock** global configuration command to change the time-division multiplexing (TDM) clock configuration from using one clock to ping two network clocks.

  Conditions This symptom is observed when a Digital Signal Processor (DSP) group change from 1 to 2 occurs immediately after a 2-to-1 change.

  Workaround There is no workaround.

- CSCdt48359

  Symptoms A Gateway GPRS Support Node (GGSN) reloads when it receives a series of Packet Data Protocol (PDP) requests without IP Control Protocol (IPCP) information.

Conditions This symptom is observed after the GGSN has first successfully sent a request to create a PDP using RADIUS authentication.

Workaround There is no workaround.

- CSCdt48393

  When you configure a 2-Port RJ-48 Multiflex Trunk - E1 with Drop and Insert Voice WAN Interface Card (VWIC-2MFT-E1-DI) using the **channel-group** *group-number* {**unframed**} controller configuration command using *0* as the *group-number*, the E1 controller may show line code violations depending on the amount of 0 bits transferred over the unframed E1 link. In some circumstances, the controller flaps and displays the following output:

  ```
  2d06h: %LINK-5-CHANGED: Interface Serial0/0:1, changed state to reset
  2d06h: %CONTROLLER-5-UPDOWN: Controller E1 0/0, changed state to up
  2d06h: %LINEPROTO-5-UPDOWN: Line protocol on Interface Serial0/0:1, changed state to
  down
  2d06h: %CONTROLLER-5-UPDOWN: Controller E1 0/0, changed state to down (10 SES)
  2d06h: %CONTROLLER-5-UPDOWN: Controller E1 0/0, changed state to up
  2d06h: %LINK-3-UPDOWN: Interface Serial0/0:1, changed state to up
  2d06h: %LINEPROTO-5-UPDOWN: Line protocol on Interface Serial0/0:1, changed state to
  up
  ```

  There is no workaround.

- CSCdt48613

  Symptoms A 324-port modem card (UP324) may not bootup gracefully, or the digital signal processors (DSPs) may get stuck in the D—Download in Progress state.

  Conditions This symptom is observed on a Cisco AS5800.

  Workaround Online insertion and removal of the modem card may cause the modem card to boot up correctly. If that does not improve the situation, reload the network access server (NAS).

- CSCdt49245

  A Cisco router does not remove the statement from the running configuration when the **no alias static** gatekeeper configuration command is issued.

  Workaround: Use the **write erase** command.

- CSCdt49256

  Symptoms When shortcuts are terminated on a Cisco router that is acting as a Multiprotocol over ATM server (MPS) and a Multiprotocol over ATM client (MPC) on the terminating interface, extensions may be missing in the Next Hop Resolution Protocol (NHRP) resolution reply and in the Multiprotocol over ATM (MPOA) resolution reply.

  Conditions This symptom is observed on but not limited to a Cisco 4500 series router.

  Workaround There is no workaround.

- CSCdt49444

  A Cisco router experiences 100 percent CPU usage when you use the **ip rtp header-compression [iphc-format]** interface configuration command on 4T/MC68360 interfaces.

  Workaround: Disable header compression using the **no ip rtp header-compression** interface configuration command.

- CSCdt50053

  Symptoms A router reloads with following tracebacks:

  ```
  602C3BAC 60463BDC 60466120 6026A3FC 60277F3C 602D4704 602D46F0
  ```

Conditions This symptom is observed when you delete an IP Virtual Private Network (VPN) routing/forwarding entry from the configuration file.

Workaround There is no workaround.

- CSCdt50476

  Symptoms A physical unit (PU) gets stuck in the "Pend ACTPU" state.

  Conditions The conditions under which this symptom occurs are not known at this time.

  Workaround Reload the router, or stop and start the Systems Network Architecture Switching Services (SNASw) process in the router.

- CSCdt50531

  When a Cisco uBR7200 broadband router is configured to do interface bundling (Dynamic Host Configuration Protocol [DHCP] Option 82) with the **ip dhcp relay information option** global configuration command, the cable modems on the slave interfaces may fail to come on line.

  Workaround: Remove the **ip dhcp relay information option** global configuration command from the configuration.

  Alternate workaround: Disable interface bundling.

- CSCdt50832

  A Cisco AS5300 series universal access server that is running Cisco IOS Release 12.2 and that is configured with the Open Settlement Protocol (OSP) feature may hold too much memory in the OSP_HTTP and Tool Command Language (TCL) application processes. The memory is not released, which may cause the router to run out of memory and pause indefinitely. The memory leak occurs over time, depending on call volume. There is no workaround.

- CSCdt50944

  H.323 FastStart calls fail to associate with a media stream. There is no workaround.

- CSCdt51043

  An artificial limit of 32 k of NVRAM memory on c4gwy cards is not compatible with Cisco IOS releases that use cards requiring 256 k of NVRAM memory. The configuration is preserved when the router image is changed to a Cisco IOS image that contains the fix for this caveat. However, if you go back to the original image, the configuration is lost.

  Workaround: Use the Cisco IOS release that contains the fix for this caveat.

- CSCdt51063

  When an originating gateway cannot successfully set up a call with Open Settlement Protocol (OSP) enabled, the gateway may indicate that there are two NULL OSP call detail records (CDRs) on the OSP server associated with that call. There is no workaround.

- CSCdt51139

  Symptoms A Cisco 7120 router reloads when you configure the lifetime of IP security (IPSec) security associations (SAs) for a very low value like 2560 kilobytes.

  Conditions This symptom is observed when there is a heavy traffic load in the IPSec tunnel.

  Workaround There is no workaround.

- CSCdt51542

  Symptoms An alignment error may occur on a Versatile Interface Processor (VIP).

  Conditions This symptom is observed when you enable output committed access rate (CAR) or output police on an FDDI interface.

Workaround Remove the output CAR or output police.

- CSCdt51602

  Spurious accesses may occur on a Cisco 3640 router that is running Cisco IOS Release 12.2(0.5c) when you use the **show voice call** [**summary**] privileged EXEC command. There is no workaround.

- CSCdt51695

  Symptoms When a **random-detect** command is enabled, a ping fails.

  Conditions The conditions under which this symptom occurs are not known at this time.

  Workaround Disable the **random-detect** command.

- CSCdt52051

  On a Cisco router that is running Cisco IOS Release 12.2(05b) and that has R2 Signaling, Tool Command Language (TCL) returns a value of 1 when a dial peer router is not configured. There is no workaround.

- CSCdt52088

  A High-Speed Serial Interface (HSSI) of a Versatile Interface Processor (VIP) does not update changes to the maximum transmission unit (MTU) size made on a Cisco Route Switch Processor (RSP) under the respective HSSI.

  Workaround: Manually change the MTU size under the VIP console. This workaround is not permanent.

- CSCdt52094

  A Cisco router that is configured for Frame Relay Traffic Shaping (FRTS), Low Latency Queueing (LLQ) and IP Real-Time Transit Protocol (RTP) header compression may see drops in the output priority queue for voice when the bandwidth configured for the voice queue is less than the uncompressed voice bandwidth. This situation does not occur if you use the **frame-relay ip rtp priority** map-class configuration command instead of LLQ.

  Workaround: Use the **frame-relay ip rtp priority** map-class configuration command instead of LLQ.

- CSCdt52127

  Symptoms The call duration in a RADIUS authentication, authorization, and accounting (AAA) record mismatches the call duration in the disengage request (DRQ) message that is sent from a gateway to a gatekeeper. The value in the DRQ message is one second longer than the value in the AAA record.

  Conditions The conditions under which this symptom occurs are not known at this time.

  Workaround There is no workaround.

- CSCdt52469

  Symptoms The Fax Relay feature is not used for a fax call, and the fax call uses the Modem Passthrough feature.

  Conditions This symptom is observed when a router is configured for both the Fax Relay feature and the Modem Passthrough feature.

  Workaround There is no workaround.

- CSCdt52678

  Symptoms A Cisco 7500 series router that is running distributed Multilink PPP (dMLP) may reload.

Conditions This symptom is observed when two Cisco 7500 series routers are connected back-to-back with one router running dMLP, the other router running MLP (that is, distributed switching is turned off), and fragmentation is enabled on the router that is running MLP

Workaround Disable fragmentation on the router that is running MLP.

- CSCdt52868

  If a Virtual Private Network (VPN) routing/forwarding instance (VRF) route points to a next hop that is also resolved by a recursive lookup, such as a multihop external Border Gateway Protocol (eBGP) session, a tag is incorrectly imposed over the Provider Edge-to-Customer Edge (PE-to-CE) link. Consequently, traffic does not pass.

  Workaround: Change the eBGP session to use IP addresses rather than Multihop eBGP.

- CSCdt54401

  A Voice over IP (VoIP) gateway that is running Cisco IOS Release 12.1(3a)XI5 or Release 12.1(5)T and that has FastStart enabled may experience high CPU utilization in the H.323 process because Real-Time Transport Protocol (RTP) sessions are created more than once for the same call and the previous call is not closed, which results in the existing RTP session being overwritten. On an originating gateway, this situation causes the RTP Control Protocol (RTCP) socket to leak.

  Workaround: Use SlowStart instead of FastStart.

- CSCdt52392

  A Cisco AS5800 access server that is running the testing image based on Cisco IOS Release 12.1(3a)T5 with NextPort card 0.6.85.0 may not detect the incoming Point-to-Point Protocol (PPP) Link Control Protocol (LCP) packets from the users. After around 40 seconds, the router will disconnect the user due to PPP timeout. There is no workaround.

- CSCdt53056

  Symptoms A Cisco AS5300 reloads.

  Conditions This symptom is observed when you attempt to configure the **pri-group timeslot 1-24 service mgcp** command.

  Workaround There is no workaround.

- CSCdt53884

  Symptoms After establishment of IP Security (IPSec) security associations (SAs), the remaining lifetimes of IPSec SAs may differ significantly, which may cause loss of encrypted connectivity.

  Conditions The conditions under which this symptom occurs are not known at this time.

  Workaround Lower the lifetimes of the IPSec and Internet Security Association and Key Management Protocol (ISAKMP) SAs. This workaround may minimize the impact for some environments but does not fully solve the issue and may include undesirable consequences.

- CSCdt54847

  The Cisco Express Forwarding (CEF) table for a Cisco 12000 Internet Router line card might not synchronize with the Gigabit Route Processor (GRP) on a Cisco 12000 Internet router that is running Cisco IOS Release 12.0(13)S2.

  This situation has been observed when a Packet-over-SONET (POS) line card did not have a /32 receive adjacency for a Gigabit Ethernet module on the same Cisco 12000 Internet router. The output of the **show cef interface gigabit 9/0** command revealed that IP processing was disabled on gigabit interface 9/0 and that there were no /32 receive entries for the addresses assigned to that interface (primary or secondary). No problems were detected on the GRP, and there have been no records of interfaces being reset.

Workaround: Clear the IP CEF table.

- CSCdt55611

  An E1/T1 feature board (FB) does not boot with Cisco IOS Release 12.2(0.11) and Release 12.2(0.12). There is no workaround.

- CSCdt55690

  Symptoms A Cisco uBR7246 router may reload unexpectedly and the system returns to the ROM monitor (ROMmon) prompt because of a bus error at PC 0x2AB, address 0x0.

  Conditions This symptom is observed when PPP over Ethernet (PPPoE) is enabled and you turn on Baseline Privacy Interface (BPI). Resource Reservation Protocol (RSVP) for low latency queueing (LLQ) may cause the Q Signaling (QSIG) call features to fail. The basic call setup works correctly.

  Workaround There is no workaround.

- CSCdt56171

  Symptoms The terminating end of a Cisco AS5300 that is running Voice over IP (VoIP) may run out of digital signal processors (DSPs) after a prolonged period of operation.

  Conditions This symptom is observed on a Cisco AS5300. When the **show vfc** *slot-number* **technology** privileged EXEC command is entered, all DSPs are shown as connected even though there are no calls. When the **show call history voice brief** privileged EXEC command is entered, all calls are shown as rejected by a 0x3F cause code.

  Workaround There is no workaround.

- CSCdt56254

  After every call is completed using Q Signaling (QSIG), the following error message is displayed:

  ```
  ISDN ERROR: Module-CCPQSIG Function-CCPQSIG_CallReleasing Error-Unknown event 0x57
  ```

  There is no workaround.

- CSCdt56273

  When you set up calls on a Cisco AS5800 series universal access server, the access server displays the following messages:

  ```
  %DIAL3-3-MSG:
  %NP-3-NAKRSP: NAK Response Received
  - command 0x1502, result code 0x8010, msg id 0x15FF, session id 0x65, msg tag 0x0
  %NP-3-NAKRSP: NAK Response Received
  - command 0x1502, result code 0x8010, msg id 0x15FF, session id 0x66, msg tag 0x0
  ```

  There is no workaround.

- CSCdt56901

  Symptoms NM-4A/S and NM-8A/S network modules may not generate a Data Carrier Detect (DCD) signal.

  Conditions This symptom is observed on NM-4A/S and NM-8A/S network modules that are configured in an asynchronous mode and that have a DCE cable attached. This symptom does not occur on the WIC-2A/S WAN interface card.

  Workaround There is no workaround.

- CSCdt56915

A Cisco 3620 router that is running Cisco IOS 12.1(5.3)T may reload with a bus error after running out of memory when the router accesses the following MIB counters:

- cbQosMarkingFeature
- cbQosPolicyMapName
- cbQosPolicyMapDesc
- cbQosCMName
- cbQosCMDesc
- cbQosMatchStmtName

There is no workaround.

- CSCdt57140

  Symptoms Load balancing may not occur, and all packets are forwarded on the same path.

  Conditions This symptom is observed when Multiprotocol Label Switching (MPLS) label imposition and load balancing are enabled and an IP packet is received on one subinterface and is forwarded to another subinterface of the same physical interface.

  Workaround There is no workaround.

- CSCdt57439

  A B channel may remain in a busy state for an undetermined time after a call is terminated. Eventually, the B channel is released. The time in which the B channel is released varies. There is no workaround.

- CSCdt57661

  Symptoms Segmented messages are not decoded and a lot of information such as Facility IE, Called/Calling number, Bearer Capability, and Channel ID are missing from the output of the **debug isdn q931** command.

  Conditions This symptom is observed in Cisco IOS Release In 12.2(0.1).

  Workaround There is no workaround.

- CSCdt57872

  A Cisco Voice over IP (VoIP) gateway may reload while running a Tool Command Language (TCL) Interactive Voice Response (IVR) voice application. This situation happens when a language other than three fixed languages (en, ch, sp) is configured in an IVR application. There is no workaround.

- CSCdt57977

  When an available bit rate (ABR) permanent virtual circuit (PVC) is used with a Cisco 3600 or Cisco 2600 router on an ATM T1 Inverse Multiplexing over ATM (IMA) module, the maximum output possible on the interface is:

  - Approximately 50 kbps if the user configures ABR PCR = 1500
  - Approximately 1220 kbps if the user configures ABR PCR = 3000
  - Approximately 2500 kbps if the user configures ABR PCR = 4500

  Output queue drops are shown on the ATM interface when the **show interfaces** *interface x/y* EXEC command is entered.

  Workaround: Use either a variable bit rate (VBR) or an unspecified bit rate (UBR).

- CSCdt57996

Calls are disconnected if a CONNECT message is received on the Voice over IP (VoIP) leg of E1 R2 to VoIP calls before a PROGRESS or ALERT message is received. This problem occurs on Cisco 2600, 3600, and 5300 routers. This occurs because register signaling is not completed on the E1 R2 trunk when the initial CONNECT message is received. There is no workaround.

- CSCdt58403

  Symptoms RADIUS attribute 196 shows a progress code 65 instead of 60 for ISDN calls.

  Conditions The conditions under which this symptom occurs are not known at this time.

  Workaround There is no workaround.

- CSCdt58453

  The output gain (negative output attenuation) on voice ports is too powerful. Negative values of output attenuation actually correspond to positive values of gain. Too much gain may distort the voice, cause digit relay to fail, or cause hearing impairment.

  Workaround: Use the Cisco IOS release that contains the fix for this caveat.

- CSCdt58642

  Symptoms A gateway that is configured for Open Settlements Protocol (OSP) may send an invalid usage indication without the mandatory “random” attribute to the OSP server.

  Conditions This symptom is observed when the random number generator emits the number zero.

  Workaround There is no workaround.

- CSCdt59425

  An H.323 gateway may run out of H.245 listening sockets when you use H.323 FastStart, enable H.245 tunneling (through dual tone multifrequency (DTMF) and t38 fax), and receive INFO messages before CONNECT messages. In this environment, the H.245 TCP listening socket may be left open, even when calls are disconnected, which causes the gateway to run out of TCP ports. This situation occurs in a terminating gateway with a lower IP address than the originating gateway.

  Workaround: Disable FastStart.

- CSCdt60265

  Symptoms When the Public Switched Telephone Network (PSTN) side has performed a busyout of an individual E1 R2 trunk, a Cisco voice router may still select this trunk for outgoing calls. The Cisco voice router internally selects the trunk early in the call setup process, at a point when the Cisco IOS software cannot determine that the trunk is in the busyout state. Later in the call setup, the Cisco IOS software does determine that the port is in the busyout state, but at this point, the call can only be released with the “user_busy” cause code.

  Conditions This symptom is observed on a Cisco voice router that is running E1 R2 trunks over a Digital E1 Packet Voice Trunk network module.

  Workaround There is no workaround. The fix for this caveat includes a process in which the Cisco IOS software checks if a trunk is in the busyout state before it selects an E1 R2 trunk for an outgoing call.

- CSCdt60363

  An ISDN call made from a Cisco AS5300 series universal access server to a Cisco SC2200 series Signaling Controller (although this can also be a switch) is released by the Signaling Controller, because the access server receives a progress that has a cause code information element (IE). Although the cause code IE is supported, there is a mismatch in the location value of the access server and the Signaling Controller. This causes the access server not to recognize the location and to send a STATUS message back to the Signaling Controller. This situation, in turn, causes the Signaling Controller to release the call. There is no workaround.

- CSCdt60803

  A Cisco router that is configured for Tag Distribution Protocol (TDP) and that is operating with very little free memory may reload. There is no workaround.

- CSCdt61183

  Symptoms A Cisco 7200VXR series router ignores class-based weighted fair queuing (CBWFQ) commands. The output of the **show running-config** EXEC command indicates that the CBWFQ commands are not in the running configuration. When you copy the startup configuration to the running configuration, the commands are accepted and work fine.

  Conditions This symptom is observed when you load a Cisco 7200VXR series router with CBWFQ saved in the NVRAM memory.

  Workaround There is no workaround.

- CSCdt61207

  A buzzing sound occurs before ringback starts. This situation happens because the originating gateway tries to incorrectly generate ringback on two stage calls when the second leg of the call receives an alert message with a progress indicator (PI) value. The originating gateway should perform a cut-through instead. This situation occurs only while the gateway is loaded. There is no workaround.

- CSCdt61322

  Symptoms When you configure multiple Multilink PPP bundles with class-based weighted fair queuing (CBWFQ) or weighted fair queuing (WFQ), all bundles drop packets.

  Conditions This symptom is observed on a Cisco 7200 series router that is configured with PA-MC-T3 or PA-MC-2T3+ port adapters. You can see the dropped packets in the output of the **show interface multilink** and the **show queueing multilink** privileged EXEC commands. The **show queueing** privileged EXEC command may not provide accurate output.

  Workaround There is no workaround.

- CSCdt61536

  Symptoms Cisco IOS software may select an old security association (SA) instead of the newly negotiated SA.

  Conditions This symptom is observed when Cisco IOS software has to select from several Phase 2 security associations (SAs) after having negotiated a new SA. The other side sees invalid security parameter index (SPI) messages until the crypto map is removed and reapplied on the interface. Clearing the SAs manually may not always work.

  Workaround There is no workaround.

- CSCdt62196

  Symptoms ISDN Layer 2 does not come up after a router reloads. The router displays the following error messages during bootup:

  ```
  %CONTROLLER-5-UPDOWN: Controller E1 0, changed state to up
  %DSX1-3-M32_BAD_INTQ: Munich 32 bad interrupt queue: Ctrl
  = 0x3C100040, Channel = 15
  -Process= "Framer background", ipl= 0, pid= 23
  -Traceback= 60030AC0 60030F2C 6003104C 60032838 6005AC8C 600592C4 60054554 600546C4
  6005B858 6005DC64 60386A84 60386A70*:
  ```

  Conditions This symptom is observed on a Cisco 4500 series router that is configured for ISDN PRI and that is running Cisco IOS Release 12.1(7).

Workaround Enter the **shutdown** interface configuration command followed by the **no shutdown** interface configuration command on the serial interface.

- CSCdt62215

  Symptoms There is no connectivity above Layer 1.

  Conditions This symptom is observed after an E1 device that is connected to a Circuit Emulation Services (CES) port on a Cisco LightStream 1010 Layer-3 enhanced ATM switch is reset.

  Workaround Enter the **shutdown** interface configuration command followed by the **no shutdown** interface configuration command on the constant bit rate (CBR) interface on the Cisco LightStream 1010 switch.

- CSCdt62295

  Symptoms Failing keepalives may destroy valid security associations (SAs).

  Conditions The conditions under which this symptom occurs are not known at this time.

  Workaround There is no workaround.

- CSCdt62800

  Symptoms A Cisco router reloads.

  Conditions This symptom is observed when you use the **ip mtu** interface configuration command on an interface that has a crypto map attached.

  Workaround There is no workaround.

- CSCdt62871

  Symptoms A Quality of service (QoS) service-policy classification may stop functioning in an input policy-map.

  Conditions This symptom is observed when you use the QoS service-policy classification in conjunction with Cisco Express Switching (CEF) switching and IP Rapid Transit Protocol (RTP) header compression on drivers that do not support IP RTP header compression in the CEF path.

  Workaround Disable CEF.

- CSCdt62876

  Reassembled packets are not switched to the outbound interface when a hardware encryption card is used. Packets that are fragmented and encrypted by a remote peer are correctly decrypted and reassembled but are not switched to the outbound interface. There is no workaround.

- CSCdt63267

  On a Cisco AS5800 series universal access server that is running Cisco IOS Release 12.1(5)XV or Release 12.2(0), performing an online insertion and removal (OIR) on a 72-port modem card Hex Modem Module (HMM) or a 144-port modem card digital multi meter (DMM) causes a router shelf to reload.

  Workaround: Use Cisco IOS Release 12.1(5)XV1 or a later release.

- CSCdt63295

  On a Cisco router that is configured with distributed Cisco Express Forwarding (dCEF), packets are not marked when you use the **set cos** policy-map class configuration command.

  Workaround: Disabled dCEF and use CEF.

- CSCdt64235

If you boot a Cisco router without a configuration, then Dynamic Host Configuration Protocol (DHCP) options are not correctly imported into local DHCP pools on the rebooted router that are configured with the **import all** command.

Workaround: Reboot the router with a configuration.

- CSCdt64833

  When you terminate V.110 calls on a Cisco access server using a Cisco Resource Pool Manager Server (RPMS) with Signaling System 7 (SS7) solution, the access server rejects the calls because it is unable to allocate a resource.

  Workaround: Disable resource pooling on the access server.

- CSCdt65151

  Symptoms A Cisco 4500 series router may reload.

  Conditions This symptom is observed on a Cisco 4500 series router that is running Cisco IOS Release 12.1(7.2).

  Workaround There is no workaround.

- CSCdt65421

  Symptoms A multilink PPP virtual termination (MLPVT) module may reload unexpectedly on a Cisco router.

  Conditions This symptom is observed when a Stack Group Bidding Protocol (SGBP) member is deleted while the SGBP member is still being authenticated. The process that is doing this authentication (specifically the verification of the response from the other member to the challenge) takes some time because it issues a RADIUS request and then waits for the RADIUS response. Within the time frame that the member is still being authenticated, if the SGBP member is removed from the command-line interface (CLI), the authentication process tries to access the memory referenced by the now deleted SGBP member when it restarts again. The router then reloads.

  Workaround There is no workaround.

- CSCdt65770

  A 324-port modem card (UP324) reloads on a Cisco AS5800 series universal access server that is running Cisco IOS Release 12.1(5)XV1 or Release 12.1(5)XM, resulting in the router shelf pausing for approximately four minutes, then reloading. Using the **hw-module slot** *shelf-id/slot-number* {**reload**} privileged EXEC command on the router shelf to reload a 324-port modem card, has the same effect. Potentially, any command that reloads a 324-port modem card may have this effect. This situation does not occur with 72-port modem cards (HMMs) or the 144-port modem cards (DMMs). There is no workaround.

- CSCdt65952

  Symptoms Trunking tones are not detected.

  Conditions This symptom is observed when you use Media Gateway Control Protocol (MGCP) Signaling System 7 (SS7) trunking configurations.

  Workaround Use a different trunking mode.

- CSCdt66034

  A Cisco router that is acting as a terminating gateway may reject some calls. The output of the **debug h225** privileged EXEC command states that the Resource Reservation Protocol (RSVP) reservation cannot be guaranteed. A debug of RSVP does not show any reservation attempt. In particular, it causes the RingAgain PBX feature to fail because it uses test calls to check if the called person is available and those calls fail as previously described. This situation does not affect Cisco IOS Release 12.2(0.5). There is no workaround.

- CSCdt66098

  Symptoms 100 percent CPU utilization occurs on a router.

  Conditions This symptom is observed on a Cisco 7000 series router that is configured with channelized T3 interfaces when the **ip rtp header-compression iphc-format** interface configuration command is enabled.

  Workaround Disable header-compression with the **no ip rtp header-compression** interface configuration command

- CSCdt66123

  Symptoms The command-line interface that accepts the Service Processing Element (SPE) range does not display the output for all the SPEs in the range when the last slot in the range is empty.

  Conditions This symptom is observed on a Cisco AS5400.

  Workaround When you provide the range to the CLI, avoid using an empty slot as the last slot in the range.

- CSCdt66581

  The Gigabit Ethernet (GE) line card or FastEthernet card on a either a Cisco 7200-I/O-2FE or a 7200-I/O-GE input/output controller that is installed on a Cisco 7200 series router may stop receiving packets.

  Workaround: Clear the interface using the **clear interface** *type slot*/*port* EXEC command.

- CSCdt66615

  In the ISDN stack of a Cisco AS5300 series universal access server, the value PI=2 is not accepted in the **isdn switch-type** *primary-ni* command. This situation causes the ISDN stack to hold the message instead of passing it on, and no alert is sent on the H.323 side. There is no workaround.

- CSCdt66797

  Symptoms When a call transfer is invoked and the party to whom the call is transferred sends alert and connect messages in quick succession, the call transfer fails and console tracebacks are generated.

  Conditions This symptom is observed on a Cisco voice gateway.

  Workaround There is no workaround.

- CSCdt67140

  A Cisco router that is acting as a gateway and that is has the Connectionless Facility feature reloads when it encounter failures during an attempt to set up the TCP connection while using a raw message pointer to provide Q Signaling (QSIG) information. If the attempt to set up TCP connection fails internally, the gateway may reload in an attempt to access freed memory. There is no workaround.

- CSCdt67820

  Symptoms An originating H.323 gateway uses both Slow Start and fastStart with another gateway, and invalid states may occur on the originating H.323 gateway, including attempts to open a Rapid Transit Protocol (RTP) session twice.

  Conditions This symptom is observed when an H.323 originating gateway that is running Cisco IOS Release 12.2(1) interoperates with another Cisco gateway that is running a Cisco IOS release that does not include the fix for caveat CSCdt59425 and the H.323 originating gateway uses Overlap Sending via H.225 information messages.

If the other gateway is a terminating gateway, it will attempt to complete the H.245 session in the tunneling process before the call proceeding state and yet continue with the fastStart procedure when it sends the call proceeding, that is, it includes a fastStart response. This situation results in invalid states in the originating H.323 gateway.

Workaround Disable fastStart on the originating H.323 gateway.

- CSCdt67965

  Symptoms Rivest, Shamir, and Adelman (RSA) keys generated in Cisco IOS software may not be recognized when a Cisco router reloads. Error messages about Secure Shell (SSH) configuration commands, which rely on RSA keys to exist, may occur. When the RSA keys are not read, the SSH configuration cannot be read. Error messages about the SSH commands are displayed on the console after bootup.

  Conditions The symptoms are caused by a bad default value in the hardware clock of the router (the value appears as 1917).

  Workaround Set the value of the hardware clock to a reasonable value using the clock set EXEC command followed by the **clock update-calendar** EXEC command before regenerating the RSA keys.

- CSCdt68416

  Firmware needs to be reset because of a firmware directory (FW) watchdog timeout when Frame Relay is configured. There is no workaround.

- CSCdt68425

  Over a busy Multilink PPP (MLP) link, Real-Time Transport Protocol (RTP) streams become choppy and on the receive side of the link, the output of the **sh ip rtp head** command shows errors on the multilink interface. RTP header compression and MLP interleaving must be enabled. Also the interfaces must be fast switched or Cisco Express Forwarding (CEF) switched.

  Workaround: Either disable fast switching and CEF on both the MLPPP interface and the serial interface and disable RTP header compression, or disable MLPPP interleaving.

- CSCdt68939

  Symptoms When many cable modem (CM) OnOff traps are being throttled, the process for throttling the traps may run for a long time and the process quantum may expire. This situation may cause a watchdog timeout to occur, and stack trace information is generated.

  Conditions These symptoms are observed on a Cisco uBR7200 series router when all of the following conditions are met:

  – The CM OnOff trap is enabled in the running configuration; the **snmp-server enable traps cable** global configuration command or the **snmp-server enable traps cable cm-onoff** global configuration command is enabled. Also, the Simple Network Management Protocol (SNMP) query cdxCmtsCmOnOffTrapEnable must be true for some Radio Frequency (RF) MAC interface.

  – The CM OnOff trap is throttled; the SNMP query cdxCmtsCmOnOffTrapInterval must not be zero for some RF MAC interface.

  – There are many CM OnOff traps that are being throttled at the same time.

  Workaround If there is no need for the CM OnOff trap, turn the CM OnOff trap off via the **no snmp-server enable traps cable cm-onoff** command-line interface (CLI) global configuration command.

  If there is a need for the CM OnOff trap, observe the following restrictions:

  – If you use SNMP: do not set cdxCmtsCmOnOffTrapInterval to 0 because every trap will be sent.

If you use the CLI: do not set cdxCmtsCmOnOffTrapInterval to 0 with the **cable enable-trap cmonoff-interval** command for every RF MAC interface.

- CSCdt69000

  A connection trunk can be up but not functional on a Cisco 1700 series router that is running a Cisco IOS Release 12.1(4)T or Release 12.1(5)T. On a connection trunk that is up and that has a recEive and transMit (E&M) connection with a PBX, some PBX calls cannot go through on a Cisco 1750 router that is running Cisco IOS Release 12.1(5.3)T. There is no workaround.

- CSCdt69204

  Symptoms A memory leak may occur on a Cisco router that is functioning as a gatekeeper, causing calls to fail.

  Conditions This symptom is observed on a gatekeeper on which 40 gateways are registered when call processing is high.

  Workaround Reload the router to free the memory temporarily.

- CSCdt69725

  Dynamic Host Configuration Protocol (DHCP) IP allocation always fails for a valid Packet Data Protocol (PDP) request in a Cisco 7200 series router that is running Cisco IOS Release 12.2(014)T with the g5js-mz image or Release 12.2(05e). There is no workaround.

- CSCdt69803

  Symptoms When a Cisco Systems Network Architecture (SNA) switch sends an invalid register (that it probably received from a downstream end node), the virtual telecommunications access method (VTAM) unbinds the control-point-to-control-point session “0889 0100.” The SNA switch responds with sense “0890 0060,” which can be observed in the pdlog file.

  Conditions The conditions under which this symptom occurs are not known at this time.

  Workaround There is no workaround.

- CSCdt70084

  An Open Settlement Protocol (OSP) token is not correctly encoded in the ClearToken nonstandard field. This situation does not occur if both the originating and terminating sides are using Cisco gateways. This situation occurs when the terminating gateway is non-Cisco, and the gateway does not decode the OSP token the way Cisco has encoded it.

  Workaround: Have the non-Cisco terminating gateway skip over the token length in the ClearToken-to-nonStandardParameter-to-data field path so that the token is accepted.

- CSCdt70960

  Symptoms Traffic shaping difficulties may occur on Fast Ethernet ports on a Cisco 7206VXR router.

  Conditions This symptom is observed on a Cisco 7206VXR router that is equipped with a Cisco 7200 I/O Controller with two Fast Ethernet Ports (C7200-I/O-2FE/E) or one Gigabit Ethernet and one Ethernet Port (C7200-I/O-GE+E) or a 2-Port Fast Ethernet port adapter (PA-2FE-TX or PA-2FE-FX).

  Workaround Ensure that the Committed Access Rate (CAR) is sufficient.

- CSCdt71080

  An Node Switch Processor (NSP) OC12 interface is configured for unidirectional Automatic Protection System (APS). If the protect side is non-functional, the user can still initiate a forced switch from the working side to the protect side. This is contrary to the GR-253-CORE Telcordia specification.

Workaround: Before initiating a forced switch from the working side, manually verify the integrity of the protect side, using the **show aps** command.

- CSCdt71437

  If H.323 **gatekeeper** functionality is enabled and an H.323 endpoint (gateway) registers with an H.323-ID exceeding 245 characters, the gatekeeper will reload.

  Workaround: Limit the endpoint H.323-ID to a maximum of 245 characters.

- CSCdt71518

  Symptoms Multiprotocol Label Switching (MPLS) connectivity may be lost.

  Conditions This symptom is observed when you use the **no router ospf** global configuration command to remove an Open Shortest Path First (OSPF) configuration from a Cisco router that is configured with Tag Distribution Protocol (TDP) or Label Distribution Protocol (LDP).

  The output of the **show tag-switching atm-tdp bindings** or the **show mpls ip binding** privileged EXEC command shows no route for prefixes that correspond to connected routes, including the TDP/LDP router ID. After approximately 5 minutes, the local labels for the connected routes are withdrawn from all TDP/LDP neighbors, are removed from the Tag Forwarding Information Base (TFIB), and are deallocated, resulting in the loss of MPLS connectivity.

  Workaround Enter the **shutdown** interface configuration command followed by the **no shutdown** interface configuration command on each interface that is up.

- CSCdt71989

  Symptoms A voice telephony security parameter (VTSP) bad enqueue traceback occurs.

  Conditions This symptom is observed when voice calls and fax calls are made through a channelized T3 card.

  Workaround There is no workaround.

- CSCdt72044

  On a Cisco router that has Generic Routing Encapsulation (GRE) or IP-in-IP tunnels configured, an input access list on a physical interface will fail to deny GRE or IP-in-IP encapsulated packets.

  Workaround: Configure a key on the GRE tunnel interfaces. Traffic going in and out of the tunnel interfaces will then be process switched. There is no workaround for IP-in-IP tunnel interfaces.

- CSCdt73543

  Symptoms A Cisco 3660 router may reload during an online insertion and removal (OIR) of an empty high-density voice network module (NM-HDV)—that is, the NM-HDV does not have an associated VWIC interface card loaded—or during bootup mode, and logs the following error messages:

  ```
  %HDV-1-NO_DAUGHTER_CARD: HDV in slot <x>: no VIC card is inserted in the HDV.
  %HDV-3-DISCOVER: HDV in slot <x>: the HDV failed to initialize properly.
  %PA-3-DEACTIVATED: port adapter in bay [x] powered off.
  ```

  A Cisco 3660 router that is running Cisco IOS Release 12.1 may enter an infinite loop after the router has reloaded and requires a power-cycle to restore normal operation. A router that is running Cisco IOS Release 12.2 is able to reload gracefully after it reloaded unexpectedly.

  Conditions These symptoms are observed on a Cisco 3660 router that is running Cisco IOS Release 12.1(5)T5, Release 12.2(0.14), or Release 12.2(0.5e) and that is configured with two or more NM-HDVs.

  Workaround Remove the empty NM-HDV module from the router.

- CSCdt73641

Symptoms Static routes to a host may not be dynamically created when a user sends a Dynamic Host Configuration Protocol (DHCP) Discover message, and the following error message is generated:

```
2d02h: %SYS-3-TIMERNEG: Cannot start timer xxxxxxxxx with negative offset xxxxxxxxx
-Process= "DHCPD Receive", ipl= 0, pid= 48
-Traceback= xxxxxxxxx
```

Conditions This symptom is observed when routed bridge encapsulation (RBE) is configured for DHCP relay.

Workaround Manually configure static routes to the host using the **ip route** *network-number network-mask interface* global configuration command and configure the DHCP server lease time to a value that is equal to or smaller than 24 days.

- CSCdt73791

  Symptoms A tunnel comes up but fails to pass any IP Security (IPSec) traffic, and the following message is displayed on a router:

  ```
  03:41:43: %IP-3-LOOPPAK: Looping packet detected and dropped - src=192.147.21.165,
  dst=157.154.194.85, hl=20, tl=44, prot=6, sport=80, dport=4624 in=FastEthernet0/0,
  nexthop=157.154.252.30, out=FastEthernet0/0
  ```

  Conditions This symptom is observed when access lists that match to a crypto map include public Port Address Translation (PAT)/Network Address Translation (NAT) IP addresses.

  Note Internal devices cannot access each other via the public address even though you can "source ping" or "source Telnet" from the same router to the peer. This is not a platform-specific issue.

  Workaround Do not use public addresses and bypass NAT. For more information, refer to the Cisco document at the following location: http://www.cisco.com/warp/public/707/static.html.

  Alternate Workaround Include a different network on your NAT pool. If the IP NAT Pool is not on the same network as one of your interfaces, IPSec traffic will be routed. You may also use a Integrated Services Module (ISM).

- CSCdt74307

  Symptoms When you reload a router, a "SYS-3-MGDTIMER: Uninitialized timer" error message may be displayed.

  Conditions This symptom is observed when you reload a Cisco 7500 series router that has Cisco Express Forwarding (CEF) disabled with the **no ip cef** global configuration command in its configuration. In this situation, packet forwarding is not affected.

  Workaround There is no workaround.

- CSCdt74589

  Symptoms A call may become associated with the wrong customer profile, or no matching customer profile may be found.

  Conditions This symptom is observed when a network access server (NAS) returns call type data to the Resource Pool Manager Servers (RPMS) during call reconstruction.

  Workaround There is no workaround.

- CSCdt74855

  Symptoms IP Payload Compression Protocol (IPPCP) may perform poorly.

  Conditions This symptom is observed when you use generic routing encapsulation (GRE)/IP Security (IPSec) in transport mode. Tunnel mode works correctly.

Workaround There is no workaround.

- CSCdt75477

  Symptoms A Versatile Interface Processor (VIP) may reload when you use header compression.

  Conditions This symptom is observed when a header decompression error occurs on a VIP port adapter of the following type: E1, T1, channelized T3, or channelized E3.

  Workaround Disable header compression.

- CSCdt75941

  A network that has two PRIs connected through Voice over Frame Relay (VoFR), may display the following message:

  ```
  convert_redirect_ocn_IE: illegal ieID
  passedencode_redirect_ocn_IE: invalid ieID!
  ```

  The error message is printed for every call attempt. Error messages should be suppressed by a debug flag. There is no workaround.

- CSCdt76036

  Symptoms A Cisco 7500 series router that is configured with a digital voice port adapter (PA) reloads at bootup with a corrupt program counter.

  Conditions This symptom is observed when the Cisco 7500 series router runs a Cisco IOS image that does not support the digital voice PA.

  Workaround Use a Cisco IOS image that supports the digital voice PA, such as the "isv" image.

- CSCdt76128

  A Cisco 3640 router with a network module (NM) Virtual Private Network (VPN) may stop sending IP Security (IPSec) packets after several hours of operation. This situation does not affect all Cisco 3640 routers that are using the same card.

  Workaround: Disable hardware encryption by entering the **no crypto engine accelerator** global configuration command.

- CSCdt76214

  A Multiprotocol Label Switching (MPLS) router may reload if it is sending traffic out an interface that is configured with Inter Switch Link (ISL) encapsulation and the ISL is unconfigured on that interface.

  Workaround: Do not unconfigure ISL.

- CSCdt76326

  Symptoms The Tunnel Endpoint Discovery (TED) protocol does not function.

  Conditions This symptom is observed on Cisco IOS Release 12.1 T and Release 12.2.

  Workaround There is no workaround.

- CSCdt76887

  The class drop rate counter does not increment for a policy with AF policer configured at the child level. There is no workaround.

- CSCdt76968

  Symptoms The "Rx-ring" and "Tx-ring" values are not always displayed when the **show atm pvc** privileged EXEC command is entered.

  Conditions The conditions under which this symptom occurs are not known at this time.

Workaround There is no workaround.

- CSCdt77514

  Symptoms The Layer 2 protocol may intermittently fail to be established on a voice BRI interface.

  Conditions This symptom is observed after a reload.

  Workaround There is no workaround.

- CSCdt77775

  The **clear counter** EXEC command may clear the MIB counters. There is no workaround.

- CSCdt78110

  Symptoms Tandem calls do not function.

  Conditions This symptom is observed on a Cisco 7507 router that is running Cisco IOS Release 12.1(5)T5 and that is placed in between two Cisco MC3810 platforms that are also running Cisco IOS Release 12.1(5)T5 or Release 12.1(7), when making a call from one Cisco MC3810 to the other Cisco MC3810. When you exchange the Cisco 7507 router for a Cisco 3640 router, the calls work fine.

  Workaround There is no workaround.

- CSCdt78145

  Packets entering through a non-Versatile Interface Processor (VIP) interface and switched out of a distributed Cisco Express Forwarding (dCEF)-enabled output VIP interface are not be classified by the policy map attached to the output VIP interface. There is no workaround.

- CSCdt78478

  When you configure a hopoff zone with a gatekeeper ID longer than approximately 25 characters, a Cisco router reloads when generating a configuration file, such as when you type the **show running-config** privileged EXEC command. There is no workaround.

- CSCdt78528

  There may be a delay in the teardown of the switched virtual circuit (SVC) on a Cisco Route Switch Processor (RSP) after an idle timeout. This problem does not affect network operation. There is no workaround.

- CSCdt78731

  On a Cisco AS5800 series universal access server, when voice channel-associated signaling (CAS) calls fail, the digital signal processor (DSP) may take 30 seconds to be released and may cause a low call success rate (CSR), depending on the number of DSP resources and the call rate. There is no workaround.

- CSCdt78831

  On a Cisco router that is running Cisco IOS Release 12.1(3a)T3, the Internet Control Message Protocol (ICMP) Type 3 Code 4 “Fragmentation required but do not fragment (DF) bit set” is generated by a router when it realizes that a packet received on one interface is too large to be transmitted on a subsequent interface. The normal course of action is for the router to fragment the packet into two or more pieces and send each one. However with the DF bit set, the router cannot do this so instead sends back a “Fragmentation required but DF bit set” message to the transmitter. Ideally, the transmitter uses this message (which contains the maximum packet size that can be transmitted without fragmentation) to reduce the packet size so that unfragmented end-end communication occurs. In the case of traffic sent across a Multiprotocol Label Switching (MPLS)/Virtual Private Network (VPN), an additional overhead of 8 bytes (2 labels) is imposed by the Provider Edge (PE) router. So for traffic generated from Ethernet (or defaulted on a T1 link) that normally consists of the maximum transmission unit (MTU) size of 1500 bytes, this situation

reduces the size to a maximum of 1492 bytes without fragmentation. So the ICMP message generated by the PE router should show 1492 bytes as the largest supportable frame size within the ICMP message. Instead, the message shows an MTU of 0. There is no workaround.

- CSCdt78862

  Symptoms An uncommanded increase in time-slot speed from 56 kb to 64 kb may occur. The output of the **show service-module serial** privileged EXEC command may continue to indicate that the speed is set to 56 Kb even though the speed has increased. In this situation, the serial line is in an "Up/Down" state.

  Conditions This symptom is observed on a 1-port T1/Fractional T1 integrated data service unit/channel service unit (DSU/CSU) WAN Interface Card (WIC-1DSU-T1) that is installed in a Cisco 3600 series router.

  Workaround Set the time-slot speed to 64 Kb and then back to 56 Kb.

- CSCdt78894

  When a Cisco AS5400 series universal access server that is running Cisco IOS Release 12.2reloads, the stack trace is lost if another reload occurs in exception handling. There is no workaround.

- CSCdt79028

  Symptoms A Cisco Voice over IP (VoIP) gateway may reload when the gateway is running a Toolkit Command Language (TCL) interactive voice response (IVR) 1.0 voice application.

  Conditions This symptom is observed if the incoming setup message has a facility information element (IE) and multiple calls are made using the long pound feature.

  Workaround There is no workaround.

- CSCdt79425

  Symptoms Outbound policing may not function on an outbound Fast Ethernet interface.

  Conditions The conditions under which this symptom occurs are not known at this time.

  Workaround There is no workaround.

- CSCdt79553

  Symptoms A dynamic crypto map may be created for a flow that is denied in the dynamic crypto map template Access Control List (ACL).

  Conditions This symptom is observed in Cisco IOS Release 12.2(0.11)T.

  Workaround There is no workaround.

- CSCdt79835

  Symptoms A spurious memory access may occur and the following message is generated:

  ```
  ALIGN-3-SPURIOUS: Spurious memory access made at 0x608D5180 reading 0x43A
  ```

  Conditions This symptom is observed on a Cisco 7200 series router or other Cisco router that is running Cisco IOS software and that is configured with an ATM interface and some "old-style." permanent virtual circuit (PVC)s.

  Workaround Change the "old style" PVC configuration to a "new style" PVC configuration. For example, if the router has the "interface atm 2/0 atm pvc 1 0 16 ilmi" configuration, change it to the "interface atm 2/0 pvc 0/16 ilmi" configuration.

- CSCdt79981

  Symptoms A crypto interface on a Cisco 7200 series router may become wedged after it has been running for a while.

Conditions This symptom is observed on a Cisco 7200 series router that is running Cisco IOS Release 12.1(5a)E2 with IP Security (IPSec) encryption enabled.

Workaround There is no workaround.

- CSCdt80192

  Symptoms A Large Network Emulator (LNE) does not form neighbors over a multipoint or point-to-point ATM link. A neighbor comes up, but is dropped after the Enhanced Interior Gateway Routing Protocol (EIGRP) "16" query limit has been reached.

  Conditions This symptom is observed under normal operating conditions.

  Workaround Upgrade the pagent image to Release 3.6 or a later release, which contains the fix for this caveat.

- CSCdt80914

  Symptoms Entering the **show ip cef exact-route** EXEC command may cause the route processor in a Cisco 12000 series router or a Cisco 7500/RSP series router to reload.

  Conditions This symptom is observed when the destination prefix is recursive and the router is load sharing to the next hop.

  Workaround There is no workaround.

- CSCdt81093

  Symptoms Committed Access Rate (CAR) limits do not function properly.

  Conditions This symptom is observed when Cisco Express Forwarding (CEF) is enabled on a router. When CEF is disabled on a router, CAR limits function properly. (This configuration is not supported.) This behavior has been observed on routers that use the same interface for input and output traffic.

  Workaround There is no workaround.

- CSCdt81586

  An Integrated Services Adapter (ISA) may fail to properly configure the ISA for use with the router memory map in certain router configurations (such as when a non-VXR Cisco 7204 router is paired with a Cisco network processing engine [NPE-225]). The non-VXR Cisco 7204 has only one region of Peripheral Component Interconnect (PCI) memory and does not have I/O memory that is supported by the current ISA driver. This may cause the ISA to fail to initialize when a router is booted up or after a microcode reload.

  Workaround: Use a different network processing engine or use a software crypto engine.

- CSCdt82052

  The latest Cisco IOS Release 12.1 or 12.1 T images do not support the ani-dnis feature for the Feature Group B (FGB) signaling type. There is no workaround.

- CSCdt82230

  Symptoms The envmon trap that is associated with the environmental monitoring daemon fails to be activated. Traps that are related to the envmon trap are not seen when the **debug snmp packet** EXEC command is entered.

  Conditions This symptom is observed after the following Simple Network Management Protocol (SNMP) global configuration commands are configured on a Cisco uBR7200 router that is running Cisco IOS Release 12.1(06)EC01 and the router is power cycled:

  – **snmp-server enable traps envmon**

  – **snmp-server enable traps config**

– **snmp-server host 192.168.0.0 public**

Workaround There is no workaround.

Note After this caveat has been corrected in subsequent Cisco IOS releases, a ciscoEnvMonRedundantSupplyNotification will be sent out when the environmental monitoring daemon detects a change in the power supply status.

The environmental monitoring daemon checks the status of the power supply, the temperature, and the voltage of the router in a sequential order. After the environmental monitoring daemon finishes checking the status of the voltage on a router, it will cycle to the beginning of the sequence to check the status of the power supply, the status of the temperature, and the status of the voltage on a router.

On certain Cisco uBR7200 routers, it may take up to 2 minutes for a router to cycle through a complete status check. The **show environment all** privileged EXEC command can be used to force the router to check and display the status of the power supply without having to wait for the router to cycle through a complete status check.

- CSCdt82256

  Weighted Random Early Detection (WRED) ClassStats table does not return Differentiated Services Code Point (DSCP) values for indexed counters.

  Workaround: Use the Cisco IOS release that contains the fix for this caveat.

- CSCdt82299

  The **cable source-verify** command fails to protect customer premises equipment (CPE) devices against an IP address being stolen by another CPE device on a different downstream interface in the same cable bundle.

  The error message has been changed for BADIPSOURCE to provide more information for this situation. It basically shows the correct and packet interface in addition to service identifier (SID).

  Old Format:

  ```
  BADIPSOURCE: Interface <Interface Name>, IP packet from invalid source. IP=<source
  IP>, MAC=<Mac A ddress>, Expected SID=<Correct SID>, Actual SID=<Packet Incoming SID>
  ```

  New Format:

  ```
  BADIPSOURCE: Interface <Interface Name>, IP packet from invalid source. IP=<source
  IP>, MAC=<Mac A ddress>, Expected Interface=<Correct Interface> SID=<Correct SID>,
  Actual Interface=<Packet Incoming Interface> SID=<Packet Incoming SID>
  ```

  Example:

  ```
  21:42:41: %UBR7200-3-BADIPSOURCE: Interface Cable3/0, IP packet from invalid source.
  IP=80.80.80.1 2, MAC=0004.2752.d73c, Expected Interface=Cable4/0 SID=1, Actual
  Interface=Cable3/0 SID=1
  ```

  There is no workaround.

- CSCdt82360

  Symptoms During bootup, 80 percent of the memory is used by the initialization process and only 20 percent of the memory is left for other processes.

  Conditions This symptom is observed on a Cisco AS5800.

  Workaround There is no workaround.

- CSCdt83160

Symptoms When you configure Perfect Forward Secrecy (PFS) group 5 at the Internet Security Association and Key Management Protocol (ISAKMP) level and a router attempts to create an IP security (IPSec) tunnel, the router is unable to detect the encryption hardware, and the following error message is generated when the router is running Cisco IOS Release 12.1(5.7) or Release 12.1(7):

```
%HW_VPN-1-LPRXERR: Hardware VPN1/132: Key management error
```

When the router is running Release 12.2 T, the following error message is generated:

```
%HW_VPN-1-LPRXERR: Hardware VPNx/x: Command Error IPSEC cmd=DH_SHARE_SECRET [0x33]
Uproc cmd=Unknown[0] status=bad peer public length[0x104D]
```

Conditions This symptom is observed when traffic attempts to pass through an IPSec tunnel on a Virtual Private Network (VPN) module (such as the AIM-VPN/HP module) that is installed in a Cisco 2600 series router, Cisco 3600 series router, or a Cisco IGX 8400 Universal Router Module

Workaround Instead of PFS group 5, use group 1 or group 2.

- CSCdt83163

  Symptoms Memory leaks may be caused by the adjacent manager, Address Resolution Protocol (ARP) input, and IP input processes.

  Conditions This symptom is observed when Cisco Express Forwarding (CEF) is enabled on a Network Service Engine-1 (NSE-1) that is installed in a Cisco 7206VXR router. The symptom is not observed on a Network Processing Engine 300 (NPE-300) in the same configuration.

  Workaround There is no workaround.

- CSCdt83502

  Symptoms A number of Systems Network Architecture (SNA) switch-attached physical units (PUs) are stuck in the “pend ACTPU” state without the associated downstream links.

  Conditions This symptom is observed after downstream data-link switching (DLSw) routers reload when the PUs connect and disconnect quickly and the “REQACTPU” message that is sent to the virtual telecommunications access method (VTAM) receives a response.

  Workaround There is no workaround.

- CSCdt83508

  Symptoms Even when the Ethernet port is unplugged and goes down, the **show ip route** EXEC command still shows that the line is connected.

  Conditions This symptom is observed on a Cisco 800 series router.

  Workaround There is no workaround.

- CSCdt83647

  Symptoms The raw message buffer may pause indefinitely when Cisco interactive voice response (IVR) 1.0 is used with ISDN (primary-net5). If a facility message is received on an ISDN trunk on a terminating gateway (TGW), the facility message is forwarded to the originating gateway (OGW). The raw message buffer is lost when the OGW receives the facility message.

  Conditions The conditions under which this symptom occurs are not known at this time.

  Workaround There is no workaround.

- CSCdt84362

When a dialout attempt is placed through a NextPort CSMv6 modem, and the call attempt fails because of a circuit setup failure such as ring no answer, busy, invalid number, and so forth, then the NextPort AT interface pauses indefinitely rather than returning the correct result code such as NO ANSWER, BUSY, NO DIALTONE, NO CARRIER, and so forth. The S7 setting (wait for carrier after dial) has no effect on this behavior. There is no workaround.

- CSCdt84477

  Symptoms You cannot use Tunnel Endpoint Discovery (TED) to negotiate an IP security (IPSec) tunnel down to a protocol basis; all access control lists (ACLs) listed within the dynamic crypto maps on both sides must be of the type "IP."

  Conditions The conditions under which this symptom occurs are not known at this time.

  Workaround There is no workaround.

- CSCdt85382

  Symptoms A memory allocation difficulty may occur across a tunnel interface for multicast packets and a "SYS-3-INVMEMINT" message is generated. This situation causes multicast packets not to be processed by the router.

  Conditions This symptom is observed when you run Cisco Express Forwarding (CEF) and IP security (IPSec).

  Workaround There is no workaround.

- CSCdt85829

  Symptoms A universal gateway fails to boot up when no IP address is stated in the configuration of the **interface group-async** global configuration command.

  Conditions This symptom is observed on a Cisco AS5400.

  Workaround Add the **ip unnumbered** or the **ip address negotiated** interface configuration command to the configuration.

- CSCdt85867

  Symptoms A Cisco 3640 voice gateway may reload and a FreeExtension message is displayed.

  Conditions This symptom is observed when the Cisco 3640 voice gateway is connected to a PBX that is running Q-Signaling protocol (QSIG).

  Workaround There is no workaround.

- CSCdt86116

  Symptoms Resource Reservation Protocol (RSVP) does not function.

  Conditions This symptom is observed when Random Early Detection (RED) is enabled.

  Workaround There is no workaround.

- CSCdt87000

  Symptoms When all channel-associated signaling (CAS) time slots are occupied, a disconnect cause code of "user busy" (17) is generated instead of a disconnect cause code of "no circuit available" (34).

  Conditions This symptom is observed when a Cisco IOS voice gateway attempts to place an outgoing CAS call.

  Workaround There is no workaround.

- CSCdt87355

Symptoms A 324-port modem card (UP324) fails to startup correctly; it pauses indefinitely during bootup. The dial shelf controller attempts to reset the UP324 after detecting the UP324 in the "unknown" state for 30 seconds, but the UP324 still does not boot up.

Conditions This symptom is observed on a Cisco AS5800.

Workaround There is no workaround.

- CSCdt87610

  Symptoms A Cisco voice gateway that is using a Toolkit Command Language (TCL) interactive voice response (IVR) voice application may reload during a prompt playout.

  Conditions This symptom is observed on a Cisco AS5300.

  Workaround There is no workaround.

- CSCdt87915

  Symptoms While running IP security (IPSec), a Cisco 2600 series router reloads with the following error message:

  ```
  ALIGN-3-SPURIOUS: Spurious memory access made at 0x810FF844 reading 0x0
  ```

  Conditions This symptom is observed on a Cisco 2600 series router that is running Cisco IOS Release 12.1(5)T5.

  Workaround There is no workaround.

- CSCdt88568

  Symptoms A Versatile Interface Processor (VIP) may reload when a service policy is attached to an interface while traffic is flowing through the interface.

  Conditions This symptom is observed on a Cisco 7500 series router.

  Workaround Stop all background traffic before attempting to update the service policy.

- CSCdt89344

  Under some circumstances, inserting routes into a routing table may cause memory to become fragmented.

  Temporary Workaround: Configure the **memory free-list 65488** command.

- CSCdt89525

  Symptoms Non-R2 channel-associated signaling (CAS) may not be configurable.

  Conditions This symptom is observed on a Cisco AS5300 that is running Cisco IOS Release 12.1(5)T5.

  Workaround There is no workaround.

- CSCdt89730

  Symptoms G.729ar8 is not accepted during the codec negotiations.

  Conditions The conditions under which this symptom occurs are not known at this time.

  Workaround There is no workaround.

- CSCdt89895

  Symptoms An E1 controller on a 2-port T1/E1 high-capacity enhanced digital voice port adapter does not come up after a the router reloads.

  Conditions This symptom is observed on a Cisco 7200 series router and does not occur on a Cisco 7500 series router.

  Workaround There is no workaround.

- CSCdt90313

  Symptoms When you enter the **audio-prompt load** *name* privileged EXEC command, the command is accepted and the prompt appears to load. However, the interactive voice response (IVR) script does not play the new prompt the next time the prompt is used.

  Conditions This symptom is observed on a Cisco AS5300.

  Workaround There is no workaround.

- CSCdt90565

  Symptoms A modem is not released after the first dialout call and subsequent calls cannot be made on this modem.

  Conditions This symptom is observed on a Cisco AS5850.

  Workaround There is no workaround.

- CSCdt90813

  A Cisco router that is running Voice over IP (VoIP) may reload under stressed fax traffic conditions. There is no workaround.

- CSCdt90952

  A Cisco uBR7200 series router that is running Cisco IOS Release 12.0(10)SC1 or a subsequent release might reload unexpectedly with a bus error at "cmts_snmp_get_cmcpe."

  Workaround: Use Cisco IOS Release 12.0(16)SC.

- CSCdt91000

  Symptoms When a Cisco AS5300 receives an ISDN release message with a cause code 0xAC (cause 44: "requested circuit/channel not available") before connecting on the Redundant Link Manager (RLM)/National ISDN-2 (NI2) interface, the Cisco Signaling System 7 (SS7) Interconnect for Voice Gateways Solution gateway may change the cause value to cause code 0x03 (cause 3: "no route to destination") when it sends the H.225 Release message to the H.323 leg of the call if the gateway has a Voice over IP (VoIP) dial peer trying for the same call.

  Conditions This symptom is observed when a call originates on the H.232 side and terminates on the RLM/NI2 side of the gateway.

  Workaround There is no workaround.

- CSCdt91118

  Symptoms A Cisco 1750 router that has a one-port 64K synchronous WAN interface card (WIC-1T) and that uses data terminal ready (DTR) dialing does not respond by raising its DTR lead after a CD signal has been received and detected.

  Conditions This symptom is observed on a Cisco 1750 router that is running Cisco IOS Release 12.0(7)T. The symptom does not occur on a Cisco 3620 or Cisco 3640 router that is running Cisco IOS Release 12.0(7)T.

  Workaround There is no workaround.

- CSCdt91142

  Symptoms After a virtual-access interface negotiates a maximum transmission unit (MTU) that is smaller than 1500 bytes, and then the session clears, the small MTU value may be left on the virtual-access interface. When a subsequent call uses this same virtual-access interface, the small MTU may remain, resulting in potential Path MTU Discovery (PMTUD) failures.

  Conditions The conditions under which this symptom occurs are not known at this time.

Workaround Configure the **mtu 1501** and **ip mtu 1500** interface configuration commands on the virtual template and save the configuration. This configuration will remain after the router has reloaded.

- CSCdt91433

  A Cisco Multiprotocol Label Switching (MPLS) Virtual Private Network (VPN) provider edge (PE) router that is running Cisco IOS Release 12.1(5)T5 and that is configured with virtual private dialup network (VPDN) may reload. The router typically displays a traceback message similar to the following:

```
0x6060A8A0:idb_get_swsb(0x6060a86c)+0x34
0x60FCF53C:tagsw_get_tag_dist_method(0x60fcf4a0)+0x9c
0x60FF055C:tfib_request_outgoing_tag(0x60ff0480)+0xdc
0x60FF06A8:tfib_request_outgoing_recursive_tags(0x60ff061c)+0x8c
0x60FF3214:tfib_resolve_recursive(0x60ff30e8)+0x12c
0x60FF5710:tfib_resolve_tag_rewrite(0x60ff5590)+0x180
0x60F4AF58:path_resolved(0x60f4aa90)+0x4c8
0x60F4B84C:ip_fib_resolve_path(0x60f4b244)+0x608
0x60F4BA20:ip_fib_force_resolve_path(0x60f4b94c)+0xd4
0x60FF4940:tfib_route_tag_change(0x60ff44ec)+0x454
0x60FF07C8:tfib_setup_route_tag_change(0x60ff06d4)+0xf4
0x60FCBE34:tib_find_route_tags(0x60fcbc4c)+0x1e8
0x60FF05EC:tfib_request_outgoing_tag(0x60ff0480)+0x16c
0x60FF06A8:tfib_request_outgoing_recursive_tags(0x60ff061c)+0x8c
0x60FF3214:tfib_resolve_recursive(0x60ff30e8)+0x12c
0x60FF5710:tfib_resolve_tag_rewrite(0x60ff5590)+0x180
```

  The router reloads if all of the following conditions exist:

  - MPLS IP is globally enabled on the router.

  - There are multiple static routes to a prefix (in the default routing table).

  - At least one of the static routes is recursive.

  - At least one of the static routes is nonrecursive.

  - The static recursive route resolves to go over a nonpeer-to-peer link (for example, Ethernet).

  Images that have the fix for CSCds91198 are susceptible to this issue. The impacted Cisco IOS releases include (but are not limited to) the following:

  - Cisco IOS Release 12.1(05b) or a later release
  - Cisco IOS Release 12.0(15.05)ST or a later release
  - Cisco IOS Release 12.0(15.05)S or a later release
  - Cisco IOS Release 12.0(14.06)ST01 or a later release
  - Cisco IOS Release 12.0(15)S01 or a later release
  - Cisco IOS Release 12.0(13.06)ST02 or a later release
  - Cisco IOS Release 12.2(00.05)T or a later release
  - Cisco IOS Release 12.002(000.005) or a later release
  - Cisco IOS Release 12.001(006.001) or a later release

  Workaround: Avoid any of the conditions listed. We recommend that the workaround be implemented in the startup configuration before the router is booted up.

- CSCdt92035

  Symptoms A Cisco Gateway GPRS Support Node (GGSN) reloads.

Conditions This symptom is observed after a Routing Area (RA) update when the new Serving GPRS Support Node (SGSN) is actually a split SGSN in which signaling and data functionalities are performed by different platforms, and after data is sent across.

Workaround Unconfigure General Packet Radio Service (GPRS) fast switching on the virtual template by entering the **interface virtual-template 1 no gprs fastswitch** command.

- CSCdt92139

  Symptoms Cisco IOS software does not properly respond to A13 (“send nature of circuit”) backward register signaling.

  Conditions This symptom is observed when R2 signaling is used.

  Workaround There is no workaround.

- CSCdt92200

  Symptoms A new language cannot be configured using the **call language voice** *language URL* global configuration command. The gateway may reload when a user attempts to use an undefined language.

  Conditions The conditions under which this symptom occurs are not known at this time.

  Workaround There is no workaround.

- CSCdt92236

  Symptoms A router may reload continuously.

  Conditions This symptom is observed on a Cisco router when it is booted up with Cisco IOS Release 12.1 or Release 12.2(0.11)T and the **logging source-interface** global configuration command is copied from Cisco IOS Release 12.2(0.16)T or a later release.

  Workaround There is no workaround.

- CSCdt92270

  Symptoms Committed access rate (CAR) may fail to function properly with multicast packets.

  Conditions This symptom is observed on a Cisco 7200 series router. This symptom does not affect unicast packets.

  Workaround There is no workaround.

- CSCdt92439

  Symptoms Calls fail when the guard time in between calls is only one second.

  Conditions This symptom is observed on a Cisco 3660 router that is configured with a high-density voice network module (NM-HDV).

  Workaround There is no workaround.

- CSCdt92679

  A Cisco ubr7200 router that is running Cisco IOS Release 12.1(6)EC may reload with a bus error at cmts_cm_lookup. There is no workaround.

- CSCdt92715

  Symptoms IP Security (IPSec) security associations (SAs) fail to be deleted when Internet Key Exchange (IKE) SAs are deleted.

  Conditions This symptom is observed with Internet Security Association and Key Management Protocol (ISAKMP) keepalives.

  Workaround There is no workaround.

- CSCdt92757

  Symptoms There may be an inconsistency in the “Disconnect” and “Release” cause codes.

  Conditions This symptom is observed when **isdn global-disconnect** interface configuration command is enabled.

  Workaround Disable the **isdn global-disconnect** interface configuration command everywhere on the router.

- CSCdt92898

  Symptoms A Cisco router may reload because of a bus error when a service-policy output command is applied on an interface that is configured for Voice over Frame Relay (VoFR).

  Conditions This symptom is observed on a Cisco router that running Cisco IOS Release 12.1(5)T5 or an early release of Release 12.2 or Release 12.2 T.

  Workaround There is no workaround.

- CSCdt93103

  Symptoms A Cisco router with a Systems Network Architecture (SNA) switch may not include the Network Services (NS) secondary logical unit (LU) name in a negotiable “Bind.” The station connection may fail.

  Conditions This symptom is observed on a Cisco 3600 series router.

  Workaround There is no workaround.

- CSCdt93130

  Symptoms In a configuration with two provider edge (PE) routers, a difficulty with tagging occurs when Automatic Protection Switching (APS) is switching from the working mode to the protecting mode. IP Intermediate System-to-Intermediate System (IS-IS) switches over to an active Packet-over-SONET (POS) interface, but the tag-switching Tag Distribution Protocol (TDP) neighbor is lost. The output of the **show tag-switching interfaces** privileged EXEC command displays that the interface is operational for both routers.

  Conditions This symptom is observed in a configuration with a PE router that is running Cisco IOS Release 12.1(7).3 and another PE router that is running Cisco IOS Release 12.0(15)S1.

  Workaround Enter the **no tag-switching ip** command followed by the **tag-switching ip** command to restart the TDP neighbor for either router.

- CSCdt93341

  Symptoms Offramp faxes mail fail when you run the Store-and-Forward Fax feature with a Modem ISDN channel aggregation (MICA) modem because the dial string is passed on to the modem, as is displayed in the output of the **debug modem csm** debug command:

  ```
  Mica Modem(1/0): Rcvd Dial String (W95551111)
  ```

  Conditions This symptom is observed on a Cisco AS5300 or a Cisco AS5800 that is running Cisco IOS Release 12.2.

  Workaround There is no workaround.

- CSCdt93976

  Symptoms A router may unexpectedly reload when the it attempts to perform a Domain Name System (DNS) query for an address-to-name translation.

  In general, a router sends a DNS query when it has the IP address but not the host name, and the host name needs to be displayed. When the router sends a DNS query though the **traceroute** command or the **show users** EXEC command, the router may reload.

Conditions This symptom is observed on a router that is running Cisco IOS Release 12.1(8) or later releases and occurs only on some queries from the router itself. DNS queries forwarded through the router do not cause the symptom.

Workaround Turn off DNS domain lookup by entering the **no ip domain-lookup** global configuration command.

Alternate Workaround Create a host entry on the router for the problem address, as in the following example. If the **traceroute** command to an IP address causes the router to reload, configure the **ip host** *name address1* global configuration command, in which *address1* is the IP address that causes the router to reload.

- CSCdt94031

  Symptoms The startup configuration may be lost when you save the running configuration to NVRAM memory and reload the switch, and you cannot recover the startup configuration.

  Conditions This symptom is observed on a Cisco Catalyst 4604 switch when the startup configuration is larger than about 9 Kb.

  Workaround Upgrade the ROM monitor (ROMmon).

- CSCdt94327

  The **ip address dhcp** command may not function properly in some situations. Some Dynamic Host Configuration Protocol (DHCP) servers require the DHCP *client-id* option to be a hex MAC address and require the inclusion of the hostname option in the "DHCP DISCOVER" message. The fix for this caveat causes the *client-id* option to contain the HEX form of the interface MAC address and adds the *hostname* keyword.

  Workaround: Upgrade to a Cisco IOS software release that has the new command, and use the new command (with *client-id* and *hostname*).

- CSCdt94497

  Symptoms A queue wedge may occur when attempting phone calls.

  Conditions This symptom is observed on a Cisco CVA122 platform that is configured for Simple Gateway Control Protocol (SGCP).

  Workaround There is no workaround.

- CSCdt94992

  Symptoms Memory leaks may occur on a router.

  Conditions This symptom is observed when Multilink PPP over ATM (MLPoATM) is configured on an ATM virtual circuit (VC) and you have fast switching enabled.

  Workaround Do not use fast switching but use process switching.

- CSCdt95090

  Symptoms Per-VC policing is not supported with Parallel Express Forwarding (PXF).

  Conditions This symptom is observed on an Network Service Engine-1 (NSE-1) with PXF.

  Workaround Disable PXF.

- CSCdt95179

  Symptoms The **cable dhcp-proxy** command does not take effect until the cable interface is reset.

  Conditions This symptom is observed on a Cisco uBR900 series router and a Cisco CVA100 series platform.

  Workaround Reset the cable interface after you have enabled the **cable dhcp-proxy** command.

- CSCdt95290

  A digital E1 line that is running Ear and Mouth (E&M) immediate signaling may pause indefinitely in the S_PROCEEDING state.

  Workaround: Enter the **shut** command followed by the **no shut** command on the E1 line.

- CSCdt95366

  This caveat consists of two symptoms, conditions, and workarounds.

  Symptoms A Multicast and broadcast packets destined for the router itself fail to deencapsulate. The result is that the packets are seen by the processor but are silently dropped because of improper headers.

  Conditions A This symptom is observed when running hardware encryption across a generic routing encapsulation (GRE) tunnel.

  Workaround A There is no workaround.

  Symptoms B Shutting down an interface on which traffic is flowing may cause the router to pause indefinitely or reload because of spurious access.

  Conditions B This symptom is observed when running IP security (IPSec) in hardware, using GRE tunnels, and Cisco Express Forwarding (CEF).

  Workaround B Remove the traffic load before you shut down the interface.

- CSCdt95498

  Symptoms A Cisco 3620 router does not support the ISDN Link Access Procedure, Balanced-Terminal Adapter (LAPB-TA) feature.

  Conditions The conditions under which this symptom occurs are not known at this time.

  Workaround There is no workaround.

- CSCdt95515

  Symptoms Stack overflow difficulties may occur on a router.

  Conditions This symptom is observed when Multilink PPP over ATM (MLPoATM) is configured.

  Workaround There is no workaround.

- CSCdt95677

  A Cisco AS5300 series access server may reload under heavy load and display the following stack:

```
Router# show stack Minimum process stacks:
Free/Size Name
5704/6000 Reset ipc queue
2572/3000 fstp init
2388/3000 allegro libretto init
7388/12000 Init
7436/9000 DHCP Client
5288/6000 RADIUS INITCONFIG
```

  Interrupt level stacks:

```
Level Called Unused/Size Name
2 5484628 7988/9000 Low IRQ Int Handler
3 19 8448/9000 High IRQ Int Handler
4 36100877 8600/9000 Console Uart
6 0 9000/9000 Parity interrupt
```

```
7 61183144 8604/9000 NMI Interrupt Handler
```

System was restarted by bus error at PC 0x60C10D9C, address 0x20 Stack trace from system failure:

```
FP: 0x6205E0D0, RA: 0x60C10D9C FP: 0x6205E128, RA: 0x60ADB01C FP: 0x6205E150, RA:
0x60C17D08 FP: 0x6205E170, RA: 0x60C17E2C FP: 0x6205E288, RA: 0x60C2ACC8 FP:
0x6205E2A8, RA: 0x60C2B430 FP: 0x6205E2F0, RA: 0x60C2576C FP: 0x6205E320, RA:
0x60C25AF0
```

There is no workaround.

- CSCdt95912

  Symptoms A permanent virtual circuit (PVC) may stop forwarding data.

  Conditions This symptom is observed when Multilink PPP over ATM (MLPoATM) is configured on a PVC and the PVC parameters are changed.

  Workaround Configure keepalives on a virtual template or change the PVC parameters when the interface is shut down.

- CSCdt96042

  Symptoms A Cisco router may fail to use the image in an Advanced Technology Attachment (ATA) SanDisks during an autoboot process. When the configuration register is set to "0x2102," the router loads the boot image from the bootflash memory during the bootup process, even when a full Cisco IOS image is present in the disk file systems and none of the other file systems contain the Cisco IOS image.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.1(6.4), Release 12.1(6.5)EC, Release 12.2(0.10), Release 12.2(0.8)T, or later releases and occurs only with ATA SanDisks and not with Flash cards.

  Workaround Boot the router from the ROM monitor (ROMmon) mode.

- CSCdt96216

  Symptoms A terminating gateway (TGW) that has T.38 Fax Relay enabled cannot fall back to Cisco Fax Relay, and the fax may fail.

  Conditions This symptom is observed when the originating gateway (OGW) is configured for Cisco Fax Relay and after the TGW receives a negative acknowledgement for a T.38 switchover attempt.

  Workaround There is no workaround.

- CSCdt96253

  Three different Cisco product lines are susceptible to multiple vulnerabilities in the Secure Shell (SSH) protocol. These issues are inherent to the SSH protocol version 1.5, which is implemented in several Cisco product lines.

  By exploiting the weakness in the SSH protocol, it is possible to insert an arbitrary commands into an established SSH session, collect information that may help in brute force key recovery, or brute force a session key.

  The affected product lines are:

  - All devices running Cisco IOS software supporting SSH. That includes routers and switches running Cisco IOS.
  - Catalyst 6000 switches running CatOS.
  - Cisco PIX Firewall.

  No other Cisco products are vulnerable.

  It is possible to mitigate this vulnerability by preventing, or having a control over, interception of SSH traffic.

This advisory will be available at:

http://www.cisco.com/warp/public/707/SSH-multiple-pub.html

- CSCdt96302

  A Cisco router that is running Cisco IOS Release 12.1(6) with the c5rsm-dsv-mz image may experience a reload in ip_flow_switch when IP Cisco Express Forwarding (CEF) is enabled. This situation occurs when you use the **no ip route-cache cef** interface configuration command on all interfaces, and when you use the **ip route-cache flow** interface configuration command on most but not all interfaces. The router displays the following messages:

  ```
  RA: 0x601C4064[ip_flow_switch(0x601c3d3c)+0x328] RA:
  0x601BC2C4[ip_fastswitch_wrapper(0x601bc26c)+0x58] RA:
  0x602F8768[rsp_eip_fs_body(0x602f8058)+0x710] RA:
  0x60303AE0[rsp_process_rawq(0x60301000)+0x2ae0] RA:
  0x602BB8F8[rsp_qa_intr(0x602bb818)+0xe0] RA:
  0x601C4048[ip_flow_switch(0x601c3d3c)+0x30c]
  ```

  The router displays the following access list logging messages before the reload at the approximate rate of one message per second:

  ```
  %SEC-6-IPACCESSLOGDP: list 169 denied icmp x.x.x.x (Vt %SEC-6-IPACCESSLOGDP: list 169
  denied icmp x.x.x.x (Vt %SEC-6-IPACCESSLOGDP: list 169 denied icmp 144.13.9.54 (Vlt
  %SEC-6-IPACCESSLOGDP: list 169 denied icmp 144.13.9.54 (Vlt %SEC-6-IPACCESSLOGDP:
  list 169 denied icmp 144.13.9.54 (Vlt %C5IP-0-MSG: slot0 %DB-0-RESTART: Waiting for
  restart %DBUS-3-DBUSINTERR: Slot 0, Internal Error %RSP-3-RESTART: cbus complex
  ```

  There is no workaround.

- CSCdt97040

  Symptoms When you configure an H.323 proxy on a gatekeeper, a voice call may get disconnected with cause code 63 (“service or option not available”).

  Conditions This symptom is observed on a Cisco 3600 series router.

  Workaround There is no workaround.

- CSCdt97078

  Symptoms An access server may reload when the Call Tracker feature is configured.

  Conditions This symptom is observed when the Call Tracker feature is populated with TCPClear calls and Virtual Private Dialup Network (VPDN) calls over ISDN trunks.

  Workaround There is no workaround.

- CSCdt97291

  When the service type on a multiservice interchange (MIX)-enabled PA-MCX-xTE1 port adapter on a Cisco 7200 VXR router that is configured with a primary rate interface (PRI) is changed from PRI voice to PRI data and then back to PRI voice, a voice time-division time-division multiplexing (TDM) connect fail message is received on the last voice channel. There is no workaround.

- CSCdt97325

  Cisco routers that are running Cisco IOS Release 12.1, 12.2, or 12.0S with an Advanced Technology Attachment (ATA) SanDisk card (of any capacity) may pause indefinitely or be slow to respond to command-line interface (CLI) command input when the SNMP FlashMIB is queried. The FlashMIB queries may also timeout. This problem occurs when the Inode numbers of the files in the ATA SanDisk are not sequential and when there is a large difference in the inode numbers.

  The following is an example of a directory list with inode numbers that are likely to cause an SNMP timeout when the Flash MIB is queried:

  gt3-7200-3#dir disk1: Directory of disk1:/

3 -rw- 1690 shankar

4 -rw- 1690 sara

5 -rw- 1690 sara1

6 -rw- 1690 sara12

7 -rw- 1690 sara123

8 -rw- 1690 sara1234

10 -rw- 1690 sara12345

11 -rw- 1690 sara123456

12 -rw- 1690 7

9 drw- 0 directory-one

15 -rw- 8623108 c7200-is-mz.121-7.4

14 -rw- 3578452 c7200-boot-mz.del96042

2994 -rw- 4307448 c7200-boot-mz.flo96042

4046 -rw- 3578544 c7200-boot-mz.del96042first

Workaround: Exclude the ciscoFlashFileEntry MIB from FlashMIB queries.

- CSCdt97469

  Symptoms Downloading and configuring a cable modem using the vendor-specific option 128 inside a Data-Over-Cable Service Interface Specifications (DOCSIS) configuration file is not reliable.

  Conditions This symptom is observed on a Cisco uBR900 series router and a Cisco CVA100 series platform.

  Workaround Statically configure the Cisco uBR900 series router or the Cisco CVA100 series platform before or during deployment.

- CSCdt97942

  When there are multiple outbound dial peers for the same called numbers, a Cisco router rotates through the dialpeers attempting to set up the call. If any of the dialpeers has the **session target settlement** *provider-number* dial-peer configuration command configured and if the dial peer is not the first dial peer on the list, the call set up process fails. There is no workaround.

- CSCdu00064

  Symptoms Some prompts may not be displayed in Real-Time Streaming Protocol (RTSP) queued play.

  Conditions The conditions under which this symptom occurs are not known at this time.

  Workaround There is no workaround.

- CSCdu00656

  Symptoms Data may be written into the unused portion of the dual-port RAM of the memory of a Digital Signal Processor (DSP). This behavior does not affect voice calls.

  Conditions This symptom is observed on a Cisco 7200 series router.

  Workaround There is no workaround.

- CSCdu01905

  Symptoms The Dynamic Host Configuration Protocol (DHCP) portion of an Network Address Translation (NAT) pool IP address that is acquired automatically does not work.

Conditions This symptom is observed on a Cisco uBR900 series cable access router.

Workaround Assign the IP address and create the NAT pool statically.

- CSCdu01943

  Symptoms If the same **ip address dhcp client-id** *interface-name* interface configuration command is used on two different interfaces and if the same DHCP client-ID interface is specified on the two interfaces, the same MAC address is used for the Dynamic Host Configuration Protocol (DHCP) client-id. This behavior presents a problem because the second interface that is configured by this method does not acquire a DHCP address correctly, and DHCP renewal messages are not sent out correctly.

  Conditions This symptom is observed on an interface of a Cisco router.

  Workaround Use a different DHCP client-ID interface name for each interface that is configured by entering the **ip address dhcp client-id** *interface-name* interface configuration command.

- CSCdu02919

  Symptoms A universal gateway may pause indefinitely.

  Conditions This symptom is observed on a Cisco AS5400 when there is heavy ingress traffic on ISDN digital and modem calls over channel-associated signaling (CAS) trunks.

  Workaround There is no workaround.

- CSCdu02944

  Symptoms A cable modem interface may pause indefinitely in the “time of day” state when Routing Information Protocol (RIP) and access lists are used in the configuration.

  Conditions This symptom is observed on the cable modem interface of a Cisco uBR900 series that is running Cisco IOS Release 12.2.

  Workaround Erase the startup configuration or upgrade to a Cisco IOS release that contains the fix for this symptom.

- CSCdu03367

  Symptoms When voice calls are placed from an IP phone to the voice-mail server through the Cisco CallManager, the voice calls fail because the voice calls are treated as fax calls. The calls can be placed successfully they are placed from an analog phone.

  Conditions This symptom is observed when voice calls are made through the Cisco CallManager that is running the Media Gateway Control Protocol (MGCP) on a Cisco VG200 that is running Cisco IOS Release 12.2(1).

  Workaround There is no workaround.

- CSCdu03734

  A Cisco 2611 router that is running Cisco IOS Release 12.1(7) may fail to forward generic routing encapsulation (GRE) and Cisco Express Forwarding (CEF) Address Resolution Protocol (ARP) requests.

  Workaround: Disable CEF on the tunnel interface.

- CSCdu03790

  Symptoms A gatekeeper reloads when a gateway registers by using a long H.323 ID.

  Conditions This symptom is observed when a Cisco gateway is configured with a long H.323 ID by entering the **h323-gateway voip** *gatekeeper-ID* interface configuration command and when Cisco access token is enabled.

  Workaround Configure a shorter H.323 gatekeeper ID that has Cisco access token enabled.

- CSCdu03840

  Symptoms A Cisco router that is configured as a provider edge (PE) router cannot provide Internet access to the local Virtual Private Network routing and forwarding instance (VRF) by using a recursive static default route that has the "global" modifier (that points to an Internet gateway on the global routing table) if the core Multiprotocol Label Switching (MPLS) routers do not have a full Internet routing table installed in the Border Gateway Protocol (BGP)-free core. The problem is that such a route does not inherit the label for reaching the Internet gateway.

  Conditions This symptom is observed on a Cisco router that is running in an MPLS and VPN environment.

  Workaround Configure a generic routing encapsulation (GRE) tunnel between the PE router and the Internet gateway.

  Alternate Workaround Configure a PE router that is directly connected to the Internet gateway (as the PE-to-customer edge (CE) router link), and advertise the default route from that PE router in the VPN.

- CSCdu04010

  Symptoms The **connection trunk** voice-port configuration command does not work as expected.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.2(2)T.

  Workaround There is no workaround.

- CSCdu04236

  Symptoms A router that is running voice features may reload and display a message that is similar to the following:

  ```
  System was restarted by error - a Software forced crash, PC 0x60437124
  ```

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.2(2)T.

  Workaround There is no workaround.

- CSCdu04273

  Symptoms A router that is running voice calls that terminate on ISDN trunks may reload unexpectedly.

  Conditions This symptom occurs when the connected telephony PBX or switch sends an ISDN disconnect with a progress indicator (Disc with PI) message as the first response to the SETUP message. This message sequence is not normal. Cisco IOS software has been configured to check for this abnormal message sequence and to drop the call if this abnormal message sequence is detected.

  Workaround There is no workaround.

- CSCdu04555

  Symptoms Voice calls cannot be made from vendor-specific collaboration and conferencing client software out of a voice BRI interface to a Cisco 2600 series or Cisco 3600 series. An incorrect bearer capability is constructed.

  Conditions This symptom is observed on a Cisco 2600 series or Cisco 3600 series.

  Workaround There is no workaround.

- CSCdu05166

  The terminating end of a Cisco AS5300 access server that is using a channel-associated signaling (CAS) interface and E1 R2 may experience hung calls and hung digital signal processors (DSPs) when high voice traffic is present. There is no workaround.

- CSCdu05205

  Symptoms A voice gateway may reload under a load of 15 to 20 simultaneous voice calls.

  Conditions This symptom is observed under rare circumstances on a Cisco voice gateway and requires a special raw message size of 256 to 260 bytes and a rare condition that appends data to the raw message buffer.

  Workaround There is no workaround.

- CSCdu05357

  Symptoms When a Resource Pool Management Server (RPMS) is configured with a local Resource Pool Management (RPM) as a backup and the RPMS is unreachable, the fallback to the local RPM fails, and the calls are rejected.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.2.

  Workaround Set the TACACS+ timeout to three seconds or fewer by entering the **tacacs-server timeout** *seconds* global configuration command.

- CSCdu05377

  Symptoms A Tool Command Language (TCL) interactive voice response (IVR) 2.0 application that is running on a Cisco voice gateway may receive an incorrect status return code of ls_001 (call was looped) to a TCL IVR 2.0 voice application when a successful call occurs. The correct status code is ls_000 (successful call setup). Depending on the specific TCL IVR 2.0 application that is used, this symptom may cause the call to be disconnected.

  Conditions This symptom is observed when a TCL IVR 2.0 application is running on a Cisco voice gateway.

  Workaround Modify the TCL IVR script to treat the return status of ls_001 in the same way that it treats ls_000.

- CSCdu05378

  Toggling of the A-bit may occur on one of the DS0s if both ports of a voice support module on a Cisco 7200 series router are used with Foreign Exchange Office (FXO) Loopstart signaling.

  Workaround: Shut down port 1, reset the digital signal processor (DSP) farm, or avoid using the affected DS0.

- CSCdu05514

  Symptoms A router that has a Route Switch Processor (RSP) may reload when a subinterface is shut down during an unconfiguration event.

  Conditions This symptom is observed on a Cisco router that has an RSP.

  Workaround There is no workaround.

- CSCdu06328

  Symptoms A router may reload when it is using a Network Service Engine-1 (NSE-1) with Parallel Express Forwarding (PXF) enabled.

  Conditions This symptom is observed under rare circumstances when a Cisco router that has an NSE-1 and that has PXF enabled is operating under stress conditions.

  Workaround Disable PXF.

- CSCdu06398

  Symptoms On a Network Service Engine-1 (NSE-1) that has virtual template interfaces that are configured as Layer 2 forwarding tunnels, such as the Layer 2 Tunneling Protocol (L2TP), incoming packets are not forwarded via the tunnel and are instead terminated locally.

Conditions This symptom is observed on an NSE-1 of a Cisco router that has virtual template interfaces that are configured as Layer 2 forwarding tunnels. This symptom is observed when Parallel Express Forwarding (PXF) is enabled.

Workaround Disable PXF by entering the **no ip pxf** global configuration command.

- CSCdu06570

  Symptoms When the E.164 number is changed in a plain old telephone service (POTS) dial peer by using the DIAL-CONTROL-MIB MIB on a Cisco uBR900 series router, the E.164 number is changed in the running configuration but the change is not reported to the gatekeeper.

  Conditions This symptom is observed on a Cisco uBR900 series.

  Workaround There is no workaround.

- CSCdu06650

  A Cisco 2600 router that is running Cisco IOS Release 12.1(5)T5 may fail to install a new route in its routing table when an IP Security (IPSec) tunnel with Extended Authentication (Xauth) is configured between virtual private network (VPN) clients. There is no workaround.

- CSCdu07559

  Symptoms A software-forced reload may occur on a Cisco 12000 series when the conn_isp image is loaded.

  Conditions This symptom is observed on a Cisco 12000 series that has an Advanced Technology Attachment (ATA) disk in the first PCMCIA slot (disk0:).

  Workaround There is no workaround.

- CSCdu07812

  Symptoms A router may reload if the **clear crypto sa** EXEC command is entered while encrypted traffic is sent.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.2.

  Workaround There is no workaround.

- CSCdu08239

  A Cisco 2500 series router that is running Cisco IOS Release 12.2 and has IPSecurity (IPSec) enabled may reload with the following error message:

  ```
  %SYS-6-STACKLOW: Stack for process Crypto Support running low, 0/1000
  ```

  There is no workaround.

- CSCdu08630

  Symptoms A router may reload.

  Conditions This symptom is observed when access and change actions are performed simultaneously. A possible scenario is when traffic-shaping tables in a MIB are accessed at the same time when a service policy is removed.

  Workaround There is no workaround.

- CSCdu08652

  The terminating end of a Cisco AS5300 access server that is using a channel-associated signaling (CAS) interface (T1 recEive and transMit [E&M] and E1 E2) may pause indefinitely when high voice traffic is present. There is no workaround.

- CSCdu09746

Symptoms A port adapter or an I/O card that is based on a vendor-specific card is static, and there may be an insufficient number of receive particles. This condition does not change dynamically even when there is contention or when the interface runs out of particles. This condition causes throttling on the interface, and the buffers show a high number of buffers used as well as buffer failures for the interface buffer pool.

Conditions This symptom is observed on a port adapter or an I/O card that is based on a vendor-specific card. The Cisco IOS software that contains the fix for this symptom allows the driver to dynamically increase the pool (from the system memory) when particles are depleted.

Workaround There is no workaround.

- CSCdu10012

  Symptoms The virtual private dial-up network (VPDN) tunnel of a Cisco AS5300 may fail to become active on an asynchronous modem call when resource pooling is configured.

  Conditions This symptom is observed on the VPDN tunnel of a Cisco AS5300 when resource pooling is configured.

  Workaround There is no workaround.

- CSCdu10213

  A Label Edge Router (LER) that is running the c7200-p-mz.122-0.18 or the rsp-pv-mz.122-0.18 image of Cisco IOS Release 12.2(18) may experience tagged virtual circuits (TVCs) that are held in the "bindwait" state if router flapping occurs on the paths from the LER to some destinations that have TVCs configured. This problem occurs even when alternate paths exist.

  Workaround: Enter the **shut** command followed by the **no shut** command on the interfaces of the LER.

- CSCdu10553

  Phones that are connected to a Cisco 1750 router may sometimes fail to ring even though the debugs show that the phone is ringing. There is no workaround.

- CSCdu10933

  A Cisco 7500 series router or Cisco 12000 series router may experience a memory leak under any of the following conditions:

  – A Cisco router is running a Cisco IOS software release that has the fix for CSCds91198.

  – A Cisco router is running Label Distribution Protocol (LDP) or Tag Distribution Protocol (TDP).

  – A Cisco router has static recursive routes in the global table.

  – At least one prefix has two static recursive routes back to it.

  – A Cisco router that is configured to use route aggregation is using Null0.

  At some point, the prefix is resolved to go over two paths. One path is over a physical interface, and the other path is to Null0. For example, **ip route x/y next hop1 ip route x/y next hop2**. The route to nexthop1 points to a physical interface, and the route to next hop 2 points (at any time) to Null0.

  This condition can be detected by entering the entering the following show commands:

  – The **show cef linecard** command will show a large number of messages in the LowQ. The large number of messages is a possible indication.

  – The **show memory** command can help you to isolate the Program Counter (PC) that is responsible for the memory leak.

Workaround: If any of the following actions are performed, the messages will eventually drain off (releasing memory):

- The static route that causes the path to go to Null0 is removed.
- The recursive routes are changed to nonrecursive routes. (The next hop is configured as an interface, instead of an IP address.)
- The static route that is causing the path to go over the physical interface is removed. (This action should be used if it does not disrupt connectivity for real traffic.)

Alternate workaround: Perform these actions at startup.

- CSCdu11203

  A Cisco AS5300 access server that is using channel-associated signaling (CAS) and E1 or R2 end to end signalling may not work because there may not be Call Distributor Application Programming Interface (CDAPI) buffers to carry information from end to end. This problem may also cause system malloc errors. There is no workaround.

- CSCdu11362

  Symptoms The default behavior for not configuring the **cas-custom signal-end-to-end** controller configuration command (for an E1 channel group on a channelized E1 line) and the **cas-custom info-end-to-end** controller configuration command (for an T1 channel group on a channelized T1 line) is unpredictable.

  Conditions This symptom is observed on a Cisco AS5300 that is running Cisco IOS Release 12.2(1).

  Workaround There is no workaround.

- CSCdu11853

  Symptoms A Cisco 3662 may stop responding to console or Telnet sessions and reload. This symptom persists even after the Cisco 3662 is reloaded. The following message may be displayed on the console when this symptom occurs:

  ```
  convert_redirect_ocn_IE: illegal ieID passedencode_redirect _ocn_IE: invalid ieID!
  ```

  Conditions This symptom is observed on a Cisco 3662 that has a high-density voice network module (NM-HDV). The Cisco 3662 works normally after the NM-HDV is removed, but the Cisco 3662 reloads when an attempt is made to perform Voice over Frame Relay (VoFR) tandem switching without an NM-HDV module.

  Workaround There is no workaround.

- CSCdu12089

  Symptoms Multimedia Mail over IP (MMoIP) dial peers are not hunted and matched correctly in a Voice over IP (VoIP) fax and interactive voice response (IVR) configuration, and calls are abandoned.

  Conditions This symptom is observed on a Cisco AS5300.

  Workaround There is no workaround.

- CSCdu12143

  When the **atm ilmi-pvc-discovery** [**subinterface**] global configuration command is used, an available bit rate (ABR) permanent virtual circuit (PVC) created on a switch is programmed as an unspecified Bit Rate (uBR) on the connected router.

  Workaround: Manually configure the respective ABR PVC on the router.

- CSCdu12288

If an ATM traffic shaping is configured under a vc-class that exceeds the peak cell rate of normal ATM T1 and the ATM virtual circuit (VC) is attached to an Inverse Multiplexing over ATM (IMA) group, the traffic shaping may be lost after a router is reloaded. For example, the **vbr-rt** *peak-rate average-rate burst* ATM Virtual Circuit configuration command will be lost if the router is reloaded after a Variable Bit Rate Real-Time (VBR-rt) is configured under a vc-class with a peak cell rate that is greater than 1500 and then attached to the IMA group.

Workaround: Configure the traffic shaping configuration directly under the IMA interface instead of configuring it under the vc-class.

- CSCdu13771

  When an outdial test is performed on a Cisco AS5300 access server that is running Cisco IOS Release 12.1(5)XM1 or 12.1(5)XM3 using vendor-specific software, the media agent of the vendor software dumps the core after a few hours under load. This problem does not affect Cisco IOS Release 12.1(3a) or 12.1(5). There is no workaround.

- CSCdu13336

  Symptoms After a host route is inserted into the Virtual Private Network (VPN) forwarding table, the Node Route Processor (NRP) that acts as a Dynamic Host Configuration Protocol (DHCP) relay agent stores the route information on a database agent, such as an FTP, TFTP or Remote Copy Protocol (RCP) server. After the NRP is reloaded, it should read the route information from the TFTP, FTP, or RCP server and insert the host route in the correct VPN forwarding table. This last step is not performed.

  Conditions This symptom is observed on a Cisco 6400.

  Workaround There is no workaround.

- CSCdu13337

  Symptoms After a Dynamic Host Configuration Protocol (DHCP) request is received from a host, the Node Route Processor (NRP) that acts as the DHCP relay agent relays the packet to the DHCP server. This route is inserted as a host route in the correct Virtual Private Network (VPN) routing/forwarding (VRF) forwarding table on the DHCP relay agent. However, when a DHCP release is initiated by the same host, the DHCP relay agent must delete the route from the correct VRF forwarding table. This step does not occur, and the route remains indefinitely in the VRF forwarding table.

  Conditions This symptom is observed on a Cisco 6400.

  Workaround There is no workaround.

- CSCdu13345

  Symptoms A G.729 Voice over ATM (VoATM) call on a router may take up 13 kBps of bandwidth when the call is shown to take up 15 kBps of bandwidth. This behavior causes the router to allow more calls on the permanent virtual circuit (PVC) than the PVC can handle. Voice quality issues may be observed with calls as the PVC becomes overloaded with calls.

  Conditions This symptom is observed on a Cisco 3600 series.

  Workaround There is no workaround.

- CSCdu13507

  Symptoms Attribute 25 (class) is interpreted as an ASCII string. If a nonstring type is sent from a RADIUS server (for example, a hexadecimal number), it is possible that the contents of attribute 25 that are received in the access-accept packet are truncated when the contents of attribute 25 are sent in the accounting-start packet and the accounting-stop packet. When this symptom occurs, attribute 25 in the accounting-start and the accounting-stop packets is shorter in length than the access-accept packet.

Conditions This symptom occurs if the hexadecimal number contains a null octet (00). Anything after the null octet is truncated.

Workaround Reconfigure the RADIUS server to send data as an ASCII string.

- CSCdu13520

  Symptoms Bad voice quality may be observed when hairpin calls are made by using an interactive voice response (IVR) solution.

  Conditions This symptom is observed on a Cisco AS5300 when hairpin calls are made by using an IVR solution.

  Workaround There is no workaround.

- CSCdu14000

  In a Cisco SS7 Interconnect for Voice Gateways solution, if a AS5300 is reloaded after reload a traceback will be registered by the system. This only seems to occur on configuration where there are 2 SC2200s configured and running (active/standby). There is no workaround.

- CSCdu14016

  Symptoms Voice over ATM (VoATM) calls that use the G.729 codec do not always release bandwidth that is used in call admission when the calls are cleared. The output of the **show atm pvc** privileged EXEC command indicates that voice bandwidth usage is very high even though the router has very few calls or no calls at all. This symptom prevents other VoATM calls from being established over a link that in reality has very few calls.

  Conditions This symptom is observed on a Cisco 3600 series or Cisco 7200 series.

  Workaround There is no workaround.

- CSCdu14541

  A Cisco router that is running Cisco IOS Release 12.1(5)XS and serving a Layer 2 Tunneling Protocol (L2TP) Access Concentrator (LAC)/Network Access Solutions (NAS)/Packet Data Serving Node (PDSN) role in a virtual private dialup network (VPDN) network may signal the incorrect type of PPP authentication to the L2TP Network Server (LNS)/home gateway (HGW), causing PAP authentication to fail if both Password Authentication Protocol (PAP) and Challenge Handshake Authentication Protocol (CHAP) are configured. A “Short MD5 response received” error message is displayed when the **debug ppp authentication** EXEC command is configured on the LNS/HGW.

  Workaround: Configure only PAP authentication.

- CSCdu14641

  Symptoms Packets that are originated locally by a router are not correctly classified by class-based weighted fair queueing (CBWFQ) (service-policy out) when the packets are either labelled or tagged and when the outgoing interface has Multiprotocol Label Switching (MPLS) configured. CBWFQ puts those packets into the class-default class instead of to their proper configured class.

  Conditions This symptom is observed on a Cisco router that has a Route Switch Processor (RSP). This symptom does not occur if MPLS is removed from the interface on which the policy map is applied. In such a setup, both the coloring and the matching are correct.

  Workaround There is no workaround.

- CSCdu15053

  The tailend of a Tagged Virtual Circuits (TVCs) may remain active while the headend of a TVC becomes missing. This problem is triggered when TVCs are re-established when better routes become available due to change of topology. The new TVCs are set up normally but the old TVs are not cleaned up properly. There is no workaround.

- CSCdu16510

  The debit-mode call duration imposed by a vendor-specific gatekeeper is ignored in incoming calls from Voice over IP (VoIP) to public switched telephone network (PSTN). There is no workaround.

- CSCdu16866

  Symptoms A network access server (NAS) may fail to send back active call information for a Resource Pool Manager Server (RPMS) audit request.

  Conditions This symptom is observed with call traffic on a Cisco AS5300, Cisco AS5400, or Cisco AS5800.

  Workaround There is no workaround.

- CSCdu16973

  When cell-mode Multiprotocol Label Switching (MPLS) is used in a network of Cisco Catalyst 8500 switches with redundant paths, the conversion for MPLS after a routing change may take up to 4.5 minutes. Open Shortest Path First (OSPF) converges normally. There is no workaround.

- CSCdu17109

  A Cisco 7204 router with a Network Processing Engine (NPE-200) and a PA-A2-4E1XC-E3ATM ATM-Circuit Emulation Services (ATM-CES) port adapter that is running Cisco IOS Release 12.1(5) may display the following error message:

  ```
  No space for tbdP1: mp->data_block
  ```

  There is no workaround.

- CSCdu18148

  Symptoms The “least recent use” dial-peer hunting selection does not work as expected. The “least recent use” dial-peer hunting selection is defined as an option that refers to the destination pattern that has waited the longest since it was selected.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.2(1).

  Workaround There is no workaround.

- CSCdu18348

  A Cisco AS5850 universal gateway that is equipped with dedicated universal port (324 universal port) cards may reload after being stress tested for 20 minutes.

  Workaround: Use a command or script that does not use the slot number in referencing an interface or subinterface. The slot number is assumed to be the slot or card on which you are issuing the command to.

- CSCdu18693

  Symptoms The PPP per-user compression attribute (attribute 233) is not applied to asynchronous over ISDN with PPP EXEC type voice calls when virtual profiles are enabled.

  Conditions This symptom is observed on a Cisco AS5300.

  Workaround There is no workaround.

- CSCdu19229

  A Cisco 7200 series router that is running Cisco IOS Release 12.1, 12.0S or 12.2(1) with a Dual-port Fast Ethernet 100BaseTX (PA-2FE-TX) or a Cisco 7200 Input/Output Controller with 2 10/100 Auto-sensing Fast Ethernet Ports (C7200-I/O-2FE/E) may experience link flaps (link line status goes up and down) when certain protocols are running on an interface. The known triggers for the

link flaps are: IP address configurations/modifications, the addition of subinterfaces, the modification of line speeds and line states (duplex/half-duplex), and other protocol-dependent configurations. There is no workaround.

- CSCdu19272

  A 7206VXR router running IOS version 12.1(5)T1 with a PA-VXC-2TE1+ port adapter may reload with a bus error.

  The errors leading up to the bus error look like the following:

  ```
  %VPA-3-TDMFAIL: VPA-TDM, access failed at ../pas/if_vpa_tdm .h - line 179,
  arg1=0x00030003,arg2=0x00000023 -Traceback= 6154A068 6154A9CC 61541F54 615425E0
  61538120 6150D384 6150D48C 61529 758 61529F10 6151AE1C 6151B198 6061FA24 6061FA10

  %VPA-3-TSBUSY: VPA (bay 1), TDM timeslot is busy: ST=0/TS=1 7 -Traceback= 61549E88
  6154A9CC 61541FD4 615425E0 61538120 6150D384 6150D48C 61529 758 61529F10 6151AE1C
  6151B198 6061FA24 6061FA10

  %SYS-3-LOGGER_FLUSHED: System was paused for 00:00:00 to en sure console debugging
  output. === Start of Crashinfo Collection ===
  ```

  There is no workaround.

- CSCdu19431

  A Cisco AS5800 universal access server that is functioning as a Voice over IP (VoIP) gateway may reload with the following error message:

  ```
  sh log found some error msg of vfc 4 6d00h: %KINEPAK-3-NOMAILELEMENTS: Cannot create
  message buffer
  ```

  There is no workaround.

- CSCdu19482

  A Cisco 7200 series or 7500 series router with a Dual-Port Token Ring ISL Port Adapter (PA-2FEISL) that is running Cisco IOS Release 12.1(5) may experience intermittent ATM link failures with packets that are sent to the ATM interface driver that have a packet size of 0. There is no workaround.

- CSCdu19800

  On the voice compression module (VCM) module in a Cisco 3810 Multiservice Access Concentrator, when FAX calls are placed such that two fax calls are routed through a single digital signal processor (DSP), the FAX calls fail and no more FAXes (even single calls) can be handled by that DSP. Voice calls will still be handled successfully. There is no workaround.

- CSCdu20301

  A Gateway General Packet Radio Service (GPRS) Support Node (GGSN) may experience memory leakage after activating and deactivating Packet Data Protocol (PDP) contexts that involve RADIUS and Dynamic Host Configuration Protocol (DHCP) servers. There is no workaround.

- CSCdu20613

  Symptoms A router that is configured for Systems Network Architecture Switching Services (SNASw) may reload at the ndr_pufut_trigger_fsms process.

  Conditions This symptom is observed on a Cisco router that is configured for SNASw.

  Workaround There is no workaround.

- CSCdu20643

Layer 2 Tunneling Protocol (L2TP) and Generic Routing Encapsulation (GRE) tunnels fail to operate correctly on a Cisco 7500 series router that is running centralized Cisco Express Forwarding (CEF). L2TP tunnels fail completely, whereas packets switched through a GRE tunnel will be fast or process switched.

Workaround: Enable distributed CEF switching.

- CSCdu21945

  Packets may be dropped when a Cisco Network Services Engine (NSE-1) is used with Parallel eXpress Forwarding (PXF) in a Multiprotocol Label Switching (MPLS) tag switching environment. This problem affects only PXF in a MPLS switching environment on a Cisco NSE-1.

  Workaround: Disable PXF on NSE-1 or use another Network Services Engine.

- CSCdu22237

  When hardware virtual private network (VPN) modules are used on a Cisco 2600 or a Cisco 3600 router, the decryption of certificates may fail. This occurs when the certificates are greater than 1548 bytes in length. There is no workaround.

- CSCdu23093

  When calls are placed to a phone that has call forwarding enabled, the call is forwarded to the correct extension. However, if the originating party clears the forwarded call before it is answered, the call will continue to ring for a few minutes before it stops. There is no workaround.

- CSCdu24241

  A ds0-group is configured on a controller and a connection trunk is configured on a voice port. The ds0-group cannot be removed after the voice port is shut down and the **no ds0-group** command is entered. The message “shutdown the voice-port first as connection trunk is configured on it” is displayed. It is not possible to remove the ds0-group even after the controller is shut down. There is no workaround.

- CSCdu24289

  A Cisco AS5300 universal access server that is used as an originating gateway (OGW) and running a c5300-js-mz.122-1.2 image along with Tool Command Language (TCL) interactive voice response (IVR) 1.0 scripts may experience a memory leak after dropping active voice calls. This leak occurs approximately after 48 hours of testing with 3.5MB of memory. There is no workaround.

- CSCdu24690

  Symptoms When the data compression advanced integration module (AIM-COMPR4) is installed on a Cisco 3660, the router may reload if the **show pas caim coprocessor** *element-number* EXEC command or the **show pas caim dma** *element-number* EXEC command is entered with an invalid compression element number.

  Conditions This symptom is observed when the **show pas caim coprocessor** *element-number* EXEC command or the **show pas caim dma** *element-number* EXEC command is entered with an invalid compression element number on a Cisco 3660 that has an AIM-COMPR4.

  Workaround There is no workaround.

- CSCdu25749

  When a police command is used for one of the classes in the second level of the attached service policy on an interface that has committed access rate (CAR) and a hierarchical service policy (without any policing actions) enabled, CAR may stop functioning. There is no workaround.

- CSCdu26615

  The Versatile Interface Processor on a Cisco router may stop functioning when header compression is not configured on a router but is configured on a peer router.

Workaround: Ensure that header compression is configured on a router and its connected peer.

- CSCdu26619

  A router may transmit "ABCD=0000" on all time slots until the state changes when an E1 line is initialized. This may cause multiframe (MF) synchronization problems. There is no workaround.

- CSCdu27143

  Symptoms A router may reload.

  Conditions This symptom is observed on a Cisco router when the **copy** EXEC command is used with a nonexistent Advanced Technology Attachment (ATA) disk destination.

  Workaround Do not enter a nonexistent ATA disk destination when you enter the **copy** EXEC command.

- CSCdu27341

  Outgoing V.110 calls may cause a Cisco router to reload. There is no workaround.

- CSCdu27688

  The following traceback messages may be displayed when voice over IP (VoIP) is used between PBXs that are running the Q Signaling (QSIG) protocol.

```
%ALIGN-3-SPURIOUS: Spurious memory access made at 0x60D600F4 reading 0x0
%ALIGN-3-TRACE: -Traceback= 60D600F4 60D61190 603FD7CC 603FD7B8 00000000 00000000
00000000 00000000
[bounty:~]rsym c3640-is-mz.du05205.infoco.bigbuf.symbols
Reading c3640-is-mz.du05205.infoco.bigbuf.symbols
c3640-is-mz.du05205.infoco.bigbuf.symbols read in Enter hex value: 60D600F4 60D61190
603FD7CC 603FD7B8 00000000 00000000 00000000 00000000
0x60D600F4:ssaFacility(0x60d600ac)+0x48 0x60D61190:sess_appl(0x60d60db8)+0x3d8
0x603FD7CC:r4k_process_dispatch(0x603fd7b8)+0x14
0x603FD7B8:r4k_process_dispatch(0x603fd7b8)+0x0
0x00000000 0x00000000 0x00000000 0x00000000 Enter hex value:
```

  There is no workaround.

- CSCdu27748

  In Cisco IOS Release 12.2(1), the **forward-digits all** dial-peer configuration command does not work if there is a "+" sign in front of the dial string.

```
dial-peer voice 4013 pots
 destination-pattern +4013
 port 0/0
 forward-digits all
```

  Workaround: Do not precede a dial string with a "+" sign or use the **forward-digits** *num-digit* dial-peer configuration command to specify the number of digits to be forwarded.

- CSCdu27954

  Symptoms The stack for the EST message processing process may run low on memory when a Cisco AS5400 is populated with Layer 2 Tunneling Protocol (L2TP), TCPClear, and asynchronous PPP calls.

  Conditions This symptom is observed on a Cisco AS5400 when the Cisco AS5400 is populated with L2TP, TCPClear, and asynchronous PPP calls.

  Workaround There is no workaround.

- CSCdu28586

A Cisco 7200 series router that is running Cisco IOS Release 12.1(7) or 12.1(8) and acting as an active home agent (HA) with mobile IP home agent redundancy may reload or experience a memory leak if the clocks on the home agents (HAs) in the redundancy group or the clocks on the mobile nodes (MNs) and standby HA are out of synchronization.

Workaround: Keep the clocks on the HAs in the redundancy group and MNs in sync.

- CSCdu28717

  A different output is given each time a query is performed on the cdxCmCpeIpAddress variable of a Cisco uBR7200 universal broadband router with the **snmp walk** command. A sorted list of cable modem (CM)/customer premises equipment (CPE) is generated based on the CM/CPE connected to the Cable Modem Termination System (CMTS) at the moment when an SNMP query is sent to any column of cdxCmCpeTable. CM or CPE that are not connected to the CMTS may still be listed in the "reused cmcpe" list.

  Workaround: Wait for the "old cmcpe" list to expire. A new list will be generated based on current CM/CPE connections.

- CSCdu30046

  Symptoms With the current implementation of Resource Availability Indication (RAI) in Cisco IOS software, a gateway may take two seconds to notify the gatekeeper when the high-resource threshold has been crossed. If the call-arrival rate is high, the gateway may start dropping calls before the RAI is sent to the gatekeeper.

  Conditions This symptom is observed in a network that has a gatekeeper that is connected to a gateway.

  Workaround There is no workaround.

- CSCdu30379

  The **ds0 busyout** *ds0* controller configuration command does not work when it is configured on a controller interface. Even though there may only be a few time slots that are "busied out," all calls (including calls destined for IDLE timeslots) will fail.

  Workaround: Use the **test voice port** privileged EXEC command to force the port into a busyout state.

- CSCdu30418

  A Cisco 2600 series or 3600 series router using a high density voice module that has voice peers or the Real-Time Protocol (RTP) configured may reload due to a segmentation violation (SegV) exception error. The reload may occur when Frame relay traffic shaping is configured, the fast packet is deferred, and the input driver which owns the packet reuses the packet before the packet is transferred to the digital voice network module for the router. If traffic shaping is enabled, the reload may occur if the other two events unfold as described. This problem is a rare event. There is no workaround.

- CSCdu30913

  A Cisco router reloads when IVR (interactive voice response) is playing dynamic Real Time Streaming Protocol (RTSP) audio streams with inter silence, for example "media play 1.au %s1000 2.au".

  Workaround: Do not use RTSP for dynamic prompts; use TFTP or FLASH instead.

- CSCdu31530

The T1 controllers may remain after they are removed from a T3 channel of a Cisco AS5850 universal access server. The running configuration file on the router does not show the removed T1 channels or the corresponding D channels (if a PRI group is configured). The D channels are still displayed when the **show isdn status** privileged EXEC command is entered.

Workaround: Remove the PRI group individually from each T1 controller before removing the T1s from the T3.

- CSCdu32033

  Traceback and spurious memory access may occur when an excessive number of data-over-cable service interface specification (DOCSIS) ping requests are issued and have to be queued by MAC. The error messages do not have any impact on normal operations. There is no workaround.

- CSCdu32284

  In a Cisco AS5800 universal access server that is running Cisco IOS Release 12.2(1), PPP may fail to start for modem calls. This occurs when a UPC324 card is reconfigured from Router-shelf1 to another Router-shelf2 in a split shelf mode. There is no workaround.

- CSCdu32336

  Internet Key Exchange (IKE) negotiation may fail with the following error message when Rivest, Shamir, & Adleman (RSA) signatures are configured and a hardware accelerator (Integrated Services Adapter [ISA] or Chaos) is used:

  ```
  01:47:36:. CryptoEngine0: calculate pkey hmac for conn id 0
  01:47:36: ISAKMP (0:3): error from CRYPTO_DH_SHARED_SECRET (MM_SA_SETUP)
  01:47:36: -Traceback= 616F3564 616E6384 616E6570 616E44E8 616DE7D4 616DF3A0 605B979C
  605B9788
  ```

  Workaround: Disable hardware acceleration.

- CSCdu32374

  The **no ip cef table inconsistency-check** global configuration command is used to disable Cisco Express Forwarding (CEF) inconsistency checkers. When the incomplete form of the command, **no ip cef table,** is entered on the command-line interface (CLI), the **no ip cef** global configuration command is executed instead and CEF is disabled. To reenable CEF, globally configure the **ip cef** global configuration command or the **ip cef distributed** global configuration command.

  Workaround: Do not enter the incomplete, **no ip cef table** command.

- CSCdu32972

  After a Cisco AS5800 access server is booted, some of the E1 ports may initialize incorrectly, resulting in excessive linecode violations and bit errors on the received signal, even when the incoming signal is clean. T1 and T3 ports are not affected by this problem.

  Workaround: This problem cannot be cleared by shutting down the E1 port. Reload the access server to clear the condition.

- CSCdu33529

  When a router interface is administratively shut down the switch or other connecting device will still show the router as connected when it is not. This problem exists only on certain port adapters (PA-2FE-TX, PA-2FE-FX, and PA-4E).

  Workaround: Physically disconnect and reconnect the cable between the devices to force both sides of the link down.

- CSCdu33568

Symptoms Some DS0 channels may pause indefinitely in the EM_WAIT_FOR_ANSWER state when a DS0 group is configured with recEive and transMit (E&M) wink-start signaling. The DS0 channels that have paused indefinitely are displayed when the **show voice call summary** EXEC command is entered.

Conditions This symptom is observed when the **ds0-group 1 timeslots 1-24 type e&m-wink-start** controller configuration command is configured under a T1 or E1 controller on which voice calls have been running for a few days. Some of the DS0 channels are stuck in the EM_WAIT_FOR_ANSWER state.

Workaround There is no workaround.

- CSCdu33835

  Symptoms Spurious memory access may be reported on the console when a continuity test (COT) is requested before a voice card is in service.

  Conditions This symptom is observed only when the **test-cot** command is entered before a voice card is in service. This symptom is observed on Cisco AS5300 platforms.

  Workaround Enter the **test-cot** command only after the voice card is in service.

- CSCdu34038

  Fancy queueing cannot be configured on X.25 encapsulated serial interfaces. This problem affects all platforms. There is no workaround.

- CSCdu34122

  Symptoms A voice port may be lost when the primary Non-Facility Associated Signaling (NFAS) group is removed by entering the **no pri-group** controller configuration command without first removing the secondary NFAS group. When this symptom occurs, an error message indicates that other members of the NFAS group must be removed before removing the primary NFAS group.

  Conditions This symptom is observed on a Cisco AS5400.

  Workaround Remove the primary NFAS member only after the secondary NFAS group is removed.

- CSCdu34261

  When a Hot Standby Router Protocol (HSRP) router with a higher priority is added to a network, the HSRP state changes continuously from “Active” to “Speaking,” from “Speaking” to “Standby,” and from “Standby” to “Active.” When the HSRP state changes from “Active” to “Speaking,” the router resets the interface in order to remove the HSRP MAC address from the interface MAC address filter. The switch detects this link state change on the interface, and a Spanning Tree Protocol transition takes place. The spanning tree takes 30 seconds (twice the default Forward Delay time of 15 seconds) to transition the port into the Forwarding state.

  Workaround:

  – Ensure that there are no packet storms on the network (IPX is prone to do this).
  – Change the duplex setting of the switch to “auto.”
  – Configure the **set spantree portfast** *mod_num*/*port_num* **enable** switch command on the switch ports. See Troubleshooting the Catalyst 5000 at: http://www.cisco.com/warp/public/784/packet/oct99/cat5000.html
  – Change the spanning tree and/or HSRP timers so that the spanning tree Forward Delay (default 15 secs) is less than half the HSRP Holdtime (default 10 seconds)
  – Configure the **standby use-bia** command.

- CSCdu34352

A Cisco router that is running Cisco IOS Release 12.2(1.2) may experience an Internet Security Association and Key Management Protocol (ISAKMP) security association (SA) failure. The following message may be displayed in the debug log:

```
ISAKMP (0:2): Notify has no hash. Rejected
```

There is no workaround.

- CSCdu34385

  An occasional call may fail because the AS5300 and the remote router attempt to negotiate an incorrect value for the codec. An incorrect codec value 0x20000 may be attempted to negotiate, and result in remote phone ringing once, and the call getting dropped. There is no workaround.

- CSCdu34741

  When the links between a Cisco SC2200 Signaling Controller and a Cisco AS5800 universal access gateway are down in a Signaling System 7 (SS7) configuration that is running Cisco IOS Release 12.1(5)XM3, incoming Voice over IP (VoIP) calls may not be immediately rejected with a "no circuit/channel available" cause. A recovery timer is set instead. When the timer expires, the call is released with a "Recovery on Timer Expiry" cause code. This problem occurs only when the links between a Cisco SC2200 Signaling Controller and a Cisco AS5800 universal access gateway are down.

  If the links are up, but all channels are blocked so that the output of the **show isdn service** privileged EXEC command indicates maint_pend, the VoIP calls are released immediately with cause "no circuit/channel available". There is no workaround.

- CSCdu35122

  Symptoms A router may pause indefinitely if the qos/sr_cbqosmonmib MIB is acquired twice.

  Conditions This symptom is observed on a Cisco router. This symptom was introduced after Cisco IOS Release 12.2(1)

  Workaround There is no workaround.

- CSCdu35334

  ISDN BRI ports that are configured on a basic-net3 and no-DID (Direct Inward Dialing) router may not provide a secondary tone on the incoming calls if overlapping signaling is used. There is no workaround.

- CSCdu36136

  A Spatial Reuse Protocol (SRP) port adapter may not recover from a data parity error on a peripheral component interconnect (PCI) bus and may remain in an unstable state until an online insertion and removal (OIR) is performed on the SRP port adapter or after the router is reloaded.

  Workaround: Perform an OIR on the SRP port adapter or reload the router.

- CSCdu36422

  When running crypto with TED, the crypto interface will become wedged immediately after IKE negotiation starts. All the packets stuck in the input buffer on that interface are ISAKMP packets. There is no workaround.

- CSCdu37392

  On ISDN BRI ports that are configured for basic-net3 and no Direct Inward Dialing (DID), a router may fail to send a CALL_PROCEEDING message. This condition occurs if the router receives an overlapped signaling SETUP message with no called-number digits and then receives the first INFORMATION message with the first called-number digit. The router matches an outgoing

dial-peer prematurely and starts an outgoing dial-peer prematurely and starts an outgoing Voice over IP (VoIP) call leg setup. The VoIP leg setup may fail because the remote VoIP gateway does not receive a complete call number. There is no workaround.

- CSCdu37543

  A Cisco router that is running Cisco IOS Release 12.1, 12.1T, or 12.1E and configured as a Multiprotocol Label Switching (MPLS) virtual private network (VPN) Provider Edge (PE) router using an IP loopback address of (a.b.c.d) as the Tag Distribution Protocol (TDP) router ID in a network that has additional loopbacks that share the same (a.b.c.d) IP address (which are bound to VPN routing/forwarding [VRF] instance) may experience an uncommanded change in the TDP router ID on the router when an additional loopback interface is shut down or deleted. This problem may interrupt MPLS traffic in a given network.

  Workaround: Avoid configuring any interfaces on an MPLS PE router that is bound to a VRF instance to share an IP address that is also used as TDP router ID on a router in a network.

- CSCdu37946

  Tagged Virtual Circuits (TVCs) and Label Virtual Circuits (LVCs) are created but there is no connectivity. The problem occurs in a network that is connected to two label switch routers (LSRs). The network has a limit on the virtual channel identifier (VCI) space but there is currently no way of limiting the VCI space used by the Tag Distribution Protocol (TDP) or the Label Distribution Protocol (LDP) in ATM and Tag-controlled ATM (TC-ATM) interfaces. There is no workaround.

- CSCdu38395

  A Cisco router that is running Cisco IOS Release 12.0(17.1)S, 12.1(3.1), or 12.2(3.1) or later that is configured for HSRP (Hot Standby Router Protocol) on only certain Inter-Switch Link (ISL) subinterfaces may experience spurious memory access. This may occur when the HSRP is not configured on all ISL subinterfaces.

  Workaround: Configure HSRP on all ISL subinterfaces.

- CSCdu38976

  A Cisco 3640 router that is running Cisco IOS Release 12.2(1) may set up two calls at the same time after experiencing the following error:

  ```
  ISDN ERROR: Module-CCPRI Function-CCPCC_CallRoutingOut Error -Unknown event received
  in message from L3: 76
  ```

  There is no workaround.

- CSCdu41056

  When Multilink PPP over ATM (MLPoATM) is configured, a Cisco router may reload under heavy data transfer conditions. A “stack running low” message may also appear.

  Workaround: Avoid congesting the interface.

- CSCdu41173

  Outgoing calls through the Foreign Exchange Office (FXO) port on the Cisco ICS7750 Multiservice Route Processor (MRP) may fail if the called number is more than ten digits (for example, a long distance call). This condition occurs in Cisco IOS Release 12.2(1). There is no workaround.

- CSCdu43216

  In Cisco IOS Release 12.1 T, the **ip audit po protected** *ip-addr* global configuration command will list only the first subnet that is identified. Every subsequent subnet that is entered will be the same as the first. The configuration appears as:

  ```
  ip audit po protected 209.165.200.225 to 209.165.200.254
  ip audit po protected 209.165.200.225 to 209.165.200.254
  ```

There is no workaround.

- CSCdu43811

  Symptoms A router that is running Internet Key Exchange (IKE) and acting as a receiver will use UDP 500 as a destination port even if the original source port is different.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.2.

  Workaround There is no workaround.

- CSCdu44614

  Symptoms Cisco voice routers are not able to configure the **progress_ind alert enable** *pi-number* dial-peer configuration command on Voice over IP (VoIP) dial peers.

  Conditions The **progress_ind alert enable** *pi-number* dial-peer configuration command is not available on VoIP dial peers. The command is only available on plain old telephone service (POTS) dial peers.

  Workaround There is no workaround.

- CSCdu45683

  Symptoms An originating gateway will not forward arbitrary H.235 Clear Tokens that are received from an admission confirmation (ACF) message into the outgoing H.225 setup message. Also, a terminating gateway will not forward Clear Tokens from the incoming setup message to the answer call admission request (ARQ). Any arbitrary feature or third party application that relies on these token transfers will not work.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.2.

  Workaround There is no workaround.

- CSCdu48061

  When the cable interface resets on a Cisco uBR905 or a Cisco uBR925 universal broadband router, two processes called “Crypto Hardware” are created. Memory malloc error messages may appear or the router may reload if the cable interface flaps for a prolonged period of time. There is no workaround.

- CSCdu48296

  On Media Gateway Control Protocol (MGCP) controlled calls, echo cancellation is set to “OFF” by default. An echo is heard on the voice path. This condition affects Cisco IOS Release 12.1(5)T, 12.2, and 12.2T. There is no workaround.

- CSCdu48652

  Voice calls may pause indefinitely when Flash MIBs for a vendor-specific Flash device located in slot 0 or slot 1 of a Cisco 7200 series router are queried. Depending on the protocols that are running, the calls may hang indefinitely or clear after a short period of time.

  Workaround: Avoid querying the Flash device or remove the cards located in slot 0 or slot 1.

- CSCdu48926

  Cisco Express Forwarding (CEF) becomes disabled on a Generic Routing Encapsulation (GRE) tunnel interface when a key is configured with the **tunnel key** *key-number* interface configuration command. The tunnel interface switches to the next available switching mechanism which is process switching (fast switching has no support for GRE tunnel options).

  Workaround: To reenable CEF or fast switching on the tunnel interface, remove the tunnel key. This workaround cannot be used if a tunnel key is required with CEF switching on the GRE tunnel.

- CSCdu49594

Symptoms If a router has the same IP address configured on two interfaces in which one of the interfaces is in shutdown state and is configured to run a Tag Distribution Protocol (TDP) or Label Distribution Protocol (LDP) session, the peer may have Tag Forwarding Information Base (TFIB) entries that are untagged.

Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.0(16.03)ST or Release 12.0(17)ST.

Workaround Remove the duplicate IP address from the interface that has been shutdown to correct this behavior.

- CSCdu50551

  Symptoms The **compand-type** {**u-law** | **a-law**} voice port configuration command should not be accessible from a Foreign Exchange Station (FXS) port, a Foreign Exchange Office (FXO) port, or an analog port of a Cisco VG200.

  Conditions This symptom is observed on the analog FXS and FXO ports of a Cisco VG200.

  Workaround Do not configure the **compand-type** {**u-law** | **a-law**} voice port configuration command for the analog interfaces.

- CSCdu50738

  Under certain conditions, entering the **clear crypto sa** EXEC command may cause a router to reload. There is no workaround.

- CSCdu52879

  A Cisco 7100 series or 7200 series router that is running Cisco IOS Release 12.2 may reload if the router runs out of memory. There is no workaround.

- CSCdu53681

  A Cisco 3600 router that is using recEive and transMit (E&M) wink start may not pause for a sufficient amount of time before sending digits when it receives a wink. There is no workaround.

- CSCdu53890

  A H.323 gateway make leak H.245 sockets after the listening sockets have been accepted or connections have been established from listening state. There is no workaround.

- CSCdu54507

  Symptoms A router may reload after the **no ip cef** global configuration command is entered after all bindings (Headend, Tailend, and Transit virtual circuit [VC]) are established on a Label Switch Controller (LSC).

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.1(5)T9, 12.2(2), or Release 12.2(2)T

  Workaround There is no workaround.

- CSCdu54754

  In Cisco IOS Release 12.2(1b), calls originating from ISDN (PRI or BRI) trunk may experience problems with codecs and playout values. The following are descriptions of the problems:

  1) VTSP-3-DSP_TIMEOUT and VTSP-3-DSPALARM error messages generated when G723 codecs are configured. This problem is easily reproducible, and results in call failures 100% of the time.

  2) When G711 codec should be negotiated, G728 is being selected instead.

  3) When adaptive jitter buffering is selected, the router is not using this method, but is using a constant 15 msec.

There is no workaround.

- CSCdu55203

  A Cisco 7100 or a Cisco 7200 series router that is using an Integrated Services Adapter (ISA) or an ISA encryption card and running Cisco IOS Release 12.1(5A)E2 may experience an input Q wedge. This occurs when encrypted packets enter the router via an unencrypting interface. There is no workaround.

- CSCdu56186

  A Resource Reservation Protocol (RSVP) and signal-only call is cleared by a terminating gateway after the gateway receives a Admission Confirm (ACF) message from the gatekeeper. This is the same problem as that reported with CSCdt66034. The fix for CSCdt66034 does not include the gatekeeper configuration case. There is no workaround.

- CSCdu57137

  Symptoms If the **write erase** command is entered on a Cisco 7200 series that is running Cisco IOS Release 12.2(3), the configuration register is set to 0x0. This condition may cause the router to pause at the ROM monitor (ROMmon) mode the next time the router is reloaded.

  Conditions This symptom is observed on a Cisco 7200 series that is running Cisco IOS Release 12.2(3).

  Workaround The configuration register must be changed to the desired setting to avoid this issue. Enter the **confreg 0x2102** ROMmon command or enter the **config-register 0x2102** global configuration command.

- CSCdu60508

  Symptoms When a Cisco Gateway General Packet Radio Service (GPRS) Support Node (GGSN) is configured to send Echo Request messages, the GGSN may periodically fail to receive the Echo Response message from a peer Serving GPRS Support Node (SGSN) and the GGSN will resend the Echo Request messages to the SGSN. The subsequent Echo Request messages contain some useless bytes after the regular message. The incorrect Echo Request messages will be ignored by SGSN, and this causes the GGSN to delete the existing policy decision point (PDP) contexts associated with this SGSN after several unsuccessful retries (according to the R3-Request parameter).

  Conditions This symptom is observed when a Cisco router that is that is running Cisco IOS Release 12.2(2.04) when Cisco Gateway General Packet Radio Service (GPRS) Support Node (GGSN) is configured to send Echo Request messages.

  Workaround There is no workaround.

- CSCdu60632

  Symptoms If a virtual trunk for Voice over IP (VoIP) is configured to use the **connection trunk** voice-port configuration command, the router will reload unexpectedly each time it attempts to activate the trunk. If the **connection trunk** voice-port configuration command is in the startup-config, the router may reload unexpectedly immediately after the router reloads.

  Conditions This symptom is observed on a Cisco 7200 series that is running the c7200-is-mz.122-2.5 image of Cisco IOS Release 12.2(2.5).

  Workaround Avoid configuring the **connection trunk** voice-port configuration command when the c7200-is-mz.122-2.5 image is used.

- CSCdu61932

  A Cisco 2600 or Cisco 3600 router that is running Cisco IOS Release 12.2(1.2) or a later release with a vwic-1mft or vwic-2mft installed may experience dropped pings, low audio quality (crackling, pops), and controller errors (line code violations, slips).

Workaround: Use Cisco IOS Release 12.2(1) or a release that precedes Release 12.2(1.2).

- CSCdu62489

  Symptoms Spurious accesses may cause a high CPU utilization condition on a router after multicast fast switching is enabled.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.2(2.5).

  Workaround There is no workaround.

- CSCdu68873

  A Cisco 3640 router may reload after receiving a voice call that cannot be set up because of insufficient bandwidth allocation by Resource Reservation Protocol (RSVP). There is no workaround.

- CSCuk22563

  A Cisco gateway may experience a buffer overflow and a loss of dual tone multifrequency (DTMF) digits at the Digital Signal Processors (DSP) when the gateway is receiving out-of-band H.245 signals. There is no workaround.

- CSCuk23290

  Symptoms The output of the **show ip cef inconsistency record** command may not include expected event log entries for the recorded inconsistency occurrences.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.0 S, 12.0 ST, 12.1, or Release 12.2.

  Workaround Enter the **no ip cef table consistency-check type lc-detect** or the **no ip cef table consistency-check** global configuration commands instead.

- CSCuk23524

  A Cisco 12000 Internet Router may experience some missing prefixes in the Cisco Express Forwarding (CEF) tables on some line cards after the router is reloaded or when an online insertion and removal (OIR) is performed on a line card.

  Workaround: Enter the **clear cef linecard** command on each slot after a reload or OIR to ensure that the CEF table is correctly downloaded.

- CSCuk23934

  When normal activation is started on an out-of-service link by the remote-end sending SIN, the virtual switch controller (VSC) begins normal alignment by returning a SIN. If the remote-end of the link then indicates an emergency alignment by sending SIE during the normal proving period, then the VSC should enter the emergency proving mode and complete the proving period within timer T4e (400 to 600msec). The VSC, however, continues the normal proving period and the link is eventually brought into service. (T4n defaults to 2.3 seconds as defined in GR–246–CORE Chapter T1.111.3.) There is no workaround.

Novell IPX, XNS, and Apollo Domain

- CSCdp28700

  Symptoms Alignment correction messages may be displayed if Internetwork Packet Exchange (IPX) encapsulation is changed from the Service Advertising Protocol (SAP) to the Subnetwork Access Protocol (SNAP) on a dot1q subinterface.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.0(5)W5.

Workaround There is no workaround.

- CSCds54821

  Symptoms The memory on a router may be fragmented because of Internetwork Packet Exchange (IPX).

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.0(12).

  Workaround There is no workaround.

- CSCdt15315

  Symptoms An Internetwork Packet Exchange (IPX) network cannot be configured on ATM point-to-point interfaces. The Service Advertising Protocol (SAP) is the default encapsulation that is used for ATM point-to-point interfaces but it cannot be configured.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.1(6.04), 12.2(0.5), 12.2(1a), or Release 12.2(0.5)T.

  Workaround There is no workaround.

- CSCdt19076

  Symptoms When Internetwork Packet Exchange (IPX) routing is used when there are multiple paths to a destination and if one path fails, the second route will be installed in the Layer 3 routing table but the lower layer switching table will not have the new route.

  Conditions This symptom is observed on a Catalyst 8500 and platforms that are based on the Catalyst 8500 family Layer 3 Ethernet switching system.

  Workaround There is no workaround.

- CSCdt19674

  Symptoms A software-forced reload that is caused by a Simple Network Management Protocol (SNMP) configuration may occur on a router and the following error message may be displayed when the **show version** EXEC command is entered:

  ```
  System returned to ROM by error - a Software forced crash, PC 0xXXXXXXXX at 10:32 ****
  ```

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.2(0.5) or Release 12.2(0.5)T

  Workaround Disable SNMP on the router.

- CSCdt19743

  Symptoms Alignment warnings may be observed on platforms that are running the Internetwork Packet Exchange (IPX) routing protocol. The warnings point to Routing Information Protocol (RIP) request handling, IPX Simple Network Management Protocol (SNMP) handling, and Services Advertising Protocol (SAP) Get Next Server (GNS) request handling.

  Conditions This symptom is observed on a Catalyst 6000 and platforms that are the IPX routing protocol and that is running Cisco IOS Release 12.0(13)W05(19).

  Workaround There is no workaround.

- CSCdt58464

  Symptoms Old Internetwork Packet Exchange (IPX) per-user profiles are not removed when the **access-profile** [**merge**] EXEC command is entered.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.2(0.12)T. This symptom does not occur when Cisco IOS Release 12.2(0.3)T is used.

  Workaround There is no workaround.

- CSCdt67661

  Symptoms A router may reload after the Internetwork Packet Exchange WAN (IPXWAN) is enabled with the IPX protocol.

  Conditions This symptom is observed after IPXWAN is enabled together with the IPX protocol on a Cisco router that is running Cisco IOS Release 12.1(7.02).

  Workaround There is no workaround.

- CSCdt68934

  Symptoms A mid-size buffer is lost when a Service Advertising Protocol (SAP) general query is sent to a network that has Routing Information Protocol (RIP) disabled by entering the **ipx router rip** global configuration command and the **no network** router configuration command.

  Conditions This symptom is observed on a Cisco AS5300 that is running Cisco IOS Release 12.1(7).

  Workaround Do not disable RIP or enter the **no ipx linkup-request sap** interface configuration command.

Protocol Translation

- CSCdj33960

  Symptoms The protocol translator may authenticate a user using the privilege level of the previous session if you perform the following steps:

  a. Enter the **aaa new-model** global configuration command.

  b. Enter the **translate** command with a login option.

  c. Connect to a Cisco router, enable privileged commands, and log out.

  d. Connect to the router using a translation session.

  If the connection established in step d uses the vty that was used in step c, it will inherit the privilege level that is established in step c.

  Conditions This symptom is observed on a Cisco router.

  Workaround There is no workaround.

- CSCds84675

  Symptoms The failure of the TCP stream option causes protocol translation X.25 to TCP test to fail.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.1(5.03)T.

  Workaround There is no workaround.

- CSCdt35347

  Symptoms If the TCP side terminates immediately after sending data, any data in the router that is yet to be transmitted will be lost. This symptom is likely to occur after a large amount of data is sent by the TCP side.

  Conditions This symptom is observed when X.25 to TCP is configured with the **x29 inviteclear-time** global configuration command set to none.

  Workaround There is no workaround.

- CSCdt44838

Symptoms Permanent virtual circuit (PVC) protocol translation commands that have the max-users option specified are lost after a router is reloaded.

Conditions This symptom is observed on a Cisco router.

Workaround Reenter the PVC translation commands without specifying the max-users option.

TCP/IP Host-Mode Services

- CSCds92731

  If you configure “ip finger rfc-compliant” on a Cisco router and more than 20 users are logged on the router, a finger request from a host pauses indefinitely and steals the vty.

  Workaround: Do not configure “ip finger rfc-compliant” on the router.

- CSCdt28166

  Symptoms Only output packets are displayed when the **debug ip-tcp-packet** *line* EXEC command is entered.

  Conditions This symptom is observed on a Cisco router.

  Workaround There is no workaround.

- CSCdt39380

  Symptoms High CPU utilization may be observed on a Cisco router that has Path MTU discovery (PMTUD) enabled.

  Conditions This symptom is observed on a Cisco router particularly when maximum segment size (MSS) packets are sent frequently as with the Border Gateway Protocol (BGP) when there are changes in the maximum transmission unit (MTU) in the underlying topology.

  Workaround Disable PMTUD.

  Alternate Workaround Configure the **ip tcp path-mtu-discovery age-timer infinite** global configuration command.

- CSCdt50932

  When a Cisco router runs out of socket resources because of thousands of calls or connections, the system CPU utilization stays at 90 percent or more and all subsequent calls or connections are rejected. There is no workaround.

- CSCdt64533

  Symptoms The User Datagram Protocol (UDP) port 1985 of a Cisco 7206VXR may be opened inadvertently from a UNIX server.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.1(4).

  Workaround Configure an access list to restrict traffic to UDP port 1985.

Wide-Area Networking

- CSCdp70710

  Symptoms A CPU hog may be observed and Frame Relay links and circuits may fail to come up when a T1 line failure or a line status change occurs on a Cisco 7500 series.

Conditions This symptom is observed on a Cisco 7500 series that has hundreds of Frame Relay point-to-point subinterfaces in a large scale configuration that is built on channelized T1s (CT1s) subinterface and data-link connection identifier (DLCI) logging messages are disabled but the **snmp-server enable traps frame-relay** global configuration command is enabled.

Workaround Apply the three following steps for the workaround.

a. If Cisco IOS Release 12.0 is used, redirect the console logging messages to a system or a network host while the router is in the global configuration mode.

b. If Cisco IOS Release 11.1 is used, disable subinterface and DLCI logging messages by entering the **no logging event subif-link-status** interface configuration command and the **no logging even dlci-status-change** interface configuration command.

c. Disable the **snmp-server enable traps frame-relay** global configuration command.

- CSCdp84272

  Symptoms The **vpdn ip udp ignore checksum** command is not processed correctly when it is entered on a router.

  Conditions This symptom is observed on a Cisco router.

  Workaround There is no workaround.

- CSCdr15509

  Symptoms A buffer leak in the small memory buffer pool may cause a router may run out of small buffer memory.

  Conditions This symptom is observed on a Cisco 3640 that is running Cisco IOS Release 12.0(9).

  Workaround There is no workaround.

- CSCdr20772

  Symptoms A router may reboot when a dialer map is unconfigured while the dialer carrier timer is running.

  Conditions This symptom is observed on a Cisco router that has configured virtual private dial-up network (VPDN) tunnels.

  Workaround There is no workaround.

- CSCdr59741

  Symptoms When an ISDN Bandwidth Allocation Protocol (BAP) client makes a call request (CallReq) to add a 64 Kb ISDN link, the call terminates at a virtual profile and Cisco IOS software sends a negative acknowledgment that cites “No links of specified type(s) available” as a reason.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.1(2a).

  Workaround Do not use a virtual profile.

- CSCdr93895

  Symptoms Process enqueue errors and incorrect memory reference errors may occur if output Link Access Procedure, Frame Relay I (LAPF I) frames must be queued internally.

  With the exception of Cisco IOS Release 12.0 S, LAPF I frames are used only for Frame Relay switched virtual circuit (SVC) connection control messages. Because of the nature of Layer 3 operations, LAPF I enqueueing does not occur under a Frame Relay SVC and this error has no impact on current Frame Relay SVCs.

  Conditions This symptom is observed when a new feature that employs the use of LAPF with bursty I frame output was developed in Cisco IOS Release 12.0 S. This symptom was fixed before the new feature was released.

Workaround There is no workaround.

- CSCds03170

  Symptoms Incoming ISDN calls do not work on a router that uses the "VN3" ISDN switch type

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.1(3).

  Workaround There is no workaround.

- CSCds07438

  Symptoms The dialer idle-timeout does not timeout if it is misconfigured.

  Conditions This symptom is observed when asynchronous dial-on-demand routing (DDR) is configured on a Cisco router that is running Cisco IOS Release 12.0(7)T.

  Workaround Configure the **absolute-timeout** *minutes* line configuration command on the line.

- CSCds11520

  Symptoms The translation rule does not find a match to any available type of number (international, national, subscriber, abbreviated, or unknown).

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.1(3)T, 12.1(05)T, or Release 12.1(3)XI.

  Workaround There is no workaround.

- CSCds19622

  Symptoms A Cisco 3600 series may display the following error messages:

  ```
  %SYS-2-BADSHARE: Bad refcount in datagram_done, ptr=3D625093BC, count -Traceback
  602FBF0C 6096270C 60961BBC 60962BE4 6029F8F4 603C1984 603C1BD8 609F0880 609F05CC
  6032F1AC 6032F198
  ```

  Conditions This symptom is observed on a Cisco 3600 series that is running Cisco IOS Release 12.0(7)XK1.

  Workaround There is no workaround.

- CSCds22294

  Symptoms Timer 305 (T305) does not disconnect properly when a disconnect is requested. This behavior does not comply with International Telegraph and Telephone (ITU-T) Q.931 clause 5.3.3 when the T305 timer expires.

  Conditions This symptom is observed on all ISDN BRI platforms that are running Cisco IOS Release 12.1(3.5)PI.

  Workaround There is no workaround.

- CSCds23814

  Symptoms Phones that have displays will not display the calling party because ISDN display information element (display_IE) is not sent over a Voice over IP (VoIP) link.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.2.

  Workaround There is no workaround.

- CSCds26715

  Symptoms Always on Dynamic ISDN (AODI) clients may sporadically fail to establish a connection to AODI server.

Conditions This symptom is observed on a Cisco 3600 series that is used as an AODI server and that has been configured for multiple clients. This symptom is not related to any specific client. This symptom is observed when Cisco IOS Release 12.1(4) is used. AODI clients are able to connect after the AODI server and the clients are reloaded.

Workaround There is no workaround.

- CSCds32256

  Outgoing voice calls using a vic-2bri-s/t-te fail with a q931 **debug unexpected alerting** command in ISDN. There is no workaround.

- CSCds41629

  Symptoms A router may reload when channel groups are unconfigured and reconfigured.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.1(2). This symptom is observed some channel groups are added under T1 or E1 controllers in a network that has some interfaces configured with Frame Relay encapsulation and some interfaces are configured with High-Level Data Link Control (HDLC) encapsulation.

  Workaround There is no workaround.

- CSCds41726

  Symptoms Internal memory allocation failure traceback messages and a reload may be observed on a router. When this symptom occurs, the output of the **show x25 services** EXEC command indicates that XOT is configured but is not in use. The output of the **show x25 context** EXEC command indicates that the XOT context is in the "R/Inactive state."

  Conditions This symptom is observed on a Cisco router that is configured for X.25 over TCP (XOT) services that is running Cisco IOS Release 12.1(4) or Release 12.2.

  Workaround There is no workaround.

- CSCds51672

  Symptoms A router that is operating as an X.25 data terminal equipment (DTE) includes the address length and facilities length fields in a call accepted packet even when no addresses, facilities, or call user data is present; the specified lengths are zero. Although this format is permitted by X.25, some X.25 switches clear the call and report a Local Procedure Error (cause code 19).

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.0(4)T or a later release.

  Workaround There is no workaround.

- CSCds58693

  Symptoms A router that has a Route Switch Processor (RSP) restarts shortly after it displays the following messages:

  ```
  %CBUS-4-FIXBADTXVC: Detected and fixed bad tx vc encap on Serial4/1/0:20, bad vc 15,
  fixed vc 20
  ```

  ```
  Traceback= 60385D90 60386718 603867C0 60387330 60643BD0 601FF0C8 601F2CE4 6036A 908
  60376228 603355B0
  ```

  Conditions This symptom is observed when a user switches from Frame Relay to ISDN backup using dialer profiles on a Cisco router that has a RSP and that is running the Enhanced Interior Gateway Routing Protocol (EIGRP). This symptom is observed when the router is running Cisco IOS Release 12.1(4).

  Workaround There is no workaround.

- CSCds62049

Symptoms The "LastCallDuration ClearCode ClearReason" values are returned when ISDN traps are enabled and the call connect trap is received by the management station.

Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.0(13).

Workaround Take the values the are returned by the trap when a call is torn down.

- CSCds69449

  Symptoms ASCEND Attribute 218 allows the specification of a pool to be searched for an IP address resolution. Part of this ASCEND pool support gives special meaning to pool "0" when it is specified in Attribute 218 as the pool to be searched. That special meaning is that a request to search pool "0" should be interpreted as a request to search all available pools. The "search all available pools" that is described above does not work.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.2(1).

  Workaround There is no workaround.

- CSCds70303

  Symptoms The output of the **show isdn statistics** EXEC command may list call control blocks (CCBs) for calls that are no longer active.

  Conditions This symptom is observed with a Signaling System 7 (SS7) voice configuration on a Cisco router.

  Workaround There is no workaround.

- CSCds74224

  Symptoms A Cisco AS5200 may reload when a T1 PRI group is unconfigured.

  Conditions This symptom is observed on a Cisco AS5200 that is running Cisco IOS Release 12.1(5.03).

  Workaround There is no workaround.

- CSCds74345

  Symptoms For BRI switchtype voice calls, the cause code of 0x29 (temporary failure) is sent in all DISCONNECT messages regardless of the cause code that is received from the switch.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.1(5)T.

  Workaround There is no workaround.

- CSCds76545

  Symptoms An ISDN trap is not generated after a call is connected. The following ISDN objects are affected:

  - demandNbrLastDuration
  - demandNbrClearReason
  - demandNbrCallOrigin
  - demandNbrClearCode
  - demandNbrLogIf
  - demandNbrName
  - demandNbrAddress

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.1(5.03).

  Workaround There is no workaround.

- CSCds81620

  Symptoms Digital calls may occasionally fail to come up after a few hours of activity with calls coming in and calls dropping off.

  Conditions This symptom is observed on a Cisco AS5400 that is running Cisco IOS Release 12.1(5)T.

  Workaround There is no workaround.

- CSCds81756

  A Cisco router that is configured for X.25 may return to ROM because of a bus error or display SYS-2-BADSHARE messages in the log. There is no workaround.

- CSCds83811

  Symptoms ISDN isdnBearerInfoType MIB is incorrect for ISDN callback.

  Conditions This symptom is observed on a Cisco AS5400 that is running Cisco IOS Release 12.1(5.04).

  Workaround There is no workaround.

- CSCds85894

  Symptoms If the **show queue interface-type** *interface-number* Privileged EXEC command is entered on a Cisco 3660 that has Frame Relay fragmentation enabled, the router may reload or provide incorrect packet information from the command output.

  Conditions This symptom is observed on a Cisco 3660 that has Frame Relay fragmentation enabled and that is running Cisco IOS Release 12.1(5)T.

  Workaround Disable Frame Relay fragmentation or use a byte size that is large enough to prevent fragmentation from occurring.

- CSCds85909

  Symptoms ISDN MIB traps for a call disconnect are not generated on the callback server for subsequent calls even though the call between the call disconnect traps is successful.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.1(5.03)T or Release 12.2(0.01).

  Workaround There is no workaround.

- CSCds88499

  Symptoms An X.25 call is not made when a router is configured for X.25 address insertion and removal.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.2(1).

  Workaround There is no workaround.

- CSCds88594

  On a Cisco 2600 or 3600 series router that is running Cisco IOS Release 12.1(2a)XH or Release 12.1(5)T, you cannot place an inbound call or an outbound call over an ISDN BRI, even though a B channel is available. The output of the **debug ISDN q931** EXEC command shows the following error message:

  ```
  cannot get an idle chan from chan mgt
  ```

  A reload of the router fixes the problem temporarily, but the problem eventually reappears.

  Workaround: Use Cisco IOS Release 12.1(4).

- CSCds89205

Symptoms The answer side dialer is not in the operational state.

Conditions This symptom is observed on a Cisco router that is using Frame Relay encapsulation and that is running Cisco IOS Release 12.2(0.01).

Workaround There is no workaround.

- CSCds89494

  Symptoms The **dialer redial** interface configuration command may not work as expected.

  Conditions This symptom is observed when V.25 bis and data terminal ready (DTR) dialing is used on a Cisco router that is running Cisco IOS Release 12.1(5.04).

  Workaround There is no workaround.

- CSCds89682

  Symptoms The following message may be displayed on a Cisco 3640 router after three or four calls are made on an E1 or PRI interface by entering the **isdn switch-type primary-net5** interface configuration command:

  ```
  ISDN ERROR: Module-l3_sdl_u Function-U0_BadMsg Error-Bad message received
  ```

  After this message is displayed, the PBX disconnects the call and subsequent calls are passed successfully.

  Conditions This symptom is observed on a Cisco 3600 series that is running Cisco IOS Release 12.1(5)T.

  Workaround There is no workaround.

- CSCdt00655

  Symptoms A newer Versatile Interface Processor 2-50 (VIP2-50) may take up to 0.5 seconds longer than the older VIP2-50 for the hardware to reset. When the Route Switch Processor (RSP) resets, the newer VIP2-50 may not wait long enough for the VIP to reset and the following messages may be displayed:

  ```
  %RSP-3-ERROR: dbus read at 3E841002.
  %RSP-3-ERROR: dbus read at 3E841002 -Traceback= 60390210 603927D8 60392D68 6039611C
  60331E4C 60331F10 6028BFB8 -Traceback= 6035F960 6036146C 60343D84 6033A268 00:00:02:
  %RSP-3-ERROR: dbus read at 3E841002 -Traceback= 60390210 603927D8 60392D68 6039611C
  60331E4C 60331F10 6028BFB8 -Traceback= 6035F960 6036146C 60343D84 6033A268
  ```

  Conditions This symptom occurs because the RSP is attempting to access the VIP2-50 across the data bus (DBUS) before they are fully reset. This symptom may also occur if the VIP2-50 inserted using an online insertion and removal (OIR) procedure. In some instances, the VIP2-50 will keep failing and produce the tracebacks for each attempt to access the VIP over the DBUS. In some instances, the VIP2-50 may initialize and the error messages can be ignored. A Gigabit Ethernet Interface Processor (GEIP) may also be affected by this symptom.

  Workaround There is no workaround.

- CSCdt05576

  Symptoms A Cisco 2500 series may reload when a watchdog timeout occurs during the TCP to packet assembler/disassembler (PAD) translation process

  Conditions This symptom is observed on a Cisco 2500 series that is running Cisco IOS Release 12.2(0.02).

  Workaround There is no workaround.

- CSCdt06767

  Symptoms A Cisco 7200 series may reload with a bus error at address 0xD0D0D11.

Conditions This symptom is observed under rare circumstances on a Cisco 7200 series that is running Cisco IOS Release 12.1(5a).

Workaround There is no workaround.

- CSCdt06842

  Symptoms Memory exhaustion may occur after a large number of modem calls because memory is not released in an ISDN module.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.1.

  Workaround There is no workaround.

- CSCdt08279

  Symptoms A bus error may occur when a remote ATM goes down for a period of time that exceeds the configured PPP timeout idle value when that value is supplied by AAA RADIUS.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.2. The exposure window can be reduced by increasing the PPP timeout idle value that is specified in AAA RADIUS or by minimizing the time that a remote ATM is down.

  Workaround There is no workaround.

- CSCdt12187

  The **no tx-ring-limit** command does not work. There is no workaround.

- CSCdt12767

  Symptoms Command control blocks (CCBs) are not released on a Cisco 7000 series after a call disconnects.

  Conditions This symptom is observed on a Cisco 7000 series that is running Cisco IOS Release 12.1(5).

  Workaround There is no workaround.

- CSCdt14303

  Calls going to a Cisco AS5300 series universal access server through Voice over IP (VoIP) and exiting a voice gateway through ISDN may be disconnected by the voice gateway after receiving an “INFORMATION” message from ISDN. There is no workaround.

- CSCdt15970

  Symptoms A software-forced reload may occur on a Cisco 3810.

  Conditions This symptom is observed when the **debug frame-relay switching** EXEC command is used for a Frame Relay-to-ATM Service Internetworking (FRF.8) connection on a Cisco 3810 that is running Cisco IOS Release 12.1(5). The **debug frame-relay switching** EXEC command does not support FRF.8.

  Workaround There is no workaround.

- CSCdt17454

  Symptoms A Cisco 2516 disconnects an incoming ISDN call with the misspelled message “Disconnecting the test call” immediately after exchanging CONNECT and CONNECT_ACK q931 messages with the dialer in the router without trying to start PPP.

  Conditions This symptom is observed after the **isdn autodetect** interface configuration command is configured on a Cisco 2516 that is running Cisco IOS Release 12.1(2)T.

  Workaround There is no workaround.

- CSCdt17733

On a Cisco AS5400 series universal access server that is running Cisco IOS Release 12.2, calls cannot be made on the first time slot if the time slot is configured for T1 channel-associated signaling (CAS). There is no workaround.

- CSCdt17782

  Symptoms An ISDN INFORMATION message is rejected by NET3 if it is received after the CALL_PROC and ALERTING messages.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.2.

  Workaround There is no workaround.

- CSCdt18462

  Symptoms A router may reject incoming ISDN calls and displays the following message:

  ```
  Incoming call id 0x3256 rejected, exceeded max calls
  ```

  Incoming ISDN calls can be received after the router is rebooted but the symptom may resurface after a certain period of normal operation.

  Conditions This symptom is observed on a Cisco 7200 series router that is configured with a dialer profile that has a callback server that has a dialer load threshold configured. This symptom may occur even when there are free B channels. This symptom is observed when the Cisco 7200 series is running Cisco IOS Release 12.1(5).

  Workaround Configure the **dialer load-threshold** *load* interface configuration command on the peer router.

- CSCdt19422

  Symptoms Interoperability problems may be observed on a Catalyst 6000 dual physical ATM module (WS-X6101-OC12-MMF) LAN Emulation (LANE) client when LANE clients (LECs) and LANE server/broadcast and unknown server (LES/BUS) services reside on the third party vendor equipment. The LANE client will send out a tag value in the LAN destination field of the flush request that is not recognized as an appropriate value by the third party bus.

  Conditions This symptom is observed when a Cisco WS-X6101-OC12-MMF is configured as a LANE version 2 client in a multi-vendor LANE environment.

  Workaround Disable the flush request that is sent by the LANE client on the Cisco device.

- CSCdt19518

  Symptoms When a DISCONNECT with a progress indicator (PI) message is received from a vendor-specific switch, a Cisco AS5400 may not send a release signal.

  Conditions This symptom is observed on a Cisco AS5400 that is running Cisco IOS Release 12.1(5)T and that is connected to a vendor-specific switch. This symptom affects only modem or data calls and not Voice over IP (VoIP) over ISDN calls

  Workaround There is no workaround.

- CSCdt20687

  Symptoms A Call Switching Module (CSM) may reject a modem call to a free timeslot. The CSM appears to be keeping track of the timeslot for a failed call and is marking the timeslot as used even when the timeslot is actually free.

  Conditions This symptom is observed on a Cisco AS5800 that is running Cisco IOS Release 12.1(6) and that has a CSM.

  Workaround There is no workaround.

- CSCdt21649

Symptoms A router pauses indefinitely if the **no interface serial** global configuration command is entered to remove a subinterface that the **x25 pvc** interface configuration command configured.

Conditions This symptom is observed on a Cisco 2600 series that is running Cisco IOS Release 12.0.

Workaround Enter the **no x25 pvc** interface configuration command on the subinterface before entering the **no interface serial** global configuration command to remove the subinterface.

- CSCdt29064

  Symptoms A dynamic template may not be bounded to the virtual profile when the virtual profile is cloned.

  Conditions This symptom is observed on a Catalyst 5000 that is running Cisco IOS Release 12.1(5).

  Workaround There is no workaround.

- CSCdt29237

  Symptoms When a call is received from the network side, a RELEASE_COMP with a “Requested circuit/channel not available” cause code should be sent to the switch.

  Conditions This symptom is observed when a network requests for the channel that might have been used for the outgoing call. Instead of releasing the incoming call, the call should be accepted to elevate the call’s preference status.

  Workaround There is no workaround.

- CSCdt29661

  Symptoms A router may reload when the **shutdown** interface configuration command is entered on a subinterface that is a member of a PPP multilink bundle while the bundle is sending data.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.2.

  Workaround There is no workaround.

- CSCdt30184

  By sending the B channel as exclusive, the switch has no way of reassigning the B channel to something else. In Cisco IOS Release 12.2, the **isdn negotiate-bchan** command line interface (CLI) is supported for all switchtypes.

  Workaround: Put the B channel be in the install manual busy (IMB) state on the switch so that the access server skips that channel when dialing out.

- CSCdt30348

  Symptoms A virtual access interface is linked to multiple Layer 2 Forwarding (L2F) sessions on the home gateway (HGW).

  Conditions This symptom is observed in an environment that has multiple network access servers (NAS) after the HGW has been upgraded to Cisco IOS Release 12.1(5)T1.

  Workaround There is no workaround.

- CSCdt30424

  Symptoms A router may reload when the **map-class frame-relay** global configuration command is unconfigured.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.1(6.04).

  Workaround Remove the configuration under the **map-class** command instead of unconfiguring the **map-class frame-relay** command in the global configuration mode.

- CSCdt30626

Symptoms A Cisco 3640 may display the following error message:

```
%ISDN-4-ISDN_UNEXPECTED_EVENT: calltrkr_call_cleared: no idb: Occurred at
../isdn/isdnif_calltrkr.c
```

Conditions This symptom is observed on a Cisco 3600 series that is running Cisco IOS Release 12.2(0.04).

Workaround There is no workaround.

- CSCdt34031

  Symptoms If L2X data packets must be switched over a virtual private dialup network (VPDN) capable router that is not the network access server (NAS), Layer 2 Tunneling Protocol (L2TP) access concentrator (LAC), home gateway (HGW), or L2TP network server (LNS) for the corresponding L2X tunnel, the L2X data packets are dropped if they are process switched, the L2X packets may be dropped because of the configuration or if the address cannot be resolved by the fast cache. 12X control packets are not affected by this symptom.

  Conditions This symptom is observed on a Cisco AS5300 that is running Cisco IOS Release 12.1(6).

  Workaround Use Cisco Express Forwarding (CEF) switching.

- CSCdt35065

  Symptoms When Layer 2 Tunneling Protocol (L2TP) and IP Security (IPSec) are used simultaneously, packets that are greater in size than the maximum transmission unit (MTU) for the PPP virtual access (VACCESS) interface that is not switched into the tunnel.

  Conditions This symptom is observed only when PPP uses L2TP or Layer 2 Forwarding (L2F) and the L2TP or L2F tunnel is protected by IPSec. This symptom affects only IP frames that have to be fragmented before they are switched into the L2TP or L2F tunnel.

  Workaround There is no workaround.

- CSCdt35187

  Symptoms When the “enblock” dialing method is set, outgoing calls cannot be made and only incoming calls can be received. When the “enblock” dialing method is set, the phone rings when an incoming call is received but no voice is heard when the call is answered.

  Conditions This symptom is observed on a Cisco router only when the Net3 switch type is used. Outgoing calls can be made and incoming calls can be received normally when the “overlap” dialing method is set.

  Workaround There is no workaround.

- CSCdt38550

  Symptoms An incorrect cause value that is forwarded to a vendor-specific billing server may cause the billing server to incorrectly deem a call as a non-chargeable call.

  Conditions This symptom is observed when a call is placed from phone A to phone B through two Cisco AS5300 universal access servers that are used as gateways. The phones are connected to the Cisco AS5300 universal access servers on both ends through two separate public switched telephone networks (PSTNs) and ISDN connections.

  After a call from phone A to phone B is disconnected, an ISDN DISC message that has a cause value of 0x10 (normal clearing) is sent to the terminating PSTN. The terminating PSTN returns an ISDN RELEASE message without presenting the cause value information element (IE). After this occurs, the terminating gateway (the Cisco AS5300 that is closer to phone B) returns an incorrect cause value of 0x29 (temporary failure) that is forwarded to the originating gateway (the Cisco AS5300 that is closer to phone A) and to the vendor-specific billing server and renders the call as a non-chargeable call.

The Cisco AS5300 universal access servers in this setup are running Cisco IOS Release 12.1(5)T.

Workaround There is no workaround.

- CSCdt39722

  Symptoms A Cisco 7513 may reload because of a bus error when the number of time slots on a 2-port multichannel T3 port adapter card (PA-MC-2T3+) is changed.

  Conditions This symptom is observed on a Cisco 7513 that has a PA-MC-2T3+ port adapter and that is running Cisco IOS Release 12.0(14)S1.

  Workaround There is no workaround.

- CSCdt40612

  When you use Large Scale DialOut with virtual profiles, packets that are stored in the dialer hold queue may not be sent out after the dialer connection is established. There is no workaround.

- CSCdt41384

  Symptoms A router that is configured for Voice over IP (VoIP) may reload if it terminates all eight ongoing calls simultaneously at the destination.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.1.

  Workaround There is no workaround.

- CSCdt42515

  Symptoms After a switched virtual circuit (SVC) idle-timeout occurs, the subinterface goes down and the corresponding IP routing entry is deleted and subsequent pings may fail.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.1(5)T.

  Workaround Change the subinterface to the “up” state.

- CSCdt43544

  A memory leak in PPP Authentication, PPP Manager, or Call Progress Notification processes may occur depending on your authentication, authorization, and accounting (AAA) configuration. There is no workaround.

- CSCdt44851

  When overlap signaling on primary-net5 is used and an outgoing call setup takes more than 20 seconds, a Cisco router drops those calls after 20 seconds because the ISDN timer is not renewed each time a Cisco router sends an INFORMATION message. There is no workaround.

- CSCdt46139

  Symptoms A router may reload and display the following message:

  ```
  %ALIGN-1-FATAL: Corrupted program counter pc=0x0, ra=0x6041081C, sp=0x628CBEB8
  ```

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.1(5)T and that is using Cisco Express Forwarding (CEF) switching with virtual profiles and Multilink PPP (MLP) after approximately 650 calls.

  Workaround There is no workaround.

- CSCdt46181

  Point-to-Point Tunneling Protocol (PPTP) allows users to tunnel to an Internet Protocol (IP) network using a Point-to-Point Protocol (PPP). The protocol is described in RFC2637.

  PPTP implementation using Cisco IOS software releases contains a vulnerability that will crash a router if it receives a malformed or crafted PPTP packet. To expose this vulnerability, PPTP must be enabled on the router. PPTP is disabled by default. No additional special conditions are required.

This vulnerability is present in all Cisco IOS releases that support PPTP. PPTP is supported in the following software releases:

12.1 train, releases: T, E, EZ, XM, XV, YA, YB, YD and YC 12.2 train, all releases

No other Cisco product is vulnerable.

There is no workaround for this vulnerability.

This advisory is available at http://www.cisco.com/warp/public/707/PPTP-vulnerability-pub.html

- CSCdt47211

  Symptoms A bus error may be observed on a Cisco 7500 series at the atm_frf11_configure process.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.1(5)T1.

  Workaround There is no workaround.

- CSCdt48531

  Symptoms After a period of normal operation, a router may start sending frames that have a Network Layer Protocol Identifier (NLPID) value that switched between IP (0xCC) and EtType (0xCE). The NLPID value does not return to X.25 over Frame Relay (Annex G) and connectivity is blocked.

  Conditions This symptom is observed when X.25 over Frame Relay (Annex G) is used on a Cisco router that is running Cisco IOS Release 12.1(5)T.

  Workaround Clear and reestablish the call.

- CSCdt49424

  Symptoms Backup delay may fail to work when it is configured on a subinterface.

  Conditions This symptom is observed on a Cisco 2600 series that is running Cisco IOS Release 12.0(8).

  Workaround There is no workaround.

- CSCdt49818

  Symptoms A router may send an ISDN disconnect message after it receives an ISDN INFORMATION message.

  Conditions This symptom is observed on a Cisco 3600 series that is running Cisco IOS Release 12.1(6).

  Workaround There is no workaround.

- CSCdt49924

  Symptoms The calling party number in a SETUP message is not populated even though an ISDN map has been configured.

  Conditions This symptom is observed on a Cisco AS5300 that is running Cisco IOS Release 12.1(5)XM.

  Workaround There is no workaround.

- CSCdt52758

  Layer 2 Tunneling Protocol (L2TP) dynamic and static dialer maps under the same dialer interface may reload a Cisco router during an L2TP dialout session.

  Workaround: Disable L2TP dialout.

- CSCdt54395

The Calling Line ID (CLID) is not reported on a Cisco AS5300 or AS5400 series universal access server that is running Cisco IOS Release 12.2(0.10) and that is connected to a vendor-specific router. There is no workaround.

- CSCdt54532

  A Cisco AS5800 series universal access server that is experiencing high CPU utilization may reload when it receives an unsolicited acknowledgement from a Cisco signaling controller. There is no workaround.

- CSCdt55258

  In Cisco IOS Release 12.2(0.4) or Release 12.2(0.5)T, a router that is running Multilink PPP may experience stack overruns or reload with a watchdog timer exception if a nonmultilink encapsulated data packet is received on a multilink member link as the associated bundle is going down. Depending on circumstances, the stack overrun error may be reported as a corrupt program counter, bus error, or similar form of memory-related exception. There is no workaround.

- CSCdt58071

  Symptoms If a Virtual Switch Controller (VSC) is stopped and then started back up again, the first T1 or E1 interface of the Non-Facility Associated Signaling (NFAS) group will not come up again. The router sends all "0s" to the VSC to block the gateway even when the T1 controller is up.

  Conditions This symptom is observed during an ISDN and Signaling System 7 (SS7) interconnect operation on a Cisco router that is running Cisco IOS Release 12.2(1)T.

  Workaround Enter the **shutdown** interface configuration command followed by the **no shutdown** interface configuration command on the first T1 or E1 interface of the NFAS group.

- CSCdt60384

  Symptoms A Cisco Systems Network Architecture (SNA) switch router pauses indefinitely approximately 2 minutes after a Cisco router reloads and displays periodic memory allocation failure messages.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.1(7.01) and is related to the number of defined uplinks

  Workaround Reduce the number of uplinks to eight.

- CSCdt60739

  The voice cut-through functionality may not work as expected after receiving a corresponding progress indicator (PI). There is no workaround.

- CSCdt62131

  Symptoms When Multilink PPP (MLP) is used with fast switching and fragmentation is enabled, the MLP fragments are sent without the Layer 2 encapsulation (Frame Relay or ATM AAL5SNAP).

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.1 or Release 12.2.

  Workaround Disable fast-switching by configuring the **no ip route-cache** interface configuration command on all interfaces, or disable fragmentation by configuring the **no ppp multilink fragmentation** interface configuration command on the virtual template interface.

- CSCdt62905

  Symptoms Fast idle timeout may fail intermittently for values that are below 70 seconds. Fast idle timeout may fail consistently for values that are around 10 seconds. The following is output from the **debug dialer** EXEC command:

  ```
  As1 DDR: starting fast idle timer 1 ticks
  As1 DDR: fast idle timeout
  ```

The following output is output from the **debug dialer** EXEC command when the fast idle is set to 70 seconds:

```
As1 DDR: No free dialer - starting fast idle timer
As1 DDR: starting fast idle timer 70000 ticks.
As1 DDR: No free dialer - starting fast idle timer.
As1 DDR: No free dialer - starting fast idle timer.
As1 DDR: No free dialer - starting fast idle timer.
As1 DDR: No free dialer - starting fast idle timer.
As1 DDR: fast idle timeout
As1 DDR: disconnecting call
```

Conditions This symptom is observed on a Cisco 2500 series.

Workaround There is no workaround.

- CSCdt63813

  Symptoms A software-forced reload may occur on a Cisco LS1010 ATM switch router. Log messages such as "SYS-6-BLKINFO: Corrupted redzone blk" and other messages that point to a memory corruption may also be displayed.

  Conditions This symptom is observed on a Cisco LS1010 ATM switch router that is running Cisco IOS Release 12.0(10)W5(18b).

  Workaround There is no workaround.

- CSCdt64499

  Symptoms A Cisco 7206 may stop calling back and display the following message:

  ```
  07:23:16: Se1/0:22 DDR: callback to test already started
  ```

  Conditions This symptom is observed on a Cisco 7206 that is running Cisco IOS Release 12.1(6) and that is configured for callback. This symptom is observed only the Cisco 7206 has an ISDN interface that has the **isdn fast-rollover-delay** interface configuration command configured and has a callback server that is configured to have multiple dialer strings for the callback call.

  Workaround Unconfigure the **isdn fast-rollover-delay** interface configuration command to prevent this symptom from occurring.

- CSCdt65818

  Symptoms A bus error may occur when a Cisco router that has a Cisco Route Processor 1 (RSP1) is booted up with an installed interface processor.

  Conditions This symptom is observed on a Cisco router that has a Cisco RSP1 that has an installed interface processor such as a Versatile Interface Processor 2-40 (VIP2-40) or a Fast Ethernet Interface Processor 2 (FEIP2). This symptom is observed when the Cisco router that has a Cisco RSP1 is running Cisco IOS Release 12.1(7).

  Workaround Perform an online insertion and removal (OIR) after booting up without the interface processors.

  Alternate Workaround Use a Cisco IOS release that contains the fix for this caveat. Both the Cisco IOS software image and the boot image must be upgraded.

- CSCdt66527

  Symptoms When an incompatible bearer capability is received an instrument under test (IUT) responds with the incorrect cause value.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.2(0.05)T.

  Workaround There is no workaround.

- CSCdt67515

  Symptoms ISDN may stop working properly after the **shutdown** interface configuration command followed by the **no shutdown** interface configuration command is entered on the T1 controller.

  Conditions This symptom is observed on a Cisco router that has a PRI controller that is configured for the 4ESS or 5ESS switchtypes and that is running Cisco IOS Release 12.1(7.02).

  Workaround There is no workaround.

- CSCdt68085

  Symptoms In an X.28 asynchronous configuration, if an X.25 call is placed and if the physical layer is reset while TCP is being established, the line stays in the program specific information (PSI)-enabled state and the carrier is dropped. You can recover from this condition without reloading by entering the **physical-layer** {**sync**} interface configuration command and the **physical-layer** {**async**} command on the interface that exhibits these symptoms.

  Conditions This symptom is observed on a Cisco router in an X.28 asynchronous configuration that is running Cisco IOS Release 12.1(4).

  Workaround Prevent TCP from opening a connection when the remote end is down by providing the remote loopback in a dynamic routing environment. This workaround is based on the assumption that no other route can cause the router to attempt to access the network of loopbacks (the default route).

- CSCdt68343

  Symptoms When an interface is configured for X.25 switching by entering the **x25 pvc** interface configuration command is accepted but the **xot-source** *interface* option is ignored.

  Conditions This symptom is observed on an interface of a Cisco router that is running Cisco IOS Release 12.1(7).

  Workaround There is no workaround.

- CSCdt68667

  Symptoms A router may leak memory when a packet assembler/disassembler (PAD) or X.28 call request fails. A memory leak may also occur when an X.25 call that is routed over X.25 over TCP (XOT) chooses an alternate destination IP address.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.1(4).

  Workaround There is no workaround.

- CSCdt69881

  A slow memory leak may occur related to Point-to-Point Protocol over Ethernet (PPPoE) authentication. In a configuration of 128 MB RAM and an average of 200 to 300 concurrent users (virtual private dial-up network (VPDN) sessions), the memory of the Node Route Processor (NRP) is exhausted after 3 to 4 weeks.

  Workaround: Reload the NRP approximately every two weeks.

- CSCdt70259

  Symptoms A buffer leak may be observed with Multilink PPP (MLP) and packets that are “received lost” are not freed under some circumstances. This symptom may lead to the eventual consumption of all the input buffers for the member link that has received the lost fragment packets. The input queue count for the interface will be incremented for each lost frame since MLP considers this to be a permanent lost and does not return the buffer to the receiving device driver to be reused.

  After a certain number of packets are lost, the driver will stop receiving data and the line becomes wedged because the input queue for the driver has reached its limit.

Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.2(0.2) and Release 12.2(0.3)T.

Workaround There is no workaround.

- CSCdt70351

  On a Cisco router that supports PPP over ATM (PPPoA) and that has PPP payload compression on the virtual access interface, the PPP pay load compression is not negotiated.

  Workaround: Configure compression on the dialer interface first and then configure an ATM permanent virtual circuit (PVC) for PPPoA dialer.

- CSCdt72678

  Symptoms Incorrect network access server (NAS) messages are sent to a Cisco SC2200 Signaling Controller when Non-Facility Associated Signaling (NFAS) members from different NFAS groups are added to the interleave order.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.2.

  Workaround Avoid adding NFAS members from different NFAS groups to the interleave order and add all NFAS members of the same NFAS group in an ascending order.

- CSCdt74455

  Global System for Mobile Communications (GSM) packs more than 30 default maximum interface status indicators and causes the total length to overflow the one-byte-length field. There is no workaround.

- CSCdt74487

  Symptoms A packet assembler/disassembler (PAD) connection cannot be made on an X.25 circuit switching over BRI line.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.2(0.5e).

  Workaround There is no workaround.

- CSCdt75548

  A Cisco router reloads after you use the **isdn leased-line bri** *0* **128** global configuration command in a 128 k leased line BRI interface in Cisco IOS Release 12.1(7.3), Release 12.2(0.14), or Release 12.2(0.15)T. This situation occurs if the ISDN interface is shut down and is configured without any dialer commands. The problem occurs only when these conditions apply but is not necessarily triggered by the actions of shutting down or configuring the interface. There is no workaround.

- CSCdt78196

  Symptoms A router that has an ISDN interface may reload with a bus error shortly after it reboots or after it clears a call. A decoded stack trace that is similar to the following may be displayed:

  ```
  0x60090268:L3_ProcessInternal(0x600901cc)+0x9c 0x6008E19C:L3_Go(0x6008d61c)+0xb80
  0x6009420C:L3_RxSarMsg(0x6009414c)+0xc0 0x600A4D28:L3IF_StartL3(0x600a4bb0)+0x178
  0x6007BA64:TaskBegin(0x6007ba38)+0x2c 0x6007BA38:TaskBegin(0x6007ba38)+0x0
  ```

  Conditions This symptom is observed on a Cisco router that has an ISDN interface and that is running Cisco IOS Release 12.2(0.15)T.

  Workaround There is no workaround.

- CSCdt79686

  The Cisco AS5300 series universal access server reloads when you use reverse Telnet to get into the access server and when you manually make modem calls. There is no workaround.

- CSCdt80009

  Symptoms A router may send an X.25 “Call Accepted” packet with an empty facilities field, rather than suppressing the facilities on a circuit that is configured as data terminal equipment (DTE). Some X.25 networks may reject this packet and send a clear packet that has a cause field of “19.”

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.1(7).

  Workaround There is no workaround.

- CSCdt81786

  X.25 encapsulation may fail on a Route Switch Processor (RSP) equipped router that is configured with dialer profiles that use multiple encapsulations types such as PPP and Frame Relay. There is no workaround.

- CSCdt82380

  Symptoms When PPP Link Quality Monitoring (LQM) is configured by entering the **ppp quality** interface configuration command on the serial interface of a Versatile Interface Processor (VIP), the interfaces are not able to pass network traffic.

  Conditions This symptom is observed on a Cisco router that has a VIP and that is running Cisco IOS Release 12.1 or Release 12.2.

  Workaround Disable the LQM feature.

- CSCdt82494

  A Cisco router that is running Cisco IOS Release 12.1(7.4) or Release 12.2(0.2) and later releases may reload when a callback is attempted and the dial attempt fails. There is no workaround.

- CSCdt82892

  Symptoms In a Signaling System 7 (SS7)/ISDN interconnection (NI2+ to SS7), if the SS7 circuits on the Cisco SC2200 series Signaling Controller that are associated with a Cisco AS5300 series universal access server are blocked, these ISDN channels on the access server are changed to the maint_pen state (5).

  If the **shutdown** interface configuration command followed by the **no shutdown** interface configuration command are entered on the Redundant Link Manager (RLM) group, ISDN reinitializes only the primary digital subscriber line (DSL) of the Non-Facility Associated Signaling (NFAS) group and changes it to the idle state. Other DSLs remain in the maint_pen state.

  Conditions This symptom is observed on a Cisco AS5300 that is running Cisco IOS Release 12.1(5)XM2.

  Workaround There is no workaround.

- CSCdt83555

  Symptoms The existing **isdn reject data** [**64**][**56**] interface configuration command does not reject data call on voice interfaces as it is expected to.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.2.

  Workaround There is no workaround.

- CSCdt87309

  Symptoms A router may reload after the callgen stops.

  Conditions This symptom is observed on a Cisco AS5300 that is running Cisco IOS Release 12.2(0.05) or release 12.2(0.19)T.

  Workaround There is no workaround.

- CSCdt87363

Symptoms A Cisco 3640 may reload after the **isdn net** command is entered.

Conditions This symptom is observed on a Cisco 3640.

Workaround There is no workaround.

- CSCdt91399

  Symptoms Layer 1 of a BRI remains in the "deactivated state on a Cisco VG200. The **layer1-emulate network** interface configuration command is not available.

  Conditions This symptom is observed on a Cisco VG200 that is running the vg200-i6s-mz.122-0.17 image of Cisco IOS Release 12.2(0.17).

  The BRI is active when the corresponding c2600-a3js-mz.122-0.17 image of Cisco IOS Release 12.2(0.17) for the Cisco 2600 series is used.

  Workaround There is no workaround.

- CSCdt92033

  Symptoms A router may reload when the **write memory** command is entered while PPP modem and ISDN calls are placed at approximately 4 cps with continuous pings.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.1(7) in a Signaling System 7 (SS7) configuration.

  Workaround There is no workaround.

- CSCdt92799

  Symptoms A Cisco AS5300 that is using overlap receiving may experience dropped calls when the gateway receives a "sending complete" information element (IE) in the last INFO message from the PBX.

  Conditions This symptom is observed on a Cisco AS5300 that is running Cisco IOS Release 12.1(4.04)T2 or Release 12.2(0.5e).

  Workaround Configure the PBX to avoid sending a complete IE together with the last digit INFO message.

- CSCdt92808

  Symptoms A router may reload because of a bus error during a call and display the following message:

  ```
  *** System received a Bus Error exception *** signal= 0xa, code= 0xc, context=
  0x61c87830 PC = emt_call(0x60435060)+0x4, Cause = 0xc20, Status Reg =
  etext(0x61154cc0)+0xb32b70
  ```

  Conditions This symptom is observed on a Cisco 3600 series that is running Cisco IOS Release 12.2(0.5f). This symptom is observed with certain forms of ISDN signaling when the router is configured for the NET5 ISDN type and when the first response to the outgoing call SETUP message is the ALERTING message and the ALERTING message does not have the CHANNEL ID information element.

  Workaround There is no workaround.

- CSCdt93810

  A dialer that has the dialer watch configured may continue to dial out after the idle timer expires. Multiple B channels remain up even when there is no traffic and will remain up until the primary route is restored. There is no workaround.

- CSCdt93857

  Symptoms A memory leak may occur on a Cisco 6400.

Conditions This symptom is observed on a Cisco 6400 that is running Cisco IOS Release 12.1(5)DC.

Workaround There is no workaround.

- CSCdt95052

  Symptoms A router may pause indefinitely when an IP ping

  Conditions This symptom is observed on a Cisco router that has a Route Switch Processor (RSP).

  Workaround There is no workaround.

- CSCdt97687

  Symptoms ISDN Layer 2 cannot be brought up on the ISDN PRI interface of a router by entering the **no pri-group** controller configuration command followed by the **pri-group** controller configuration command on the PRI controller.

  Conditions This symptom is observed on a Cisco AS5300 that has an ISDN PRI interface and that is running Cisco IOS Release 12.2(0.18), 12.2(0.19)T, or Release 12.2(2)T1.

  Workaround There is no workaround.

- CSCdt97779

  Traceback messages are observed on a Layer 2 Tunneling Protocol (L2TP) Network Server (LNS) and on a L2TP Access Concentrator (LAC) after 2000 sessions and 2000 tunnels are brought up. This is a minor problem, because no session or tunnels drops were observed as a result of these traceback messages. There is no workaround.

- CSCdt97827

  Symptoms Some B channels may remain the "proposed" state on the egress gateway after an overnight stress test.

  Conditions This symptom is observed after the **isdn negotiated resend-setup** interface configuration command is configured on the serial interface of a Cisco AS5300 that is running Cisco IOS Release 12.2(0.05).

  Workaround Reload the Cisco AS5300.

- CSCdu02703

  Symptoms A router may reload when packets are switched using Cisco Express Forwarding (CEF) to a dialer interface from a Layer 2 Tunneling Protocol (L2TP) or a Layer 2 Forwarding (L2F) tunnel and display the following message:

  ```
  %ALIGN-1-FATAL:Corrupted program counter pc=0x0, ra=0x60BC120C, sp=0x61C8ED60
  %ALIGN-1-FATAL:Corrupted program counter pc=0x0, ra=0x60BC120C, sp=0x61C8ED60
  -Traceback= 0 60BC120C 6022333C 60010260 60013C4C 603728B8 6033FA80 signal= 0xA, code=
  0x8, context= 0x61B5BAC0
  ```

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.2(0.18). The router has CEF enabled and is configured as an L2TP access concentrator (LAC) and a Network Address Translation (NAT) device.

  Workaround Use Cisco IOS Release 12.1 or Release 12.2(0.5e).

  Alternate Workaround Disable CEF on the dialer interface by entering the **no ip route-cache cef** interface configuration command.

- CSCdu04583

Symptoms If a Cisco AS5300 in a Signaling System 7 (SS7) solution is required to disconnect a large volume of calls at one instance (over 72), some of the calls may be disconnected with no cause code. This symptom may cause the Cisco AS5300 to release the calls back to SS7 because of an unspecified protocol error.

Conditions This symptom is observed a Cisco SS7 interconnect for Voice Gateways solution on a Cisco AS5300 that is running Cisco IOS Release 12.1(5)XM2.

Workaround There is no workaround.

- CSCdu05811

  Symptoms A Cisco 2600 series or Cisco 3600 series may not release the second B channel of a voice BRI interface properly if the call is first terminated by the Voice over IP (VoIP) side of the connection. The second B channel pauses indefinitely until the device that is connected to the BRI releases the second B channel.

  Conditions This symptom is observed on a Cisco 2600 or Cisco 3600 series that is running Cisco IOS Release 12.1(5)T6.

  Workaround There is no workaround.

- CSCdu12188

  X.25 PAD calls that are routed over X.25 over TCP (XOT) may not work if the first IP address that is configured is not reachable. There is no workaround.

- CSCdu12363

  When an interface that is a PPP Multilink bundle member goes down while it is transmitting data, the router may lock up, requiring a reload to recover. There is no workaround.

- CSCdu18344

  Throughput is less than the committed information rate (CIR) for a permanent virtual circuit (PVC) that is used for MLPPP-over-ATM (MLPoATM) or Frame Relay (FR). There is no workaround.

- CSCdu19654

  Symptoms Point-to-Point Tunneling Protocol (PPTP) connections cannot be established on a router.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.2(1).

  Workaround There is no workaround.

- CSCdu24355

  When voice calls are placed using 2-stage dialing, the ISDN on the terminating gateway may disconnect the call with a 0x80E6 (Recovery on timer expiry) cause code if the call is terminated on a Foreign Exchange Station (FXS) endpoint.

  Workaround: Enter the **isdn t310 50000** configuration command on the serial interface of the terminating gateway.

- CSCdu24794

  The dial tone does not work properly on caller plain old telephone service (POTS) 1 and POTS2 for the switch types DMSNI1, 5ESSNI1, 5ESSMP, and DMS100 when it is tested with a c800-nsy6-mw.122-1.2 image. There is no workaround.

- CSCdu28729

  ISDN may intermittently fail to manage a setup correctly. This may cause the calls to fail. There is no workaround.

- CSCdu28758

A Cisco router that is configured with MLPPP-over-Frame Relay (MLPoFR) through a virtual template may reload when the **show queue** *interface-type interface-number* EXEC command is entered. This problem tends to occur when the multilink fragment delay is set to a small number (for example, 10).

Workaround: Configure traffic shaping when MLPoFR is used.

- CSCdu28829

  Frame Relay permanent virtual circuit (PVC) status information may not be displayed for tunnel interfaces when the **show frame-relay pvc** EXEC command is entered. There is no workaround.

- CSCdu28902

  The PPP callback client may make redundant outgoing calls. This is an incorrect callback client behavior when PPP multilink is not configured. There is no workaround.

- CSCdu31091

  A Cisco 3600 router may experience problems accepting BRI calls. The following disconnect reason may be displayed:

  ```
  Cause i = 0x80AC - Requested circuit/channel not available
  ```

  There is no workaround.

- CSCdu33021

  When the **shut** command followed by the **no shut** command is entered on a BRI interface during testing to obtain the "MULTIPLE_FRAME_ESTABLISHED" ISDN status, a spurious memory access error may occur on a Cisco 2600 router. This problem does not recur with subsequent attempts to enter the **shut** command and the **no shut** command on the BRI interface. There is no workaround.

- CSCdu38570

  A Cisco router may reload when the **clear interface** EXEC command or the **shut** command followed by the **no shut** command is entered on the BRI interface. There is no workaround.

- CSCdu38669

  The interoperation of Session Initiation Protocol (SIP) and ISDN messages is not working correctly. An ISDN message may show internetworking error and invalid information element (IE) content. When the **isdn calling-number** *calling-number* interface configuration command is added to the D-channel configuration, the calls go through. There is no workaround.

- CSCdu40493

  Symptoms A Layer 2 Tunneling Protocol (L2TP) access server (LNS) may reload at the l2x_ip_udp_send_fs process.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.2(2.02).

  Workaround There is no workaround.

- CSCdu41258

  A Cisco router may reload when the **no isdn busy nfas-int 0 b_channel 1-2 type soft** command is entered. There is no workaround.

- CSCdu43855

  In a Signaling System 7 (SS7) environment with resource pooling enabled using a Resource Pool Manager Server (RPMS), subsequent calls that are placed after the first successful call on the same channel may fail. There is no workaround.

- CSCdu47321

  A router may experience a bus error or a reload when the **pri-group** [**timeslots** *range*] controller configuration command is used on the T1 controller to configure a Non-Facility Associated Signaling (NFAS) backup interface. There is no workaround.

- CSCdu47841

  A Cisco router may reload at dialer_unlink_member(). There is no workaround.

- CSCdu48329

  Symptoms The previous authentication information is retained and used after the **no ppp authentication** interface configuration command.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.2.

  Workaround There is no workaround.

- CSCdu48944

  The following error messages may be displayed when the c5800-p4-mz.122-1a image is used on a Cisco AS5800 universal access server:

  ```
  ISDN ERROR: Module-CCPRI Function-CCPRI_Go Error-Event received for an unrecognized
  call: 97

  ISDN ERROR: Module-CCPRI Function-CCPRI_Go Error-Event received for an unrecognized
  call: 97
  ```

  There is no workaround.

- CSCdu51248

  Symptoms In systems that use the bandwidth-on-demand features of Multilink PPP (MLP), MLP will not attempt to connect additional channels to bundles in response to heavy traffic loads.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.2(2.03).

  Workaround Enter the **debug ppp multilink events** EXEC command to cause MLP to request additional channels.

- CSCdu51306

  In Cisco IOS Release 12.2(2.2) through 12.2(2.4), enabling keepalives may cause PPP over ATM, PPP over Frame Relay, and PPP over Ethernet interfaces to flap.

  Workaround: Disable keepalives by configuring the **no keepalive** command on the virtual template interface.

- CSCdu51346

  Symptoms A Cisco AS5400 may return to the ROM monitor (ROMmon) mode because of a bus error in the Compression Control Protocol (CCP) process.

  Conditions This symptom is observed on a Cisco AS5400 that is running Cisco IOS Release 12.1(5)T8.

  Workaround Disable compression.

- CSCdu51548

  Symptoms A Cisco 3620 may reload at the “ipcp_add_ip_route” routine when performing asynchronous functionality (terminal server) tests.

  Conditions This symptom is observed in a setup in which the lines have been cleared for dial-on-demand routing (DDR). The Cisco 3620 reloads when pings are sent to a Cisco 2600 series through a modem.

Workaround There is no workaround.

- CSCdu65125

  Symptoms A Cisco AS5800 network access server (NAS) may not negotiate Multilink PPP (MLP) over a Layer 2 Forwarding (L2F) tunnel.

  Conditions This symptom is observed on a Cisco AS5800 that is running Cisco IOS Release 12.2(2.03).

  Workaround There is no workaround.

Resolved Caveats—Cisco IOS Release 12.2(2)

Cisco IOS Release 12.2(2) was not released. Please see "Resolved Caveats—Cisco IOS Release 12.2(3)" section.

Resolved Caveats—Cisco IOS Release 12.2(1)M0

Cisco IOS Release 12.2(1)M0 is a rebuild of Cisco IOS Release 12.2(1). All caveats listed in this section are resolved in Cisco IOS Release 12.2(1)M0 but may be open in previous Cisco IOS releases.

- CSCdw65903

  An error can occur with management protocol processing. Please use the following URL for further information:

  http://www.cisco.com/cgi-bin/bugtool/onebug.pl?bugid=CSCdw65903

Resolved Caveats—Cisco IOS Release 12.2(1d)

Cisco IOS Release 12.2(1d) is a rebuild of Cisco IOS Release 12.2(1). All caveats listed in this section are resolved in Cisco IOS Release 12.2(1d) but may be open in previous Cisco IOS releases.

- CSCdw65903

  An error can occur with management protocol processing. Please use the following URL for further information:

  http://www.cisco.com/cgi-bin/bugtool/onebug.pl?bugid=CSCdw65903

Resolved Caveats—Cisco IOS Release 12.2(1c)

Cisco IOS Release 12.2(1c) is a rebuild release for Cisco IOS Release 12.2(1). The caveats in this section are resolved in Cisco IOS Release 12.2(1c) but may be open in previous Cisco IOS releases.

- CSCdu43855

  In a Signaling System 7 (SS7) environment with resource pooling enabled using a Cisco Resource Pool Manager Server (RPMS) server, the subsequent calls on the same channel fail after the first successful call. There is no workaround.

Resolved Caveats—Cisco IOS Release 12.2(1b)

Cisco IOS Release 12.2(1b) is a rebuild release for Cisco IOS Release 12.2(1). The caveats in this section are resolved in Cisco IOS Release 12.2(1b) but may be open in previous Cisco IOS releases.

- CSCds11520

  The translation rule does not find a match to any available type of number (international, national, subscriber, abbreviated, and unknown). There is no workaround.

- CSCdt06855

  When Open Shortest Path First (OSPF) is used as a protocol between provider edge (PE) and customer edge (CE) routers in the Multiprotocol Label Switching (MPLS) Virtual Private Network (VPN) environment, type-3 link-state advertisements (LSAs) may be generated at the PE as a result of the redistribution of the internal Border Gateway Protocol (iBGP) route. When the iBGP route goes down, PE should flush the previously generated type-3 LSA. There is no workaround.

- CSCdt40308

  Under certain load stress conditions with Resource Management and Cisco Resource Pool Manager Server (RPMS) configured, some ports may get stuck. There is no workaround.

- CSCdt46941

  The configuration of the **isdn negotiate-bchan** [**resend-setup]** interface configuration command on the serial interface (D-channel) of an Non-Facility Associated Signaling (NFAS)/ Redundant Link Manager (RLM) group in a Thundervoice configuration will cause multiple setups to be sent for a call in the event of a Continuity Testing (COT) failure. This may cause the Cisco SC2200 Signaling Controller and the gateway to associate different setup messages with the call and may subsequently cause the call to fail. There is no workaround.

- CSCdt48613

  A 324-port modem card (UP324) may not bootup gracefully, or the digital signal processors (DSPs) may get stuck in the D—Download in Progress state.

  Workaround: Online insertion and removal of the modem card may cause the card to boot up correctly. In the worst case, reload the Network Access Solutions (NAS) to overcome this problem

- CSCdt52392

  A Cisco AS5800 access server that is running the testing image based on Cisco IOS Release 12.1(3a)T5 with NextPort card 0.6.85.0 may not detect the incoming Point-to-Point Protocol (PPP) Link Control Protocol (LCP) packets from the users. After around 40 seconds, the router will disconnect the user due to PPP timeout. There is no workaround.

- CSCdt90565

  A modem is not released after the first dialout call. Subsequent calls may not be made on this modem. There is no workaround.

- CSCdu05166

  The terminating end of a Cisco AS5300 access server that is using a channel-associated signaling (CAS) interface and E1 R2 may experience hung calls and digital signal processors (DSPs) when high voice traffic is present. There is no workaround.

- CSCdu05378

  When both ports of the 2-port VoIP PA are used with Foreign Exchange Office (FXO) Loopstart signalling, the A-Bit may toggle on one of the DS0 ports.

  Workaround: Shutdown port-1 or reset DSPfarm interface.

- CSCdu08652

  The terminating end of a Cisco AS5300 access server that is using a channel-associated signaling (CAS) interface (T1 recEive and transMit [E&M] and E1 E2) may pause indefinitely when high voice traffic is present. There is no workaround.

- CSCdu10213

  When the c7200-p-mz image in Cisco IOS Release 12.2(0.18) and rsp-pv-mz in Cisco IOS Release 12.2(0.18) are running on a Cisco router, if router-flapping occurs in the path on which Tag Virtual Circuits (TVCs) are set up from the router to some destinations, these TVCs may be held in bindwait indefinitely on the router even though alternative paths exist.

  Workaround: Enter the **shut** command followed by the **no shut** command on the interfaces of the router on which these TVCs start.

- CSCdu15053

  The tailend of a Tagged Virtual Circuit (TVC) may remain active while the headend of a TVC becomes missing. This problem is triggered when TVCs are re-established when better routes become available due to a change of topology. The new TVCs are set up normally, but the old TVCs are not cleaned up properly. There is no workaround.

- CSCdu18348

  A Cisco AS5850 universal gateway that is equipped with dedicated universal port (324 universal port) cards may reload after being stress tested for 20 minutes.

  Workaround: Use a command or script that does not use the slot number in referencing an interface or subinterface. The slot number is assumed to be the slot or card on which you are issuing the command.

- CSCdu32972

  After a Cisco AS5800 access server is booted, some of the E1 ports may initialize incorrectly, resulting in excessive linecode violations and bit errors on the received signal, even when the incoming signal is clean. T1 and T3 ports are not affected by this problem.

  Workaround: This problem cannot be cleared by shutting down the E1 port. Reload the access server to clear the condition.

- CSCdu34385

  An occasional call may fail because the Cisco AS5300 access server and the remote router attempt to negotiate an incorrect value for the codec. An incorrect codec value 0x20000 may be attempted to negotiate, and may result in the remote phone ringing once, and the call then getting dropped. There is no workaround.

- CSCdu37946

  Tagged Virtual Circuits (TVCs) and Label Virtual Circuits (LVCs) are created, but there is no connectivity. The problem occurs in a network that is connected to two label switch routers (LSRs). The network has a limit on the virtual channel identifier (VCI) space, but there is currently no way of limiting the VCI space used by the Tag Distribution Protocol (TDP) or the Label Distribution Protocol (LDP) in ATM and Tag-controlled ATM (TC-ATM) interfaces. There is no workaround.

- CSCdu41173

  Outgoing calls through the Foreign Exchange Office (FXO) port on the Cisco ICS7750 Multiservice Route Processor (MRP) may fail if the called number is more than ten digits (for example, a long distance call). This condition occurs on Cisco IOS Release 12.2(1). There is no workaround.

Resolved Caveats—Cisco IOS Release 12.2(1a)

Cisco IOS Release 12.2(1a) is a rebuild release for Cisco IOS Release 12.2(1). The caveats in this section are resolved in Cisco IOS Release 12.2(1a) but may be open in previous Cisco IOS releases.

- CSCdr00116

  A Cisco multichannel T1/E1 port adapter does not support the switching of Multiprotocol Label Switching (MPLS) packets. There is no workaround.

- CSCds38712

  Class-Based Weighted Fair Queueing (CBWFQ) may not correctly classify Multiprotocol Label Switching (MPLS) packets that are transmitted into an MPLS Traffic Engineering tunnel interface. There is no workaround.

- CSCds75021

  A Cisco 8230 router that has the Cisco WAN Manager (CWM) enabled may not be able to add interfaces or subinterfaces to the route processor module (RPM) card. The CWM is affected by this condition because the **interface** *interface-type* configuration command requires a reference to the slot number being used.

  Workaround: Use a command or script that does not use the slot number in referencing an interface or subinterface. The slot number is assumed to be the slot/card that you are issuing the command to.

- CSCdt06261

  If a recursive route, for example from Border Gateway Protocol (BGP), is resolved using the default route and if a route that is more specific to the recursive prefix is subsequently inserted into the database, Cisco Express Forwarding (CEF) may fail to reresolve the recursive route to use this new route rather than the default route. This situation may occur during route flaps in which the original route that a recursive route resolves to temporarily disappears. The recursive route is then permanently resolved through the default route even after the original route reappears.

  Workaround: Clear the recursive route using the **clear ip route** {*network* [*mask*]} EXEC command. This will force the rediscovery and reresolution of the recursive route.

- CSCdt19792

  TCP sessions cannot be initiated with an IP Security (IPSec) peer. This occurs when the server or client is a Cisco 2600 or 3600 series router that is using the following encryption hardware devices:

  - AIM-VPN/BP-DES/3DES VPN Encryption Advanced Interface Module (AIM) for the Cisco 2600 router.
  - NM-VPN/MP-DES/3DES VPN Encryption network module (NM) for the Cisco 3620 or Cisco 3640 router.
  - AIM-VPN/HP-DES/3DES VPN Encryption Advanced Interface Module (AIM) for the Cisco 3660 router

  This condition does not occur when software encryption is used.

  Workaround: TCP sessions must be run across the local (unencrypted) link.

- CSCdt21758

  A Cisco 7500 series router that is configured for Cisco Express Forwarding (CEF) (not distributed CEF [dCEF]) and Multiprotocol Label Switching (MPLS) may stop receiving MPLS packets on Versatile Interface Processor 2 (VIP2) modules after an online insertion and removal (OIR) event. All MPLS packets are dropped silently, and no counters are incremented. The connectivity is restored after dCEF is enabled.

Workaround: Use dCEF globally and disable it on per-interface basis, if needed.

- CSCdt29190

  The nas_port on Remote Authentication Dial-in User Services (RADIUS) reports Vendor-specific Attributes (VSAs) on all calls on controller 0. This includes calls from controllers other than controller 0. This condition may cause incorrect Call Detail Records (CDR) records. There is no workaround.

- CSCdt41384

  A router that is configured for Voice over IP (VoIP) may reload if it terminates all eight ongoing calls simultaneously at the destination. There is no workaround.

- CSCdt45083

  A Cisco AS5300 access server may fail an egress Continuity Test (COT) in the transponder and loopback modes. There is no workaround.

- CSCdt61322

  When multiple multilink PPP bundles are configured with Class-Based Weighted Fair Queueing (CBWFQ), all bundles except for first bundle drop all packets under light to moderate loads. There is no workaround.

- CSCdt85867

  A Cisco 3640 voice gateway may reload and a FreeExtension message is displayed when it is connected to a private branch exchange (PBX) that is running Q-Signaling protocol (QSIG). There is no workaround.

- CSCdt91000

  When a Cisco AS5300 access server receives an ISDN release message with a cause code 0xAC (cause 44 “requested circuit/channel not available”) before connecting on the Redundant Link Manager (RLM)/National ISDN-2 (NI2) interface, the Cisco Signaling System 7 (SS7) Interconnect for Voice Gateways Solution gateway may change the cause value to cause code 0x03 (cause 3 “no route to destination”) when it sends the H.225 Release message to the H.323 leg of the call if the gateway has a Voice over IP (VoIP) dial peer trying for the same call. This problem occurs when a call originates on the H.232 side and terminates on the RLM/NI2 side of the gateway. There is no workaround.

- CSCdt46941

  The configuration of the **isdn negotiate-bchan** [**resend-setup**] interface configuration command on the serial interface (D-channel) of an Non-Facility Associated Signaling (NFAS)/Redundant Link Manager (RLM) group in a Thundervoice configuration will cause multiple setups to be sent for a call in the event of a Continuity Testing (COT) failure. This may cause the Cisco SC2200 Signaling Controller and the gateway to associate different setup messages with the call and may subsequently cause the call to fail. There is no workaround.

- CSCdt92799

  A Cisco AS5300 access gateway that is using overlap receiving may experience dropped calls when the gateway receives a “sending complete” information element (IE) in the last INFO message from the Private Branch Exchange (PBX).

  Workaround: Configure the PBX to avoid sending a complete IE together with the last digit INFO message.

- CSCdt95498

  A Cisco 3620 router does not support the ISDN Link Access Procedure, Balanced-Terminal Adapter (LAPB-TA) feature. There is no workaround.

- CSCdt95677

  A Cisco AS5300 series access server may reload under heavy load and display the following stack:

```
Router# show stack
Minimum process stacks:
Free/Size Name
5704/6000 Reset ipc queue
2572/3000 fstp init
2388/3000 allegro libretto init
7388/12000 Init
7436/9000 DHCP Client
5288/6000 RADIUS INITCONFIG
Interrupt level stacks:
Level Called Unused/Size Name
2 5484628 7988/9000 Low IRQ Int Handler
3 19 8448/9000 High IRQ Int Handler
4 36100877 8600/9000 Console Uart
6 0 9000/9000 Parity interrupt
7 61183144 8604/9000 NMI Interrupt Handler
System was restarted by bus error at PC 0x60C10D9C, address 0x20
```

  Stack trace from system failure:

```
FP: 0x6205E0D0, RA: 0x60C10D9C
FP: 0x6205E128, RA: 0x60ADB01C
FP: 0x6205E150, RA: 0x60C17D08
FP: 0x6205E170, RA: 0x60C17E2C
FP: 0x6205E288, RA: 0x60C2ACC8
FP: 0x6205E2A8, RA: 0x60C2B430
FP: 0x6205E2F0, RA: 0x60C2576C
FP: 0x6205E320, RA: 0x60C25AF0
```

  There is no workaround.

- CSCdu00656

  Data may be written into the unused portion of the dual port RAM of the Digital Signal Processors (DSP) memory on a Cisco 7200 series router. This problem does not appear to affect voice calls. There is no workaround.

- CSCdu03931

  In Cisco IOS Release 12.2(2), the maximum number of dual tone multifrequency (DTMF) digits that can be forwarded is 10.

  Workaround: Users who are experiencing this problem should upgrade to Cisco IOS Release 12.2(1a).

- CSCdu04273

  A Cisco AS5300 access server may occasionally receive a disconnect with progress message and reload on ISDN voice trunks when no b-channel is negotiated. There is no workaround.

- CSCdu04555

  Voice calls cannot be made from NetMeeting out of a voice BRI interface to a Cisco 2600 or a 3600 series router. An incorrect bearer capability is constructed. There is no workaround.

- CSCdu05205

  A Cisco voice gateway may reload under a load of 15-20 simultaneous voice calls. There is no workaround.

- CSCdu05811

  A Cisco 2600 or 3600 series router may not properly release the second B channel of a voice BRI interface if the call is terminated first by the Voice over IP (VoIP) side of the connection. The second B channel pauses indefinitely until the device that is connected to the BRI releases the second B channel. There is no workaround.

- CSCdu08652

  The terminating end of a Cisco AS5300 access server that is using a channel-associated signaling (CAS) interface (T1 recEive and transMit [E&M] and E1 E2) may pause indefinitely when high voice traffic is present. There is no workaround.

- CSCdu14641

  Packets that are originated locally by a router are not correctly classified by Class-based weighted fair queueing (CBWFQ) (policy out) when the packets are either labelled or tagged and when the outgoing interface has Multiprotocol Label Switching (MPLS), Label Distribution Protocol (LDP), or Tag Distribution Protocol (TDP) configured. CBWFQ puts those packets into the class-default class instead to their proper configured class. The problem does not occur if MPLS or TDP is removed from the interface where the policy-map is applied. In such a setup, the coloring and matching are both correct. There is no workaround.

- CSCdu18348

  A Cisco AS5850 universal gateway that is equipped with dedicated universal port (324 universal port) cards may reload after being stress tested for 20 minutes. There is no workaround.

  Workaround: Use a command or script that does not use the slot number in referencing an interface or subinterface. The slot number is assumed to be the slot or card on which you are issuing the command to.

Resolved Caveats—Cisco IOS Release 12.2(1)

This section describes possibly unexpected behavior by Cisco IOS Release 12.2(1). All the caveats listed in this section are resolved in Cisco IOS Release 12.2(1). This section describes severity 1 and 2 caveats and select severity 3 caveats.

Access Server

- CSCds33599

  During abnormal behavior of modem ISDN channel aggregation (MICA), the modems recovery does not start up, which results in bad modems allocated for the call. This situation results in a low call success rate (CSR) within the system. In this situation, the modem should be marked busy out. There is no workaround.

Basic System Services

- CSCds25740

A Cisco router that is configured for priority queueing with X.25 in which the packets for the remote end are assigned the highest priority queue and the remote end is shutdown may not function properly.

Workaround: Use custom queueing.

- CSCds52612

  A PPC gcc.97r1-9804.ppc compiler error occurs on a 64-bit data movement.

  Workaround: Use Cisco IOS Release 12.1(5)T or Cisco IOS Release 12.2.

- CSCds64050

  A Cisco router that uses the protocol control information (PCI) Fast Ethernet controller of a certain vendor may reload because of a memory corruption that is caused by a rare condition in which a packet consisting of only cyclic redundancy check (CRC) bytes is received.

  Workaround: Use to the driver software that contains the fix for this caveat.

- CSCds65974

  On a Cisco 1600 series router, a slow memory leak on an ISDN BRI interface may occur. Symptoms include the following:

  – Free memory continually decreases in the output of the **show process memory** command.

  – The total number of small buffers continually increases to very high levels.

  The router eventually runs out of memory and displays memory allocation failure error messages in the processor pool. The error messages may also appear in the I/O pool. At that point, you need to reload the router to resume normal operation. The router displays the following error messages:

  ```
  %SYS-2-MALLOCFAIL: Memory allocation of 552 bytes failed from 0x20CD53C, pool
  Processor, alignment 0 -Process= "Per-minute Jobs", ipl= 4, pid= 21

  -Traceback= 20FB37E 20FC64C 20CD544 2106D7A 20CDAB8 20DCA2C

  %SYS-2-MALLOCFAIL: Memory allocation of 552 bytes failed from 0x20CD53C, pool
  Processor, alignment 0 -Process= "Net Background", ipl= 4, pid= 14

  -Traceback= 20FB37E 20FC64C 20CD544 20CD83E 20CDBB0 2464668 246D09C 20DD01E 20DD1C4

  %SYS-2-MALLOCFAIL: Memory allocation of 552 bytes failed from 0x20CD53C, pool
  Processor, alignment 0
  ```

  There is no workaround.

- CSCds92198

  On a Cisco router, after one or two calls, the port remains in an off-hook condition. The Foreign Exchange Station (FXS) voice interface card (VIC) and direct inward dial (DID) VIC fails to recognize an on-hook condition. There is no workaround.

- CSCdt06653

  ISDN traps that do not use register_snmp_trap do not work. If a trap that uses General Packet Radio System (GPRS) Tunneling Protocol (GTP) does not use the register_snmp_trap correctly, then other traps are also affected, and the traps cannot go out. There is no workaround.

- CSCdt07408

  You cannot run NetFlow and distributed Cisco Express Forwarding (dCEF) on a Versatile Interface Processor (VIP) or a Gigabit Ethernet Interface Processor Plus (GEIP+) card with 256 MB of DRAM. There is no workaround.

- CSCdt20427

When you configure distributed Compressed Real-Time Transport Protocol distributed Compressed Real-Time Transport Protocol (dCRTP) on an interface, spurious accesses result for every compressed Real-Time Transit Protocol (RTP) packet.

Workaround: Disable to distributed Compressed Real-Time Transport Protocol (dCRTP).

- CSCdt23572

  Round-Trip Time (RTT) measurement may be incorrect if the measurement cycle begins just before 00:00:00 Coordinated Universal Time (UTC) time. This situation applies to all probe types. There is no workaround.

- CSCdt31081

  ATM adaptation Layer 2 (AAL2) does not switch from voice mode to voice-band-data mode (upspeed) with fax traffic. If the codec is G726 or G711, AAL2 can sustain up to 9600 baud fax traffic without the upspeed. There is no workaround.

- CSCdt58772

  On a network that includes a Frame Relay access device (FRAD) that is connected through a serial bisynchronous line to a Cisco 3640 router that is running Cisco IOS Release 12.1(5)T3, the Cisco 3640 router has a wide area Network (WAN) connection to a Cisco 1601 router that is running Cisco IOS Release 12.1(5). This setup is connected through a bisynchronous serial line to an ATM. The encapsulation type is Bisynchronous Serial Tunnel (BSTUN). The ATM works correctly for several days before the connection drops. The bisynchronous Block Check Character (BCC) is dropped on the line between the Cisco 1601 router and the ATM when the last BCC character is an x7F.

  For example, if the ATM transmits:

  ```
  02d440f2f21cf0f0f01c1cf91cf1f9f1f0f2f6f0f0f0f0f0f003 347f <- BCC characters
  ```

  The router receives:

  ```
  02d440f2f21cf0f0f01c1cf91cf1f9f1f0f2f6f0f0f0f0f0f00334 <- last BCC character is gone
  ```

  If the data ends in other than a x7F there appears to be no problem.

  Workaround: Use Cisco IOS Release 12.1(2) on the Cisco 1601 router.

IBM Connectivity

- CSCdr55235

  In some circumstances, Frame Relay access support (FRAS) fails to get connected. The output of the **show llc** command shows that the Logical Link Control (LLC) session remains in Asynchronous Disconnect Mode (ADM).

  Workaround: Remove the failing FRAS connection from the configuration and then add it back in to remove the LLC session.

- CSCds17085

  Under rare circumstances there may be an invalid Routing Information Field (RIF) when using Data-Link Switching/Routing Information Field (DLSw/RIF) pass-through is used. As a consequence the llc2 session between the Network Control Protocols or the virtual telecommunications access methods (VTAM) do not get established.

  Workaround: Use remote source-route bridging (RSRB) without local-ack.

Interfaces and Bridging

- CSCds03768

  A getnext of 1.3.6.1.4.1.9.9.61.1.1.1.1.2, which is a ciscoAccessEnvMonMIB variable may cause a Cisco router to reload or pause indefinitely. There is no workaround.

- CSCds03961

  When a Cisco 7507 router with a Gigabit Ethernet Interface Processor (GEIP) installed in slot 5 and slot 6 is upgraded to Cisco IOS Release 12.0(11)S, the GEIP may experience a reload when booted.

  Workaround: Run Cisco IOS Release 11.1(33)CC to stabilize the router.

- CSCds42715

  The 802.1q **native** VLAN keyword does not function properly when fast switching is enabled.

  Workaround: Use the **native** VLAN keyword when the packets are process switched.

- CSCds65995

  When you use dot1q encapsulation on a Cisco 6400 series router and the native VLAN is VLAN 1, communication stops between the devices.

  Workaround: Use Inter-Switch Link (ISL) instead of dot1q.

  Alternate workaround: Change the native VLAN to any VLAN other than VLAN 1.

IP Routing Protocols

- CSCds04704

  Multiprotocol Label Switching (MPLS) traffic engineering (TE) tunnels may fail to come up on slow interfaces (less than 2 Mb per second) because fair queueing is automatically enabled on such interfaces. This situation may artificially reduce the bandwidth reservable by TE tunnels.

  Workaround: Disable fair queueing on the interface by entering the **no fair-queue** command.

- CSCds38720

  A Cisco 7100 series router fails to copy the IP precedence of IP packets to a generic routing encapsulation (GRE) header when precedence is set using policy routing, outgoing interface is set using policy routing in the same router, and fast switching is used for policy routing. There is no workaround.

- CSCds44102

  Internet Control Message Protocol (ICMP) Router Discovery Protocol (IRDP) does not work if you use the **ip irdp** interface configuration command to configure minimum and maximum intervals and then use the **show ip irdp** EXEC command.

  Workaround: Use the **ip irdp** [**maxadvertinterval** *0*], the **ip irdp** [**minadvertinterval** *0*], and the **ip irdp** [**holdtime** *0*] interface configuration commands, and then negate these commands using the **no ip irdp** [**minadvertinterval** *0*] and the **no ip irdp** [**holdtime** *0*] interface configuration commands. This workaround turns on IRDP for the interface.

- CSCds54855

  A Cisco router that is connected to a stubby area does not advertise the default route into that area. The database on the router shows that the link-state advertisement (LSA) for the default route is MAXAGE and that the LSA is not purged until the Open Shortest Path First (OSPF) process is reset. There is no workaround.

- CSCds62728

  When Message Digest 5 (MD5) authentication is applied to Enhanced Interior Gateway Routing Protocol (EIGRP) neighbors of a stub EIGRP router, the neighbor relationship is not formed.

  Workaround: Disable MD5 encryption.

- CSCds67623

  A Cisco router that is running Resource Reservation Protocol (RSVP) with BRI interfaces reboots if all of the following conditions are true:

  - RSVP is previously enabled on any BRI interface with the **ip rsvp bandwidth** command.
  - There is only one interface of any type remaining with RSVP enabled.
  - RSVP is disabled on the last remaining interface with the **no ip rsvp bandwidth** command.

  There is no workaround.

- CSCds72170

  A Cisco router that is configured with Network Address Translation (NAT) may encounter a situation in which NAT uses the Selsius Skinny Station Protocol support to listen on a TCP port 2000, which is used by Cisco Call Manager (CCM) to translate the embedded IP address and port information. Since a TCP port 2000 is not a registered port, there are other applications that may be using it. NAT treats this port as a special port and tries to parse the packet when an application uses a TCP port 2000, which may lead to a reload. There is no workaround.

- CSCdt04176

  If one of links in an area goes down, the Open Shortest Path First (OSPF) summary routes related to the failed link are deleted from the routing table even though you can reach the network through another link. After 5 seconds, the routes are restored automatically. There is no workaround.

- CSCdt21533

  When a Network Address Translation (NAT) pool is configured with subranges, the subranges do not take effect. There is no workaround.

- CSCdt23240

  A system goes into a continuously booting loop when you use the **ip nat inside source** {**list**} global configuration command and when you define more than one pool.

  Workaround: Enter the break sequence, go into ROM monitor (ROMmon) mode and boot using the boot loader image. Erase the configuration and replace every command except the **ip nat inside source** {**list**} global configuration command.

  Alternate workaround: Use Cisco IOS Release 12.1 E.

- CSCdt27148

  A 7206VXR router that is running Cisco IOS Release 12.2(0.5) may experience a software-forced reload when Network Address Translation (NAT) is configured on the router.

  Workaround: Use the **ip nat service skinny tcp port** *number* global configuration command with *2000* as the *number* on the router.

- CSCdt41262

  On a Cisco router that is running Cisco IOS Release 12.1(5)T1, when you try to add a route-map or a filter-list to the address-family Virtual Private Network (VPN) version 4 neighbor, the configuration ends up under a global Border Gateway Protocol (BGP) configuration instead.

  Workaround: Disable the parser cache by entering the **no parser cache** global configuration command.

- CSCdt41363

  For the **set ip next-hop** route-map configuration command, the command line interface (CLI) prevents you from configuring one of the router interfaces as the next-hop in routing updates Border Gateway Protocol (BGP). There is no workaround.

Miscellaneous

- CSCdp03254

  A Cisco 3640 router may reload with a bus error at PC 0x603DFF38, address 0xAC. The stack decode shows:

  ```
  [fcp_transmit_on_mgmt_idbs [fcp_transmit_shm_msg [fcp_reenable_learning
  [fcp_process_sh_ack_msg [fcp_input [fcp_process [r4k_process_dispatch
  [r4k_process_dispatch
  ```

  There is no workaround.

- CSCdp90589

  Multilink PPP over ATM may drop packets with a “Bad VCD” error message. There is no workaround.

- CSCdp90696

  If an interface card is replaced online through an online insertion and removal (OIR) with a card of a different type, the Hot Standby Router Protocol (HSRP) configuration may not be carried over to the new card.

  Workaround: Remove HSRP from the configuration before removing the card.

- CSCdr30099

  The difference between Real-Time Transport Protocol (RTP) timestamps and sequence numbers causes voice quality degradation. There is no workaround.

- CSCdr49601

  A Gigabit Ethernet Interface Processor (GEIP) on a Cisco 7500 series router may experience problems receiving causing it to pause indefinitely.

  Workaround: Disable distributed Cisco Express Forwarding (dCEF) on the Gigabit Ethernet interface.

- CSCdr56944

  A Cisco AS5300 series universal access server that is used for terminating ISDN calls reloads with a bus error at acct_search_type once within 4 weeks of deployment if you use the **aaa accounting resource start-stop group** and **aaa accounting resource stop-failure group** global configuration commands on a network access server (NAS) when a communication problem also exists with the RADIUS accounting server. If the START record is not processed on call termination but still remains in the queue, the NAS reloads. There is no workaround.

- CSCdr72112

  Digital Signature Standard (DSS) keys generated in Cisco IOS Release 12.0(11) cannot be used or exchanged in Cisco IOS Release 12.1(2). There is no workaround.

- CSCdr76950

H.235 security configured on a gateway generates and includes an H.235 crypto token in the request messages that the gateway sends to the gatekeeper. This process allows the gatekeeper to authenticate the gateway. When the crypto token is generated, the gateway inadvertently frees the wrong memory. This situation causes an immediate reload of the gateway. There is no workaround.

- CSCdr96959

  On a Cisco 7200VXR series router with one or more dual-port Token Ring Inter-Switch Link (TRISL) 100BaseTX (PA-2FEISL-TX) port adapters installed, throughput may be adversely affected when you configure a service policy using the **service-policy** policy-map class configuration command on the Fast Ethernet ports of the PA-2FEISL port adapter.

  Workaround: Do not use service policies on Fast Ethernet interfaces.

- CSCds02864

  The flapping of LANE interfaces with Cisco Express Forwarding (CEF) switching may cause the Cisco router to reload.

  Workaround: Disable CEF on those interfaces.

- CSCds06148

  A Cisco router reloads because a PC application does not remove the dynamic elements when ms_play converts them into static prompts. The amount of memory held increases and causes the router to reload. There is no workaround.

- CSCds09499

  Cisco IOS Software allocates calls to modems in the disconnecting state when it fails to find a free modem. Cisco IOS Software sends a terminate signal to a modem and after two seconds assumes that the modem is back to idle even if it does not receive an idle signal from the modem. This assumption is incorrect for modems taking longer to terminate and for modems that have failed. This situation results in RingNoAnswer (RNA) and a lower call success rate (CSR). There is no workaround.

- CSCds16810

  On a Cisco AS5300 series access server that is running Cisco IOS Release 12.1(2a) and that has an 8 port T1/PRI, CPU utilization goes up to 35 percent, even with no users dialed in to the system. There is no workaround.

- CSCds18803

  On a network that has a client that is directly connected to the Token Ring module of a Cisco Catalyst 5000 series switch, a Cisco 7500 series router connects the switch on a Fast Ethernet module (PA-2FEISL-TX) through a Token Ring Inter-Switch Link (TRISL). The router may not pass non-IP traffic for the client if the Media Access Control (MAC) address of the client contains a pattern on 0800.

  Workaround: Replace the Token Ring Inter-Switch Link (TRISL) interface with a real Token Ring port.

- CSCds23802

  On a Cisco 3600 series router that is running Cisco IOS Release 12.1(4) or 12.1(3.5)PI, when a permanent virtual circuit (PVC) with a total data rate higher than the sustainable cell rate (SCR) is overloaded, Operation, Administration, and Maintenance (OAM) cells are delayed before transmission which may cause the PVC to go down. There is no workaround.

- CSCds24566

  A Cisco router reports the following error message when you use the **clear counters** EXEC command:

```
%SYS-3-CPUHOG
```

There is no workaround.

- CSCds28537

  If you oversubscribe a Cisco ICS7700 series Multiservice Route Processor (MRP) with fax calls, a digital signal processor (DSP) may stop responding. The MRP displays output similar to the following message:

  ```
  ASSERTION FAILED: file "../src-m860-les/if_ipm_c54x_idma.c", line 537 *
  %SYS-2-BADSHARE: Bad refcount in datagram_done, ptr=8109E46C, count=0 *
  %IPM_C54X-3-HOST_XMIT_BLOCKED: Host is unable to transmit packets to DSP 1
  ```

  After the MRP displays the message, no calls can go through.

  Workaround: Reload the MRP.

- CSCds30627

  Auth-proxy fails with a vendor-specific browser and the window displays a “400 bad request” message.

  Workaround: Use a later version of the browser.

- CSCds31610

  When you use Simple Network Management Protocol (SNMP) to poll a call active record (CAR), a timing-related access violation of the MIB data structure may occur, which causes a Cisco router to unexpectedly reload. There is no workaround.

- CSCds35041

  Symptoms If a progress message is received while a call transfer is being set up, the transferred party does not hear ringbacks, tones, or announcements that are played by the destination gateway. However, the call will complete with a two-way voice path.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.2(1)T.

  Workaround There is no workaround.

- CSCds37028

  A Cisco 1700 series router has very low throughput when you use IP Security (IPSec) over generic routing encapsulation (GRE) with a hardware encryption card compared to when you use IPSec directly. Packets get processor-switched instead of fast-switched. There is no workaround.

- CSCds39413

  Symptoms A router may stop forwarding traffic and may observe a memory leak after a sustained period of operation.

  Conditions This symptom is observed on a Cisco 7200 series that has an outgoing ATM interface.

  Workaround There is no workaround.

- CSCds42140

  Symptoms An interface that is configured with a static IP address in the startup configuration obtains an IP address using Dynamic Host Configuration Protocol (DHCP) after a router reboots.

  Conditions This symptom is observed when a new interface card is inserted into the router or when the startup configuration on the router does not have the configuration for one or more interfaces.

  Workaround There is no workaround.

- CSCds44730

A Cisco AS5300 series access router that is running Cisco IOS Release 12.0(7)T with the c5300-js-mz.120-7.T.bin image may experience a system returned to ROM by error with a write bus error interrupt at PC 0x6021B0D0. There is no workaround.

- CSCds48735

  Voice support on a Versatile Interface Processor 4 (VIP4) reloads a Cisco 7500 series router during a stress test after 5 to 6 hours. There is no workaround.

- CSCds49272

  On the originating Cisco gateway, some digital signal processors (DSPs) are not released after stress testing. There is no workaround.

- CSCds49536

  On a Cisco 7200VXR series Network Services Engine (NSE-1) with Parallel eXpress Forwarding (PXF) switching and a Gigabit Ethernet I/O controller, the Gigabit Ethernet interface may stop forwarding packets.

  Workaround: Disable PXF switching on the NSE using the **no ip pxf** command.

- CSCds53235

  After reloading a Cisco 7500 series router using multiple tunnel interfaces and Cisco Encryption Technology (CET) over Frame Relay, only part of the CET tunnels function properly (27 out of 46). There is no workaround.

- CSCds55000

  A Q Signaling (QSIG) call is prematurely disconnected during hold. There is no workaround.

- CSCds55017

  A DISCONNECT message may not be forwarded across a plain old telephone service (POTS) call leg. When an E1 Q Signaling (QSIG) controller is out of service, and a Cisco router receives an incoming call from a PBX, the controller does not send a DISCONNECT message to the PBX. Instead, the PBX initiates a DISCONECT message after 20 seconds with a “recovery on timer expiry” cause message. If the signaling connection is not successfully set up, H.323 does not initiate disconnect procedures.

  If the H.323 terminating gateway is unreachable, then a DISCONNECT message is returned with a “service or option unavailable” cause message after the H.225 connection timer expires. The cause message may prevent a PBX from rerouting the call. There is no workaround.

- CSCds55742

  While 8 T1 lines are stress tested for about 2 hours, a voice time-division multiplexing (TDM) connection fails on a PA-MCX port adapter on a Cisco 7200 series router that has a T1-channel associated signaling (CAS) Voice over IP (VoIP) configured. There is no workaround.

- CSCds57256

  Memory allocation failure may occur when you make a Voice over IP (VoIP) call and the connecting plain old telephone service (POTS) call leg uses Q Signaling (QSIG) to a PBX. There is no workaround.

- CSCds57642

  If an ATM interface experiences traffic congestion, a subsequent packet that belongs to a virtual connection is not entered into tx_ring or txc_ring. Instead, it is held in VC hold_pak is not scheduled. This can in turn cause the output queue to wedge.

  Workaround: Enter the **shut** command followed by the **no shut** command on the subinterface. This workaround clears the queue temporarily.

- CSCds58082

  On a Cisco AS5300 series universal access server that is running the c5300-is-mz.capa image, a certain vendor billing system has many Call Detail Records (CDRs) (about 0.25 percent) in which the disconnect cause is 0x11 (busy) but the call duration is not zero. There is no workaround.

- CSCds58760

  On a Cisco AS5300 series universal access server, when modem recovery action is configured to be disabled, modems are still downloaded with no regard for the recovery configuration. The recovery mechanism considers the configuration only when call failures exceed the threshold. There is no workaround.

- CSCds60445

  Symptoms A router may reload when an attempt is made to pass some Supplemental Q Signaling (QSIG) services.

  Conditions This symptom is observed on a Cisco AS5300.

  Workaround There is no workaround.

- CSCds60991

  In a configuration that includes a Cisco AS5300 series universal access server and a Cisco SC2200 series signaling controller, when a receiving party suspends an incoming call for a moment, Suspend and Resume messages may not be generated in the incoming leg. There is no workaround.

- CSCds61495

  A Versatile Interface Processor (VIP) under heavy loads may produce spurious access messages.

  Workaround: Use the Cisco IOS release that contains the fix for this caveat.

- CSCds62892

  A Cisco router that is acting as a Provider Edge (PE) router in a Multiprotocol Label Switching (MPLS)/Virtual Private Network (VPN) may show an incorrect tag value for some VPN routing/forwarding instance (VRF) routes. This situation breaks connectivity between the local and remote VPN networks. The problem may occasionally appear under specific timing conditions in networks with unstable (flapping) VRF links and redundant Route Reflectors (RR) that are at different geographical locations (different network connection speed).

  The recovery method is to use the **clear ip route vrf** *vrf-name* {*ip-address*} EXEC command, in which the vrf-name is the VRF that includes the route and the corresponding IP address.

  Workaround: Use a single RR.

- CSCds63916

  Pings larger than 1500 bytes fail if Cisco Express Forwarding (CEF) switching occurs across a Fast Ethernet interface (port adapter) and a Token Ring interface (interface processor) and when you configure rate-limiting on the Fast Ethernet interface.

  Workaround: Disable CEF switching on the Fast Ethernet interface.

- CSCds63951

  You cannot identify the master or slave dial shelf controller (DSC) using Simple Network Management Protocol (SNMP). There is no workaround.

- CSCds63989

  On a Cisco router that is running Cisco IOS Release 12.0(10)SC1, PCs drop when you change the interval on the **cable privacy tek life-time** global configuration command from the 12-hour default to 3 hours. When the PCs drop, you can ping on the local subnet (not including the gateway). After

you ping locally for the first time, you can ping outside the subnet. The cable modem does not display the cm file. This situation occurs on slave interfaces in a bundle when Cisco Express Forwarding (CEF) and BPI are both enabled.

Workaround: Perform a release or a renew on the PCs.

Alternate workaround: Let the PCs recover on their own, which may take up to 20 minutes.

Alternate workaround: Disable CEF or bundling.

- CSCds64597

  With the Point-to-Point Protocol over ATM (PPPoA) feature, dialer configurations, and Multilink PPP, you may see a virtual access interface flap periodically with the interval of dialer idle time. There is no workaround.

- CSCds65453

  When a class 3 switch that initiates calls is connected to the ISDN PRI interface of a Cisco AS5300 series universal access server that is running Cisco IOS Release 12.1(3)XI, the call uses a Session Initiation Protocol (SIP) proxy to get to a gateway where the call is terminated at a switch. Most of the calls are completed (tone is generated, phone is answered), but some of the calls are not completed. No error message is produced in the system log. Debug output shows the following message:

  ```
  ccsip_caps_ind: Load DSP with codec (-1) , Bytes=0
  ```

  The debug message should read:

  ```
  ccsip_caps_ind: Load DSP with codec (5) g711ulaw, Bytes=160
  ```

  There is no workaround.

- CSCds65881

  The remote_ip_authentice.1.1.1.tcl Tool Command Language (TCL) interactive voice response (IVR) 1.0 script is incorrectly classified as a TCL IVR 2.0 script on Cisco voice gateways that support the TCL IVR 2.0 functionality. This behavior causes the script to abort and the call to fail. There is no workaround.

- CSCds66588

  A memory leak may occur under various timing conditions when a backend name server is used with DistributedDirector. There is no workaround.

- CSCds68004

  A Cisco Multipath Channel (CMPC) configuration on a channel port adapter (XCPA) or Enterprise Systems Connection (ESCON) Channel Port Adapter version 4 (ECPA4) causes read failure on a Flash disk.

  Workaround: Use a Flash card instead of a Flash disk.

- CSCds68071

  Calls from a vendor-specific virtual meeting application to a vendor-specific PBX fail. There is no workaround.

- CSCds68492

  Cisco Express Forwarding (CEF) may be disabled on virtual template interfaces when the router reloads. There is no workaround.

- CSCds69086

This situation may occur in a Multiprotocol Label Switching (MPLS) Virtual Private Network (VPN) on a provider core router (P) that is adjacent to a VPN provider edge router (PE) when the address (A) of an interface on PE that is bound to a customer VPN routing/forwarding instance (VRF) is also an address for a core router that is adjacent to P. When the situation occurs the P router uses incorrect outgoing labels for prefixes whose next hop address is A. This situation can be detected in the output of the **show tag-switching forwarding** EXEC command on the P router. Specifically, for prefixes whose next hop address is A, the output shows the label advertised by PE for the outgoing label instead of the label advertised by the next hop router.

Workaround: Configure provider core routers so that the routers do not have addresses that are used as addresses for interfaces bound to customer VRFs on PE routers.

- CSCds69267

  On a Cisco 7200 series router that is running Cisco IOS Release 12.1(5.1)T, a Cisco 8-port multiservice interchange multichannel T1 or E1 (PA-MCX-8TE1) port adapter that is configured with a T1 line PRI and Voice over Frame Relay (VoFR), the router may reload after 120 calls (5 T1 lines) within one day of operation. There is no workaround.

- CSCds69316

  DistributedDirector may reload when a host or server is removed automatically, and the host or server is still referenced. There is no workaround.

- CSCds69666

  Multiple traffic classes are generated with committed access rate (CAR), PQCBWFQ, Frame Relay Fragmentation (FRF.12), and Frame Relay Traffic Shaping (FRTS) configured. Traffic is correctly policed to the committed information rate (CIR). However, as the traffic exceeds the contracted rate, policing and PQCBWFQ restricts traffic to the CIR well below the line rate to allow for framing overhead but the output queue still fills, causing packet loss and delay, with throughput much less than the CIR. Therefore, an aggressive low priority data class may cause problems for a well-behaved higher priority traffic stream. There is no workaround.

- CSCds69928

  On a Cisco 7500 series router that is running Cisco IOS Release 12.0(13.6)S or 12.0(13.6)S1, when a service policy is attached to an ATM or Frame Relay virtual connection, class map statistics are correct, but features such as bandwidth or police features show statistics that are all zeros.

  Workaround: Attach a service policy to ATM or Frame Relay subinterfaces.

- CSCds70637

  The VWIC-1MFT-T1 Signaling Link Terminal will respond to a single yellow alarm code word by shutting down the controller. Large numbers of line and path code violations will result. The frequency of this problem may vary. The controller will report the following error message:

  ```
  %CONTROLLER-5-UPDOWN: Controller T1 0/1, changed state to down (RAI detected)
  ```

  Workaround: Use Super Frame (SF) mode instead of Extended Super Frame (ESF).

  Alternate workaround: Do not use the Telco equipment that is incorrectly indicating yellow alarm.

- CSCds70691

  In RSP8, if the packets are received in PA-A3-8T1/E1 interface, the interface type will not be recognized. There is no workaround.

- CSCds70862

  Calls to a vendor-specific PBX may not be completed. There is no workaround.

- CSCds71022

Symptoms A “404 not found error” is displayed and the Cisco quality of service (QoS) Device Manager (QDM) does not start up when a user clicks the QDM link on the home page of the router.

Conditions This symptom is observed if the user did not install QDM in the default Flash file system. For example, this symptom occurs if QDM is installed in slot 0 instead of slot 0.

Workaround Instead of clicking the QDM link, enter the following URL in the browser:

http://<IP>/archive/slot1:qdm/qdm.shtml

Replace “slot1” with the name of the file system that the QDM is installed on.

- CSCds71058

  A Cisco AS5800 series universal access server that is running Cisco IOS Release 12.1(05)T or a later release and that is configured with IP Cisco Express Forwarding (CEF) reloads because of alignment and bus errors when V.120 digital calls are present. The access server displays the following restart message:

  ```
  %ALIGN-1-FATAL: Corrupted program counter pc=0x0, ra=0x6046097C, sp=0x628D9C38
  ```

  There is no workaround.

- CSCds71440

  A Cisco AS5800 series universal access server that has downloadable codecs on a medium complexity card experiences a low call success rate (CSR). There is no workaround.

- CSCds72270

  The new feature ANI/DNIS Delimiter for CAS Calls on CT1 in Cisco IOS Release 12.1(1)T on a Cisco AS5800 series universal access server does not function properly. There is no workaround.

- CSCds72416

  A Cisco gateway that is running the c5300-is-mz.capA8 image (based on Cisco IOS Release 12.1(4.4)T2) may pause indefinitely with error message output on the console. There is no workaround.

- CSCds72459

  When you use Rivest, Shamir, and Adelman (RSA) signature authentication for IP Security (IPSec), a Cisco router exchanges certificates with the IPSec peer router if the router has not previously negotiated with this peer router. In this case, the router correctly verifies the peer router certificate and checks the appropriate certificate revocation list (CRL) to make sure that the peer router certificate has not been revoked.

  In subsequent negotiations with the same peer router, the router may fail to obtain and check the appropriate CRL. This situation may result in the router successfully negotiating an IPSec connection with a peer router whose certificate has been revoked.

  Workaround: Reload the router.

- CSCds73277

  A Cisco 3640 router or a Cisco 7200 series router may reload when a class map (or the access control list (ACL) referred to in a class-map) is altered. This situation occurs in hierarchical class-map statements and also when match statements or access lists indirectly related to the class-map statement are modified. There is no workaround.

- CSCds73361

  Inconsistent serial interface counters may occur when you use a hardware encryption card.

  Workaround: Use the Cisco IOS Release that contains the fix for this caveat.

- CSCds73550

Using zero to cancel a Rivest, Shamir, and Adelman (RSA) key may generate a traceback message on a Cisco router if there is no primary identity configured. The router should continue to function normally.

Workaround: Use the Cisco IOS release that contains the fix for this caveat.

- CSCds73654

  A Cisco router may reload when the router queries the dialCtlPeerStatsRefuseCalls object from a Simple Network Management Protocol (SNMP) server. There is no workaround.

- CSCds73984

  In a Cisco router that is running Cisco IOS Release 12.1(5.3), a dynamic permanent virtual circuit (PVC) cannot be discovered in a subinterface on an ATM-Deluxe interface and cannot be discovered on a main interface after the subinterface is moved. There is no workaround.

- CSCds74643

  On a Cisco 4500 or 4700 series router, when you use a Systems Network Architecture (SNA) switch instead of a Network Control Program (NCP) for specific downstream dependent logical units (LUs), LU2 sessions are not established because the SNA Switch Dependent LU Requester (DLUR) forwards the secondary logical unit (SLU) name in a BIND message for the LU2. When the Network Control Program (NCP) is in use, the LU can be connected by the host application. The nonnegotiable BIND message does not include the SLU name.

  Workaround: Use the SLU name on the downstream PU.

- CSCds74789

  Symptoms The shaping service policy is rejected on the basis of the following reason:

  `"service-policy is supported only on VIP interfaces with DCEF enabled"`

  Conditions This symptom is observed on Versatile Interface Processor (VIP) interfaces that have distributed Cisco Express Forwarding (dCEF) enabled.

  Workaround There is no workaround.

- CSCds75050

  A Cisco Gateway GPRS Support Node (GGSN) slows down and finally reloads after it is up for 2 days, 19 hours, and 16 minutes. This situation can be reproduced if the last mobile user on a path creates or deletes a Packet Data Protocol (PDP) context, recreates another PDP context, and then performs a Routing Area (RA) update from another Serving GPRS Support Node (SGSN). There is no workaround.

- CSCds75723

  A Cisco router experiences a software-forced reload after you use the **ip audit ids-policy in** command. There is no workaround.

- CSCds76418

  In an Multiprotocol Label Switching (MPLS) network that uses Label Distribution Protocol (LDP) or Tag Distribution Protocol (TDP), packets that match the default route are dropped or forwarded incorrectly. This situation may occur in MPLS networks that use LDP or TDP that have routes for both 0.0.0.0/0 (default) and 0.0.0.0/n. Routers that incorrectly drop or forward these packets, the output of the **show tag-switching forwarding-table** privileged EXEC command shows the label advertised for 0.0.0.0/n as the outgoing label for 0.0.0.0/0.

  Workaround: Prevent the use of route 0.0.0.0/n in networks that use 0.0.0.0/0 (default).

- CSCds76424

Packets of 1500 bytes are dropped on the Fast Ethernet interface of a Cisco AS5400 series universal access server that is configured as an Inter-Switch Link (ISL) or dot1q trunk. There is no workaround.

- CSCds76566

  A Cisco 2600 or 3600 series gateway that is running Cisco IOS Release 12.1(3a)XI4 and that is configured with Registration, Admission, and Status (RAS) protocol Resource Availability Indication (RAI) always indicates a threshold limit that is reached regardless of what limit has been set. You can diagnose this situation in the output of the **show call resource voice threshold** privileged EXEC command, which shows that the threshold has been reached (high_threshold_hit) with no active calls on the gateway. This situation does not affect Cisco IOS Release 12.1(3a)XI3. There is no workaround.

- CSCds76567

  When a connection trunk is configured on a Cisco 7200 series router, some trunks may go down and up intermittently. There is no workaround.

- CSCds77504

  On a Cisco router that is running Cisco IOS Release 12.1(5a) and that is running Tag Distribution Protocol (TDP) on an ATM point-to-point subinterface between two routers, the TDP session for the subinterface disappears and cannot be reestablished.

  Workaround: Enter the **configure terminal interface** *interface-name* command followed by the **shut** command. Wait 10 to 15 seconds, and then enter the **no shut** command.

- CSCds77693

  A Cisco 7200 or 7500 series router with an enhanced ATM Port Adapter (ATM-PA3) 8T1 or 8E1 may stop forwarding packets on one or more virtual circuits (VCs). The packets show up as output drops on those VCs. These VCs appear stuck. This situation occurs because of newer versions of microcode G120.

  Workaround: Use the **shut** command followed by the **no shut** command on the subinterface or the main interface.

- CSCds77902

  With Parallel eXpress Forwarding (PXF) switching, all packets going out an ATM variable bit rate (VBR) permanent virtual circuit (PVC) are dropped if the PVC gets congested once by a burst for a few seconds. Packet drops on the ATM PVC continue even if the PVC is not congested anymore. Process-switched packets still go through.

  Workaround: Disable PXF switching by entering the **no ip pxf** command.

- CSCds78112

  When a Cisco IOS voice gateway is configured to use a RADIUS server for user authentication, authorization, or accounting, the gateway may reload because of memory depletion if the external RADIUS server becomes unreachable. There is no workaround.

- CSCds78766

  On a Cisco 2600 or 3600 series router that is running Cisco IOS Release 12.1(3a)XI3 and that has a two-slot voice network module (NM-2V) and a Foreign Exchange Office (FXO) module, the digital signal processor (DSP) may pause indefinitely. Subsequent calls that are made after the DSP pauses indefinitely do not complete. When this situation occurs, the output of the **show voice call** [**summary**] privileged EXEC command appears as follows:

```
PORT CODEC VAD VTSP STATE VPM STATE
1/0/0 g726r32 n S_CONNECT S_TRUNKED
1/0/1 g726r32 n S_CONNECT S_TRUNKED
```

```
1/1/0 g726r32 n S_CONNECT S_TRUNKED
1/1/1 - - - FXSLS_ONHOOK
2/0/0 g726r32 n S_CONNECT FXOGS_OFFHOOK
2/0/1 None n S_SETUP_FAIL - - S_SETUP_IND_NO_DSP
- - S_SETUP_IND_NO_DSP - - S_SETUP_IND_NO_DSP -
- S_SETUP_IND_NO_DSP - - S_SETUP_IND_NO_DSP - - S_
SETUP_IND_NO_DSP - - S_SETUP_IND_NO_DSP - - S_SETUP_IN
D_NO_DSP - - S_SETUP_IND_NO_DSP - - S_SETUP_IND_NO_DSP
- - S_SETUP_IND_NO_DSP - - S_SETUP_IND_NO_DSP -
- S_SETUP_IND_NO_DSP - - S_SETUP_IND_NO_DSP - - S_
SETUP_IND_NO_DSP - -S_SETUP_IND_NO_DSP - - S_SETU P_IN
D_NO_DSP - - S_SETUP_IND_NO_DSP - - S_SETUP_IND_N O_DSP
- - S_SETUP_IND_NO_DSP - - S_SETUP_IND_NO_DSP -
- S_SETUP_IND_NO_DSP - - S_SETUP_IND_NO_DSP - - S_
SETUP_IND_NO_
```

The voice port 2/0/1 cannot accept new voice calls.

Workaround: Reload the DSP.

- CSCds78976

  On a Cisco AS5300 series universal access server that is running Cisco IOS Release 12.1(5) or Release 12.1(6), modems are marked BAD after a reload with calls coming into the router. If there are no calls coming in, the modems come up correctly.

  Workaround: Open the trunks for calls only after a reload. To bring the modems back into service once they have been marked BAD, enter the **no modem bad** line configuration command.

- CSCds79009

  The attempt fails if you try to bring up more than four T1 voice calls on a Cisco ICS7700 series Multiservice Route Processor (MRP). There is no workaround.

- CSCds79919

  The General Packet Radio Service (GPRS) Tunneling Protocol (GTP) tunnel interface on a Cisco GPRS Support Node (GGSN) experiences an input-queue-full situation if the GGSN keeps receiving GTP signal messages with a zero User Datagram Protocol (UDP) checksum.

  Workaround: Disable GPRS fast switching by entering the **no gprs fastswitch** command on the GTP virtual template interface.

- CSCds80973

  Symptoms T.38 fax delay and fax store-and-forward Group 3 fax on a voice-capable access-router-based voice feature card (VFC) do not work as expected.

  Conditions This symptom is observed on a Cisco AS5300.

  Workaround There is no workaround.

- CSCds81783

  A Cisco 7200 series router with an Integrated Service Adapter (ISA) may display the following error message while sending 26,000 frames per second with a frame size of 256 bytes:

  ```
  %ISA-1-NOMEMORY: isa_prcoess_hipri_rx: no mr creation failed for slot 3
  ```

  If this error message is displayed, the ISA card stops encrypting the traffic.

  Workaround: Reload the router.

- CSCds82079

  Symptoms When the Cisco Quality of Service Device Manager (QDM) is used, missing images and spurious error messages such as “document contains no data” may be observed.

Conditions When the Cisco QDM is used, the web browser can open up to four connections to retrieve the HTML files and images. Each connection takes up a vty line in addition to any Telnet session. If the connection runs out of vty lines, some files will not be sent and error messages such as "document contains no data" may be observed.

Workaround Increase the number of vty lines to 16. There is no workaround for platforms that are limited to a maximum of five vty lines.

- CSCds82220

  The Q Signaling (QSIG) callback function does not work on a Voice over IP (VoIP) network because the FACILITY information element contents in a message are corrupted across the network. There is no workaround.

- CSCds82520

  A Cisco AS5300 series universal access server Voice over IP (VoIP) gateway (egress or PRI only) that is running the c5300-is-mz.capA11 image may reload by bus error. There is no workaround.

- CSCds82943

  A Cisco router may reload if the user-to-user bit mask indicates that the H.450 supplementary Protocol Data Unit (PDU) is present, but the PDU itself is absent. This situation may occur in a non-H.450 scenario because of a malformed PDU. This situation may also occur because of a very heavy load. There is no workaround.

- CSCds83080

  A Cisco router reloads if a mix of Real-Time Streaming Protocol (RTSP) and silence prompts are interrupted in an IP call leg. This situation may occur when the prompt is interrupted during the WAIT_START state or when interrupted during silence.

  Workaround: Do not interrupt the prompt.

- CSCds83990

  If you use the **cable dhcp-proxy** cable interface command, a Cable Modem Termination System (CMTS) cannot access the IP address assigned to the cable interface. This situation cripples cable modem remote query and all the applications that rely on the cable interface IP address. There is no workaround.

- CSCds84925

  Command line interface (CLI) commands may corrupt the memory that stores the frequency hop information. When the frequency hops for any reason, the router reloads.

  Workaround: Ensure that there are no more than 16 items of customer premises equipment (CPE) behind a cable modem at any time.

  Alternate workaround: Do not use CLI commands from the console or through a background Simple Network Management Protocol (SNMP) script session.

- CSCds84954

  Hot Standby Router Protocol (HSRP) is unstable and does not converge if millisecond timers are configured. There is no workaround.

- CSCds85371

  In a hub-and-spoke Virtual Private Network (VPN) environment, if a new crypto map instance is added on the hub router while the crypto map is applied to the interface, all clear traffic is stopped before the crypto peer router or Access Control List (ACL) is defined.

  Workaround: Remove the crypto map from the interface, add the new map instance, and reapply the crypto map back to the interface.

- CSCds85671

  When you define switched virtual circuits (SVCs), the **vbr-nrt** command is not recognized. There is no workaround.

- CSCds85756

  A Cisco General Packet Radio Service (GPRS) Gateway Support Node (GGSN) appears to leak memory under a routing area update stress test. There is no workaround.

- CSCds86732

  When Tool Command Language (TCL) 2.0 version scripts are used during AAA and if authorization fails, the script still reports that the authorization was successful. The output of the **debug voip ivr** privileged EXEC command shows an AAA status of ao_000, as indicated in the following output:

  ```
  AAA/AUTHEN (2723304763): status = FAIL
  aaa authorize Status=ao_000
  ```

  The output may affect the performance of the router. There is no workaround.

- CSCds86895

  The **show crypto ca crl** command may cause a Cisco router to reload.

  Workaround: Do not use the **show crypto ca crl** command.

- CSCds86921

  On a Cisco AS5800 series universal access server that is running the c5800-p4-mz.capA12 image (based on Cisco IOS Release 12.1(4.4)T2), an E1 or R2 outgoing call cannot use E1 channels.

  Workaround: Enter the **shutdown** command followed by the **no shutdown** command.

- CSCds86958

  If you use the **boot startup-test** command, a Service Processing Element (SPE) goes to a BAD state when you bring the system up.

  Workaround: Do not use the **boot startup-test** command.

  Alternate workaround: Restore a configuration that has not been saved by this release or manually load the SPE firmware. To manually load the SPE firmware, follow these steps:

1. Copy the SPE firmware-only file to Flash memory.
2. Add the following configuration:

   ```
   NP_UUT#config t Enter configuration commands, one per line. End with CNTL/Z.
   NP_UUT(config)#spe 1/00 5/17 NP_UUT(config-spe)#firmware location
   flash:np_2_1_5_93.spe NP_UUT#end
   ```

- CSCds87131

  On a Cisco router, when you use the **priority** {*kbps*} policy map configuration command in a class that matches an access list, and the **priority** {*kbps*} policy map configuration command is greater than half the interface bandwidth, the feature does not function after the router reloads. The following error message is displayed:

  ```
  bandwidth of <x> kbps is not available (y).
  ```

  Workaround: Remove and reattach the service policy.

- CSCds87164

  On a Cisco 1700 series router that has a BRI along with voice ports, Layer 1 stays in a DEACTIVATED state when loaded with the o3sv3y voice image. Sometimes Layer 1 comes up, but Layer 2 stays in an ESTABLISH_AWAITING_TEI state.

  Workaround: Use the bnr2sy data-only image if the router does not have any voice ports.

- CSCds87184

  Outgoing Next Hop Resolution Protocol (NHRP) packets on a multipoint generic routing encapsulation (GRE) tunnel are not sent out by a Cisco router. The packets appear as output drops on the tunnel interface. There is no workaround.

- CSCds87203

  When interworking with Cisco IOS Release 12.1(3a)T1 and Cisco IOS Release 12.1(5), if a Q931 SETUP message received from a PBX contains a facility message, the call passes over the Voice over Frame Relay (VoFR) network successfully. If the Q931 SETUP message does not contain a facility message, an interoperability problem exists between VoFR in Cisco IOS Release 12.1, Release 12.1(2)T, or a later release. The FRF.11 subframe length byte is not set correctly for large (larger than 255 bytes) ISDN messages in Cisco IOS Release 12.1(2)T software. As a result, Cisco IOS Release 12.1 does not understand the message. There is no workaround.

- CSCds87983

  A Cisco datacom node does not work correctly when an unknown information element is included in the create packet data protocol (PDP) context response packet. There are no workaround.

- CSCds88559

  A Cisco AS5300 series universal access server that is running the c5300-is-mz.capA12 image (based on Cisco IOS Release12.1(4.4)T2) may experience a software-forced reload. There is no workaround.

- CSCds88604

  A Cisco AS5300 series universal access server that is running the c5300-is-mz.capA11 image (based on Cisco IOS Release12.1(4.4)T2) may reload by bus error. There is no workaround.

- CSCds88624

  In a Multiprotocol Label Switching (MPLS) environment, a Cisco 7200 series router that is running Cisco IOS Release 12.1(5)T1 drops all MPLS packets received on a Dynamic Packet Transport (DPT) PA-SRP-OC12 port adapter. There is no workaround.

- CSCds88925

  A Cisco AS5300 series universal access server voice gateway that is running Cisco IOS Release 12.1(5.3)T sets a different value for RADIUS attribute 61 (NAS-Port-Type) than the same access server that is running Cisco IOS Release 12.1(5)T. This situation may introduce problems for accounting and authentication because of the inconsistency of the releases. There is no workaround.

- CSCds89458

  When source-route bridging (SRB) is configured on a Token Ring HAWKEYE interface, the router duplicates packets when in standby or listening mode in Hot Standby Router Protocol (HSRP).

  Workaround: Enter the **standby use-bia** command.

- CSCds89937

  On an originating Cisco universal access server that is running Cisco IOS Release 12.2(1) and a terminating Cisco universal access server that is running Cisco IOS Release 12.0(7)T, the negotiated packet size of the voice codec is the default size instead of the size specified by the configuration. There is no workaround.

- CSCds90558

  The CCH323_CT process holds a large amount of memory (144 MB) on a terminating gateway when 420 E1 or R2 voice calls that use codec g729 are active. Both the originating and terminating gateways are running the c5800-p4-mz image in Cisco IOS Release 12.2(1).

Workaround: Use the Cisco IOS release that contains the fix for this caveat.

- CSCds90793

  When a Cisco router sends out updates to an unconnected neighboring router, some parts of the updates may be discarded by the receiving router. There is no workaround.

- CSCds91198

  After a reload, a Cisco router does not forward packets to an interface that is not running IP tag switching. Pinging from the router works, but a ping that needs to cross the router fails.

  This condition is present in topologies which involve: - a hierarchy of static recursive routes (with varying mask lengths) - route aggregation using the null0 interface.

  Workaround: Ensure that the route flaps. If the route flaps, the Multiprotocol Label Switching (MPLS) or Cisco Express Forwarding (CEF) is installed correctly.

- CSCds91819

  A Cisco AS5300 series universal access server that is running the c5300-is-mz.capA11 image (based on Cisco IOS Release 12.1(4.4)T2) may reload by bus error. There is no workaround.

- CSCds91873

  DistributedDirector reloads with a traceback message under a heavy load when you make a configuration change. There is no workaround.

- CSCds91981

  The output of the following commands may not show correct information for Dynamic Feedback Protocol (DFP) configurations:

  – The **show run** command may not list all DFP configurations.

  – The **show ip dir** command may not list all DFP configurations, may list unconfigured DFP information, or may list duplicated DFP configurations.

  There is no workaround.

- CSCds92115

  When you make calls through a high-density voice (HDV) module to Public Switched Telephone Network (PSTN) or PBX analog phones, call setup is established, but voice does not pass through. Complete silence is heard at both ends. This situation does not affect an analog Foreign Exchange Station (FXS) module installed in the same gateway. There is no workaround.

- CSCds92116

  When you make ISDN-to-channel-associated signaling (CAS) or CAS-to-ISDN hairpin calls on a Cisco AS5800 series universal access server, the access server reloads after about 1,000 calls. There is no workaround.

- CSCds92671

  The av_send option for the **aaa authorization** global configuration command does not work properly. This situation impacts scripts written using Tool Command Language (TCL) interactive voice response (IVR) version 2.0 and the av_send option to send RADIUS vendor-specific attributes (VSAs) to the server.

  Workaround: Use Cisco IOS Release 12.2(1) that contains the fix for this caveat.

- CSCdt00408

  On a Cisco AS5400 series universal access server that is running Cisco IOS Release 12.1(6), when resource pooling is enabled, calls are incorrectly mapped to digital resources when there are no modems available. There is no workaround.

- CSCdt02629

  A Cisco MC3810 multiservice access concentrator that is running Cisco IOS Release 12.1(5.3)T and that has a DS0 group rejects calls with a user busy cause code even when there are timeslots available in the DS0 group. There is no workaround.

- CSCdt02925

  A Cisco router that is running Cisco IOS Release 12.1(05.03)T reloads when the following events occur:

  – The router is used as relay agent between a Dynamic Host Configuration Protocol (DHCP) client and a DHCP server. The client sends a DHCPDISCOVER message through an unnumbered interface to the relay agent.

  – The relay forwards the DHCPOFFER and DHCPACK messages from the server to the client on an unnumbered interface and adds a static host route to the client.

  – The same client sends another DHCPDISCOVER message through the same setup (which may happen when the client goes down and comes back up) or the same client sends DHCPDISCOVER for renewing the lease. The relay agent, while forwarding the DHCPACK message again, tries to delete an existing host route and the router reloads.

  There is no workaround.

- CSCdt03441

  A Cisco universal access server that is running the resource-pooling feature may reload with a bus error in rm_rpm_resource_allocate_success. There is no workaround.

- CSCdt03936

  Distributed Director that is running Cisco IOS Release 12.1 T or Release 12.2 may reload. There is no workaround.

- CSCdt04658

  Open Settlement Protocol (OSP) calls fail during a Secure Socket Layer (SSL) handshake to an SSL server of a certain vendor because of a rejected certificate. There is no workaround.

- CSCdt05360

  A Cisco 3640 router pauses indefinitely after several align spurious accesses because the American National Standards Institute (ANSI) library does not release memory correctly, which causes a memory leak. There is no workaround.

- CSCdt05534

  A Cisco router reloads whenever you use the **show pots status** global configuration command for Germany. There is no workaround.

- CSCdt05612

  A Cisco AS5300 series universal access server Voice over IP (VoIP) ingress gateway that is running the c5300-is-mz.capA11 image (based on Cisco IOS Release 12.1(4.4)T2) and that is using two E1 or R2 trunks, reloads by bus error. There is no workaround.

- CSCdt06222

  In a Multiprotocol Label Switching (MPLS)/Virtual Private Network (VPN) environment, a Provider Edge (PE) router may fail to install static VPN routing/forwarding instance (VRF) routes that point to an interface when the interface flaps. Static routes in a global routing table are not affected. This situation occurs under the following conditions:

  – The static route points to an interface, not to an IP address.

  - The Cisco IOS software contains the fix for the CSCdr47377 caveat.

  Workaround: Use static VRF routes that point to an IP address instead of to an interface.

- CSCdt06737

  On a Cisco AS5300 series universal access server that is an originating gateway that is running Cisco IOS Release 12.1(4.4)T2 and a Cisco AS5300 series universal access server that is a terminating gateway that is running Cisco IOS Release 12.0(7)T, when you use interactive voice response (IVR) to let the originating gateway send an answer to an originating PBX after the called party is off hook, the parties cannot hear each other because the originating switch does not send an answer to the originating gateway. The originating gateway incoming dial-peer is configured as follows:

  - **dial-peer voice** *tag* {**pots** global configuration command
  - **application** *name* dial-peer configuration command (with *17931* as the *name*)
  - **incoming called-number** *string* dial-peer configuration command (with *17931T* as the *string*)

  There is no workaround.

- CSCdt09262

  A Cisco AS5300 series universal access server that is configured as a terminating gateway may experience high CPU utilization caused by the CCH323_CT process after several hours of processing calls. The CCH323_CT process runs at high CPU utilization even after you remove all the calls that are going through the terminating gateway. No calls can be established at this time. There is no workaround.

- CSCdt10151

  RADIUS sends the h323-conf-id vendor-specific attribute (VSA) for all Cisco platforms even though H.323 is not supported for most Cisco platforms, which may cause incompatible communication between RADIUS servers and Cisco IOS software. There is no workaround.

- CSCdt11072

  When you interoperate with a gatekeeper in the signaling mode (nondirectory gatekeeper), and the gatekeeper is configured to use security, the token object identifier (OID) sent back from the Cisco gateway may not be the token OID originally received, which results in call setup failure. There is no workaround.

- CSCdt11190

  A memory leak occurs in quality of service (QoS) history even if the QoS feature is not enabled. This situation becomes apparent when you have a large configuration with several subinterfaces that have attached service policies. Changing the policy map and attaching and detaching the service policy causes the leak. Once the allocated amount of memory for QoS history is used, the router may reload. There is no workaround.

- CSCdt11426

  An image with k8 or k9 in the image name reloads on startup because the crypto subsystem does not recognize k8 or k9 as a valid name. There is no workaround.

- CSCdt11779

  When Voice over IP (VoIP) calls go through a Cisco ICS7700 series Multiservice Route Processor (MRP), and a call is made from one Foreign Exchange Station (FXS) to a second FXS, noise is heard periodically at the second FXS after the call is answered. There is no workaround.

- CSCdt12269

  A Cisco router may reload with a bus error during a Simple Network Management Protocol (SNMP) walk and displays the following error message:

```
System returned to ROM by bus error at PC 0x2057A4C, address 0x0
```

There is no workaround.

- CSCdt13084

  When you dial an unresolved number on a Public Switched Telephone Network (PSTN) and hang up, a disconnect message with a progress indicator may be sent to the router. If this is the case, the router reloads. There is no workaround.

- CSCdt14805

  A Cisco 3640 router that is running Cisco IOS Release 12.1(5)T may enter a loop after a reload.

  Workaround: Configure the exception logging size using the **logging exception** *size* configuration command.

  Alternate workaround: Use a Cisco IOS release that contains the fix for this caveat.

- CSCdt15649

  Symptoms A Cisco 7200 series router may reload.

  Conditions This symptom is observed when Cisco IOS Release 12.2 software is loaded on a Cisco 7200 series that has a Cisco 7200 I/O controller with one Gigabit Ethernet port and one Ethernet port (C7200-I/O-GE+E) or a Cisco 7200 I/O controller with two 10/100 autosensing Fast Ethernet ports (C7200-I/O-2FE I/O).

  Workaround There is no workaround.

- CSCdt16296

  A Cisco router experiences spurious accesses or an auto reload because of illegal memory access when you use the **ip rtp header-compression** interface configuration command under stress conditions. There is no workaround.

- CSCdt16389

  A Cisco 7204VXR router at the headend with Cisco 2600 series routers at remote ends using Voice over IP (VoIP) and Q Signaling (QSIG) to PBXs at all locations attempts to get the message indicator light to illuminate at remote site phones (voice mail is on the PBX at the headend). This attempt causes the Cisco 7204VXR router to reload with a bus error at PC 0x613C4348, address 0x47C. Using #175, an extension number, and #11 causes the same effect as having the router reload. The **debug isdn q931** and **debug isdn q921** EXEC commands do not reveal any useful information. There is no workaround.

- CSCdt16456

  In rare situations, an incoming call may be rejected with an indication that there are no resources available, even though there are available resources. There is no workaround.

- CSCdt17100

  When you enable the multiple resource record (RR) feature, and DistributedDirector is configured to return multiple resource records (RRs) in Domain Name System (DNS) answers, DistributedDirector may experience high CPU utilization, which causes the watchdog timer to expire and DistributedDirector to reboot.

  Workaround: Disable the multiple RR feature.

- CSCdt18352

  Some images are too big to fit in available Flash memory.

  Workaround: Use a smaller image.

- CSCdt18421

A Catalyst 5000 series switch that is running Cisco IOS Release 12.1 T or Release 12.1 E and that is using Multicast Multilayer Switching (MMLS) in conjunction with Layer 3 switching hardware does not work properly because of a memory leak of packet buffers that are used for keepalive packets from the Catalyst 5000 series switch to the router. MMLS is disabled by default on the Catalyst 5000 series switch. If you enable MMLS on the switch, MMLS causes the management interface or virtual LAN for MMLS to wedge the input queue. This situation does not impact Catalyst 6000 series switches. There is no workaround.

- CSCdt18436

  On a Cisco AS5400 series universal access server that is running Cisco IOS Release 12.1 T and that has terminating digital Multilink Point-to-Point protocol (MLPPP) calls with Layer 2 Tunneling Protocol (L2TP) or a virtual private dial-up network (VPDN), when Fast Ethernet gets throttled, it may remain throttled even after all the packets in the input hold queue are processed.

  Workaround: Clear the Fast Ethernet interface.

- CSCdt19861

  Modem passthrough calls on a Cisco AS5300 series universal access server fail when you configure “codec g711u” under the dial peer router.

  Workaround: Use Cisco IOS Release 12.2(1) that contains the fix for this caveat.

- CSCdt20095

  When you place a call to a network access server (NAS) that is running T1 channel-associated signaling (CAS) feature group B (fgb), the following message is displayed several times:

  ```
  CDAPI: cdapi_create_raw_msg(): FOR_RAW_MSGS queue is empty.
  ```

  The Call Distributor Application Programming Interface (CDAPI) memory buffer pool is empty, and the call does not go through. This situation occurs on releases prior to Cisco IOS Release 12.2. There is no workaround.

- CSCdt20127

  A spurious memory access occurs in H.323 because of unavailable raw message buffers and a missing null pointer check. The Call Distributor Application Programming Interface (CDAPI) raw message buffers are created only when an ISDN interface is configured.

  Workaround: Enable ISDN on at least one of the interfaces.

- CSCdt20363

  When a Cisco AS5300 series universal access server attempts to use a certain vendor callback function, “progress indicator (PI)” appears in the PRI setup message. The access server then disconnects the line, which causes callback dial-out to fail. “Invalid information element” appears in the STATUS message. There is no workaround.

- CSCdt23426

  The image description name may not be accurate when read by a Simple Network Management Protocol (SNMP) management station for uBR920 images. There is no workaround.

- CSCdt24018

  Baseline Privacy Interface (BPI) does not work.

  Workaround: Use the Cisco IOS release that has the fix for this caveat.

- CSCdt26015

Connection trunks configured between the voice ports on two Cisco routers may not be established. This situation occurs on T1 line channel-associated signaling (CAS) voice ports between a Cisco 7206VXR router with a NPE-300 processor blade with a PA-VXB-2TE1+ or a PA-VXC-2TE1+ port adapter and a Cisco 3640 router with a NM-HDV-xT1-y or a NM-HDV-xE1-y network module.

Workaround: Use Cisco IOS Release 12.1(5)T on the Cisco 3640 router.

- CSCdt27446

  The **ip local pool** global configuration command does not work on a Cisco uBR920 router that is running Cisco IOS Release 12.1 T or a later release. There is no workaround.

- CSCdt28919

  A Cisco gateway under a heavy load may send incorrect digital signal processor (DSP) playout parameters to the DSP, which disrupts audio. There is no workaround.

- CSCdt29053

  A Cisco router may experience spurious memory traceback messages immediately after booting up and display the following traceback messages:

  ```
  %ALIGN-3-SPURIOUS: Spurious memory access made at 0x6045866C reading 0x10
  %ALIGN-3-TRACE: -Traceback= 6045866C 60597040 6041D160 6041D210 603642A4 603645E0
  603FC38C 603FC378
  %ALIGN-3-TRACE: -Traceback= 60458670 60597040 6041D160 6041D210 603642A4 603645E0
  603FC38C 603FC378
  ```

  There is no workaround.

- CSCdt29082

  Packets are acted upon twice by the interface service policy when the interface does not have an IP address configured and the subinterface/data-link connection identifier (DLCI)/permanent virtual circuit (PVC) on which packets are routed does not have a service policy configured. There is no workaround.

- CSCdt29483

  The process CCH323_CT may hold abnormally high memory after a few days of load or stress testing (about 420 E1-R2 voice calls terminated using g729 and Media Server support for interactive voice response (IVR) scripting debit card applications). There is no workaround.

- CSCdt29490

  A Cisco AS5400 series universal access server that has an ISDN PRI line configured and is connected to a live PRI line may not come up after the router is reloaded. The ISDN Layer 2 stays down.

  Workaround: Create a loopback on the other PRI line.

- CSCdt29836

  On a Multiservice Route Processor 200 (MRP200) that has a packet voice or fax digital signal processor (DSP) module -20 (PVDM-20) (5 DSP modules), the system may reload when you change the time-division multiplexing (TDM) clock configuration from two network clocks to one network clock using the **dial-tdm-clock** global configuration command. There is no workaround.

- CSCdt29838

  On Cisco IOS Release 12.2, if a crypto map is deleted while traffic that matches it is being sent (whether this crypto map is deleted from the command line interface (CLI) or is a dynamic crypto map that is deleted automatically), the router may reload. There is no workaround.

- CSCdt30601

User Datagram Protocol (UDP) traffic is dropped by the receiver when an IP Security (IPSec) tunnel is present. UDP applications such as Simple Network Management Protocol (SNMP), voice, or Dynamic Host Configuration Protocol (DHCP) may fail. There is no workaround.

- CSCdt31789

  On a Cisco 2600 or 3600 series router or a Cisco MC3810 multiservice access concentrator with a T1 recEive and transMit (E&M) trunk that is configured with the **signal** {**immediate**} voice-port configuration command and that has Digital Number Identification Service (DNIS) option, calls disconnect automatically 10 seconds after the initial seizure of the trunk. There is no workaround.

- CSCdt34198

  A call between two Cisco routers that are configured to use the Open Settlement Protocol (OSP) is disconnected with a DISCONNECT CAUSE of 0x0 (uninitialized) or 0x2C (no_req_circuit), which results in the call being disconnected and Call Detail Records (CDRs) being generated. However, the OSP transaction remains. If the transaction counter increases to the limit of 2000, no more calls are processed by the gateway.

  Workaround: Use the **shutdown** command followed by the **no shutdown** command inside the settlement configuration. This workaround resets the counter to 0.

- CSCdt34334

  A Cisco 1600 or 2500 series router that is running Cisco IOS Release 12.2(0.5) may pause indefinitely when you implement class-based weighted fair queueing (CBWFQ) and use the **service-policy** {**output**} service-policy global command. There is no workaround.

- CSCdt34392

  A Cisco MC3810 multiservice access concentrator that is running Cisco IOS Release 12.2(0.5b) reloads when you remove a PRI group. This situation may impact all MC3810 ISDN voice testing including Q Signaling (QSIG). There is no workaround.

- CSCdt34919

  A Cisco router that is running Cisco IOS Release 12.2(0.5b) with the DistributedDirector image may reload. There is no workaround.

- CSCdt37135

  Under very heavy load conditions, the Gigabit Ethernet Interface of a Cisco 7200 series router may stop transmitting packets. The output queue remains stuck at 40/40.

  Workaround: Enter the **clear interface gigabitethernet** *number* privileged EXEC command, or enter the **shut** command followed by the **no shut** command.

- CSCdt38813

  When a gateway handles signal-only calls and when there is no Real-Time Transport Protocol (RTP) or when a Control Protocol (RTCP) session is needed, the RTP or RTCP ports are reserved, and the RTCP socket are created. These ports and sockets are not deallocated at the end of the call, resulting in RTCP sockets leaks or depletion. Once the leak or depletion occurs, the normal calls that need RTP or RTCP sockets are not available, and the calls have no audio. There is no workaround.

- CSCdt39468

  When a Cisco router receives a progress indicator information element (IE) with a reserved value (not a standard value as found in the Q.931 specification), the router ignores any configured **progress_ind** dial-peer configuration commands. There is no workaround.

- CSCdt40191

  The Cisco IOS ubr7200-ik8s.mz and ubr7200-ik8st.mz images do not build. There is no workaround.

- CSCdt42255

  A Cisco voice gateway may reload when a call is disconnected after performing a valid call transfer. There is no workaround.

- CSCdt43095

  Symptoms It is not possible for a router to boot, format, read, or write from an Advanced Technology Attachment (ATA) vendor-specific card. The symptoms that are observed may be intermittent and random and typically appear in one of two forms. When Cisco IOS software is used, the message "ATA_Status time out waiting for x," where x is a digit, may be displayed. When booting from the ROM monitor (ROMmon) mode, a "loadprog" error message or the "ATA_Status time out waiting for x" message may be displayed.

  Conditions These symptoms are observed on a router that is using a bad ATA vendor-specific card under a variety of conditions. This symptom affects 48-MB and 128-MB cards from a specific vendor.

  Workaround Replace the bad ATA vendor-specific card with one that operates in the normal response time.

- CSCdt44029

  A Cisco router pauses indefinitely when you use Real-Time Transport Protocol (RTP) and configure header compression by using the **ip rtp header-compression** interface configuration command.

  Workaround: Disable header compression by entering the **no ip rtp header-compression** interface configuration command.

- CSCdt46056

  Symptoms If the routing process modifies a prefix that is marked as "subnetted," Cisco Express Forwarding (CEF) may incorrectly delete that prefix from the forwarding table.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.2(2).

  Workaround There is no workaround.

- CSCdt47765

  On a Cisco ICS 7750 Integrated Communication System Multiservice Route Processor (MRP) 200, the system may reload when you use the **tdm clock** global configuration command to change the time-division multiplexing (TDM) clock configuration from using one clock to ping two network clocks. This situation occurs when a Digital Signal Processor (DSP) group change from 1 to 2 occurs immediately after a 2-to-1 change. There is no workaround.

- CSCdt51213

  A Cisco high end router that is running Cisco IOS Release 12.1 E and that has an ATA disk reloads when queried for the ciscoFlashPartitionEntry MIB.

  Workaround: Remove the ATA disk.

- CSCdt51542

  An alignment error occurs on a Versatile Interface Processor (VIP) when you enable output committed access rate (CAR) or output police on a FDDI interface.

  Workaround: Remove the output CAR or output police.

- CSCdt56171

  Symptoms The terminating end of a Cisco AS5300 that is running Voice over IP (VoIP) may run out of digital signal processors (DSPs) after a prolonged period of operation.

Conditions This symptom is observed on a Cisco AS5300. When the **show vfc** *slot-number* [**technology**] privileged EXEC command is entered, all DSPs are shown as connected even though there are no calls. When the **show call history voice brief** privileged EXEC command is entered, all calls are shown as rejected by a 0x3F cause code.

Workaround There is no workaround.

- CSCdt79028

  Symptoms A Cisco Voice over IP (VoIP) gateway may reload when the gateway is running a Tool Command Language (TCL) interactive voice response (IVR) 1.0 voice application.

  Conditions This symptom is observed if the incoming setup message has a facility information element (IE) and multiple calls are made using the long pound feature.

  Workaround There is no workaround.

- CSCdt83807

  Symptoms A supervisor may time out if the bootup time is longer than 3 minutes.

  Conditions This symptom is observed on an Access Gateway Module (AGM) for the Cisco Catalyst 4000 series switch (WS-X4604-GWY).

  Workaround There is no workaround.

- CSCdt85829

  Symptoms A router may fail to boot if it has the **no ip address** global configuration command in a group-async configuration.

  Conditions This symptom is observed on a Cisco AS5400.

  Workaround Use the **ip unnumbered** global configuration command or the **ip address negotiated** interface configuration command.

- CSCdt87610

  Symptoms A Cisco voice gateway that is using a Tool Command Language (TCL) interactive voice response (IVR) voice application may reload during a prompt playout.

  Conditions This symptom is observed on a Cisco AS5300.

  Workaround There is no workaround.

- CSCdu01905

  Symptoms The Dynamic Host Configuration Protocol (DHCP) portion of a Network Address Translation (NAT) pool IP address that is acquired automatically does not work.

  Conditions This symptom is observed on a Cisco uBR900 series cable access router.

  Workaround Assign the IP address and create the NAT pool statically.

Novell IPX, XNS, and Apollo Domain

- CSCds59456

  Use of the **no ipx sap-uses-routing-info** command causes a loss of all Service Advertising Protocol (SAP) information inside a SAP table. The output of the **debug ipx sap** EXEC command shows that SAP information is “rejected, route xxxx is not in table.” When the use of route information with service information is disabled, the SAP table is ordered only by service hops information in the SAP packet and not by a ticks or hops route metric.

  Workaround: Do not disable the use of route information with service information.

TCP/IP Host-Mode Services

- CSCds04747

  Cisco IOS software contains a flaw that permits the successful prediction of TCP Initial Sequence Numbers.

  This vulnerability is present in all released versions of Cisco IOS software running on Cisco routers and switches. It only affects the security of TCP connections that originate or terminate on the affected Cisco device itself; it does not apply to TCP traffic forwarded through the affected device in transit between two other hosts.

  To remove the vulnerability, Cisco is offering free software upgrades for all affected platforms. The defect is described in DDTS record CSCds04747.

  Workarounds are available that limit or deny successful exploitation of the vulnerability by filtering traffic containing forged IP source addresses at the perimeter of a network or directly on individual devices.

  This notice will be posted at http://www.cisco.com/warp/public/707/ios-tcp-isn-random-pub.shtml.

Wide-Area Networking

- CSCdm12179

  A multilink interface may stop processing received packets from the peer if the peer multilink interface went down and came back up. The **show ppp multilink** command will indicate "received lost fragments" when this caveat is encountered.

  Workaround: Clear the multilink interface.

- CSCdr61146

  When a Cisco router is configured for an outbound X.25 permanent virtual connection (PVC) using protocol translation, the router ignores a received Reset, resulting in a PVC (once recreated) for which the two stations have a conflicting state. This situation is unrecoverable without a restart.

  Workaround: Initiate an X.25 interface restart.

- CSCdr67867

  If a permanent virtual circuit (PVC) is learned by Frame Relay (FR) Local Management Interface (LMI) before it is associated with a virtual template (VT) interface, any attempt to associate it with a VT by using the **frame-relay interface-dlci** *dlci* [**ppp** *virtual-template-name*] interface configuration command fails.

  Workaround: Complete the following steps:

1. Configure the VT interface by entering the **frame-relay interface-dlci** interface configuration command (without **ppp**).
2. Remove it by entering the **no frame-relay interface-dlci** interface configuration command.
3. Associate it immediately with a VT by entering the **frame-relay interface-dlci** *dlci* [**ppp** *virtual-template-name*] interface configuration command.

- CSCdr99517

  The X.25 for Dialer interface feature is still unusable because X.25 packet assembler/disassembler (PAD) calls are correctly routed to the dialer interface and bound to the BRI, but the **dialer idle-timeout** interface configuration command is not reset by the flow of X.25 data. Any traffic defined by a dialer list, however, does reset the dialer idle timer. X.25 PAD data is not definable by a dialer list. There is no workaround.

- CSCds02464

  Frame Relay Traffic Shaping (FRTS) does not perform correctly when Custom Queueing is also applied on the main interface/shaping mechanism. There is no workaround.

- CSCds18988

  PPP/Multilink PPP over Frame Relay (FR) produces the following known statistics errors:

  The number of packets and number of bytes in the input serial interface are added twice.

  The number of packets and number of bytes in the output virtual access interface are added twice.

  The output packets and out bytes of an FR permanent virtual circuit (PVC) are added twice when a packet is fast switched.

  The input Forward Explicit Congestion Notification (FECN) packets, input Backward Explicit Congestion Notification (BECN) packets, and input Discard Eligibility (DE) packets of an FR PVC are incorrect. There is no workaround.

- CSCds26729

  Real-Time Transport Protocol (RTP) header compression does not work on a Cisco router that is running Cisco IOS Release 12.1(4) or a later release and that has Multilink PPP with Cisco Express Forwarding (CEF) or fast switching enabled when you use the **ip rtp header-compression** interface configuration command.

  Workaround: Disable CEF by entering the **no ip cef** global configuration command and the **no ip route-cache** interface configuration command on both the interface and on the virtual template, legacy profile, dialer profile, or multilink group.

- CSCds41629

  After you add some channel groups under a T1 or E1 controller and some interfaces configure frame relay encapsulation and some interfaces configure High-Level Data Link Control (HDLC) encapsulation, remove those channel groups from the T1 or E1 controller and configure some channel groups on the T1 or E1 controller and frame relay encapsulation again. The router reloads. There is no workaround.

- CSCds47020

  On a Cisco AS5300 series universal access server, when the ISDN interface sends a SETUP message with an explicitly defined interface identifier (CCID) in the channel identification (IE) (the channel identification IE is 0xE9808381 and the interface identifier always 0), the ISDN interface on the receiving side rejects the interface identifier message because the D channel carrying this message is actually trunk 1. There is no workaround.

- CSCds48801

  The dialer idle-timeout timer does not reset for inbound traffic on some asynchronous interfaces. When the dialer idle-timeout value is configured for inbound traffic on the group-asynchronous interface, the timer continues to decrement even though there is incoming traffic on the group-asynchronous interface. There is no workaround.

- CSCds48954

  When a Cisco 2600 series router receives a disconnect message with the progress indicator information element indicating that inband information (indicated by progress description value of 8) is available, the call is disconnected per the ISDN Q931 specification. However, the specification states the announcement as an alternative option, the call may be connected to a B channel (if not done already) so that the announcement may be provided to the user. This alternative option is not available in releases prior to Cisco IOS Release 12.1(3a)XI5.

  Workaround: Use Cisco IOS Release 12.1(3a)XI5 or a later release.

- CSCds50794

  Under rare circumstances, Always on Dynamic ISDN (AODI) X.25 calls on a D channel may not succeed. The output of the **show x25 map** EXEC command indicates new calls outstanding, a refcount of 10, and hold queues at full capacity. There is no workaround.

- CSCds51555

  Symptoms A release message is not generated when a T1 channel is removed.

  Conditions This symptom is observed on a Cisco router.

  Workaround There is no workaround.

- CSCds52654

  Symptoms A call is allowed on an administratively busied channel.

  Conditions This symptom is observed if an incorrect digital subscriber line (DSL) number is set to busy on an interface by entering the **isdn busy dsl** *number* interface configuration command.

  Workaround Enter the correct DSL number in the **isdn busy dsl** *number* interface configuration command.

- CSCds54182

  A Cisco network routing processor (NRP) that is running Cisco IOS Release 12.1(1)DC1 with 1,900 or more access interfaces with compression configured may experience memory fragmentation. The largest memory block is about 45 KB, and the free memory is 20 MB.

  Workaround: Configure a free list size for the compression history block.

- CSCds55326

  In a multilink configuration in which multilink bundles contain member links which are virtual access interfaces, under some circumstances the link interfaces are not detached from their associated bundles as the link connections are terminated. The affected bundles continue to claim the link interfaces as belonging to the bundle and consequently may attempt to utilize these links; additionally, the bundle interfaces are not terminated properly and remain in the system indefinitely.

  You will most commonly encounter this problem in systems that are running Multilink PPP and in which the multilink bundles contain virtual access member links that connect and disconnect with high frequency, for example, in the offload servers in stack group systems acting as large scale dial servers, or in routers acting as home gateway systems for PPP links tunneled through Virtual Private Networking (VPN). There is no workaround.

- CSCds57094

  When you call from a PBX or switch to a Cisco AS5300 series universal access server that is running Cisco IOS Release 12.1(3a)XI2 and that has overlap signaling used on the E1 connection and a Voice over IP (VoIP) dial peer router with the T deliminator configured, the router drops the call after displaying the following message:

  ```
  EVENT_FROM_ISDN::dchan_idb=0x61E75D54, call_id=0x17F, ces=0 x1 bchan=0x0, event=0x1,
  cause=0x0
  ```

  If the same VoIP dial peer router is replaced with a fixed-length dial peer router for the previously called number, the call succeeds. There is no workaround.

- CSCds59560

  A Cisco 4500 series router may reload when a PPP call is disconnected after a timeout. The router displays the following error message:

  ```
  %ALIGN-1-FATAL: Corrupted program counter pc=0x0, ra=0x605A0FD8, sp=0x610A9490
  %ALIGN-1-FATAL: Corrupted program counter pc=0x0, ra=0x605A0FD8, sp=0x610A9490
  ```

There is no workaround.

- CSCds59623

  If a Redundant Link Manager (RLM) or Non-Facility Associated Signaling (NFAS) group is configured on a digital subscriber line (DSL) other than zero, the ISDN service state never changes from OUT_OF_SERVICE to IN_SERVICE, and no calls are possible.

  Workaround: Configure the RLM or NFAS group nfas_d primary to be on DSL 0.

- CSCds68446

  Under Frame Relay Forum 9 (FRF.9) hardware compression, the following Frame Relay MIB counters do not reflect correct byte counts:

  - frCircuitSentOctets “1.3.6.1.2.1.10.32.2.1.7”
  - frCircuitReceivedOctets “1.3.6.1.2.1.10.32.2.1.9”

  There is no workaround.

- CSCds70303

  On a Cisco router that has a Signaling System 7(SS7)-enabled Voice over IP (VoIP) configuration, the output of the **show isdn** {**status**} EXEC command may list call control blocks (CCBs) for calls that are no longer active. These CCBs may accumulate over time. There is no workaround.

- CSCds70793

  On a Cisco AS5300 series universal access server that is running Cisco IOS Release 12.1(3a)XI3, if a Redundant Link Manager (RLM) connection is lost to a Cisco SC2200 series Signaling Controller while calls are active in the solution, calls stay active until the caller on the Cisco AS5300 series universal access server disconnects the call.

  Workaround: Have the caller on the Cisco AS5300 series universal access server disconnect the call.

- CSCds73853

  Pings do not go through because the Call Initiator does not initiate a call. This situation occurs on all encapsulations. There is no workaround.

- CSCds75271

  Multiple tunnel IDs may be generated in such a way that the IDs are all mapped to the same index value, and the new tunnel overrides the old tunnel in the lookup table. This situation causes a Cisco router to discard control messages for the old tunnel because of lookup failures. There is no workaround.

- CSCds78520

  Symptoms PPP over ATM (PPPoA) sessions are not stable when logical link control (LLC) RFC 1483 bridging (AAL5SNAP) encapsulation is used because keepalive processing is not working normally. AAL5MUX encapsulation is not affected by this symptom and is the recommended encapsulation for PPPoA.

  Conditions This symptom is observed on a Cisco 6400 series.

  Workaround Use AAL5MUX encapsulation, or disable keepalive processing.

- CSCds80984

  In Cisco IOS Release 12.1 and Release 12.1T, when you use Multilink PPP, Multiprotocol Label Switching (MPLS), Virtual Private Network (VPN) routing/forwarding (VRF), and Cisco Express Forwarding (CEF) switching or a dialer interface with Multilink PPP, packets may be lost when a single link is contained in a Multilink PPP or dialer interface. Interleaving on this interface is not functional and all, or most, voice packets are lost.

Workaround: Use a fragmentation delay of 10 or 20 microseconds on dialer interfaces with Multilink PPP encapsulation using MPLS and CEF, or add a dialer load threshold of 1 to the dialer interface. There is no workaround for interleaving.

- CSCds82435

  An INFORMATION message is not passed from end to end under a connected state. There is no workaround.

- CSCds82868

  A Cisco router that is running Cisco IOS Release 12.1(3)DC or Release 12.2 experiences a memory leak for each authentication, authorization, and accounting (AAA) failure. There is no workaround.

- CSCds84024

  A Cisco router with a NET5 Network Side PRI may reload because the router cannot receive a call proceeding, call alerting, or call connection without a channel ID information element (IE), which is a required function of a network-side switch. There is no workaround.

- CSCds86189

  In Cisco IOS Release 12.0 T to Release 12.1(5), when you use Multilink PPP and Large Scale DialOut, the dialer profile may show an idle state when one active Multilink PPP link is assigned to the interface. There is no workaround.

- CSCds88215

  In a Large Scale DialOut setup, IP traffic that will be forwarded to a destination that already has a dialup connection established but in which the routing protocol has not converged yet (the route to this destination is not yet known on all routers in the Stack Group Bidding Protocol (SGBP) group) may be corrupted. There is no workaround.

- CSCds88502

  A Cisco router that is running Cisco IOS Release 12.0 T may reload if you use the **dialer disable-multiencaps** command on an active dialer interface.

  Workaround: Shut down the related physical interface (for example, BRI0) before applying this command.

- CSCds88621

  On a Cisco AS5300 series universal access server that is running Cisco IOS Release 12.1(3a)XI3, if a Redundant Link Manager (RLM) connection is lost to a Cisco SC2200 series Signaling Controller while calls are active in the solution, calls stay active until the user on the AS5300 side disconnects the call. ISDN T309 expiration does not bring down active calls.

  Workaround: Have the user on the AS5300 side disconnect the call.

- CSCdt01452

  A Cisco 7000 series router that is running Cisco IOS Release 11.0(19) and that is not the root of the spanning tree will forward bridge protocol data units (BPDUs) from the LAN interface of a LAN Extender to all interfaces in the bridge group.

  Workaround: Make the Cisco 7000 series router the root of the spanning tree.

- CSCdt02705

  When a large number of multipoint switched virtual circuits (SVCs) originate on a Cisco router, and there is excessive signaling activity (tearing down and building) of SVCs, a party block may be doubly freed when a processing error leads to a reload. There is no workaround.

- CSCdt03449

When you initiate a data call on an ISDN BRI and receive an ISDN Layer 3 ALERTING message, the ISDN call connects, but data encapsulation fails.

When you use the **debug isdn event** EXEC command, the following error message is displayed:

```
ISDN BR3/1: HOST_ALERTING: DEV_CALL_PROGRESSING: VOICE ERROR: Bearer capability not
available(0x3A): bchan 0, call id 8006
```

Possible workaround: Disable the function that sends the ALERTING message on the called peer router. If the called peer is a Cisco IOS router, enter the **no isdn send-alerting** interface configuration command on the ISDN interface.

- CSCdt05576

  A Cisco 2500 series router may reload on a watchdog timeout on the TCP to packet assembler/disassembler (PAD) protocol translation process. There is no workaround.

- CSCdt06842

  A Cisco router may run out of memory after a large number of modem calls fail to release memory in ISDN. There is no workaround.

- CSCdt19518

  A Cisco router may not send a release signal if it receives a disconnect signal with a progress indicator. There is no workaround.

- CSCdt30348

  In an environment with multiple network access servers (NASes) such as for a Cisco AS5200 or AS5300 series universal access server, after you upgrade the home gateway to Cisco IOS Release 12.1(5)T1, the same virtual access interface is linked to multiple Layer 2 Forwarding (L2F) tunnel sessions. The multiple tunnels come from different NASes. There is no workaround.

- CSCdt30424

  When you unconfigure a Frame Relay map class, a Cisco router may reload.

  Workaround: Remove the configuration under the map class instead of unconfiguring the Frame Relay map class.

- CSCdt30626

  A Cisco 3640 router may display this error message:

  ```
  %ISDN-4-ISDN_UNEXPECTED_EVENT: calltrkr_call_cleared: no idb: Occurred at
  ../isdn/isdnif_calltrkr.c
  ```

  There is no workaround.

- CSCdt35187

  Under the overlap dialing method, you can make outgoing calls and receive incoming calls. But when you use the enablock method, only incoming calls can be received and you cannot make outgoing calls. The phone rings, but there is no audio when you answer. This situation only occurs with the NET3 switch type. There is no workaround.

- CSCdt78196

  Symptoms A router may reload with a bus error after it reboots or after it clears a call. The decoded stack trace may display an output that is similar to the following:

  ```
  0x60090268:L3_ProcessInternal(0x600901cc)+0x9c 0x6008E19C:L3_Go(0x6008d61c)+0xb80
  0x6009420C:L3_RxSarMsg(0x6009414c)+0xc0 0x600A4D28:L3IF_StartL3(0x600a4bb0)+0x178
  0x6007BA64:TaskBegin(0x6007ba38)+0x2c 0x6007BA38:TaskBegin(0x6007ba38)+0x0
  ```

  Conditions This symptom is observed on a router that has an ISDN interface that is running Cisco IOS Release 12.2(0.15)T or a later release.

Workaround There is no workaround.

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

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This document is to be used in conjunction with release notes for Cisco IOS Release 12.2.