Resolved Caveats—Cisco IOS Release 12.2(7g)

Cisco IOS Release 12.2(7g) is a rebuild release for Cisco IOS Release 12.2(7). The caveats in this section are resolved in Cisco IOS Release 12.2(7g) 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(7e)

Cisco IOS Release 12.2(7e) is a rebuild release for Cisco IOS Release 12.2(7). The caveats in this section are resolved in Cisco IOS Release 12.2(7e) but may be open in previous Cisco IOS releases.

The following information is provided for each caveat:

Symptoms—A description of what is observed when the caveat occurs.

Conditions—The conditions under which the caveat has been known to occur.

Workaround—Solutions, if available, to counteract the caveat.

- CSCdx14794

  Symptoms A modem call does not send data after the data send ready (DSR) signal comes up on the modem.

  Conditions This symptom is observed on a Cisco AS5800 universal access server that has a Cisco AS5800 series 324-port card that has a Cisco NextPort modem. The client side may keep sending PPP and Link Control Protocol (LCP) frames until a timeout occurs.

  Workaround There is no workaround.

- CSCdx20135

  Symptoms A router may display a "%RADIUS-3-ALLDEADSERVER" error message on the console.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.2 T even if the **radius-server deadtime** global configuration command is not configured.

  Workaround There is no workaround.

Resolved Caveats—Cisco IOS Release 12.2(7c)

Cisco IOS Release 12.2(7c) is a rebuild release for Cisco IOS Release 12.2(7). The caveats in this section are resolved in Cisco IOS Release 12.2(7c) but may be open in previous Cisco IOS releases.

- CSCdu58378

  A Cisco AS5300 or Cisco AS5800 universal access server that is running tandem Voice over IP (VoIP) and ISDN traffic may display "%VTSP-3-DSPALARM" and "%VTSP-3-DSP_TIMEOUT" error messages. The error messages are displayed immediately after the access server is rebooted. There is no workaround.

- CSCdv40244

  A Cisco 7206VXR router that is using an 8-port multichannel T1 port adapter (PA-MC-8T1) and that is running Cisco IOS Release 12.1(8.04) may experience a continuous stream of "%POT1E1-3-FWFATAL" error messages:

  ```
  %POT1E1-3-FWFATAL: Bay 5: firmware needsresetdue to fw watchdog timeout
  %POT1E1-3-FWFATAL: Bay 4: firmware needsresetdue to fatal softwareerrors
  ```

  This condition has also been observed on a Cisco 7206VXR router that is running Cisco IOS Release 12.1(7.03) or Release 12.0(14)S3. There is no workaround.

- CSCdv45264

  Symptoms A universal access server may display the following digital signal processor (DSP) error message:

  ```
  %VTSP-3-DSP_TIMEOUT: DSP timeout on event 6: DSP ID=0x1241: DSP error stats
  ```

  Conditions This symptom is observed on a Cisco AS5300 universal access server that is used as a voice gateway and that is running Cisco IOS Release 12.2(1a). This symptom has no impact on calls.

  Workaround There is no workaround.

- CSCdw01309

  Traceback messages may be displayed if an ISDN voice or fax call is made after a dial peer is shut down by entering the **shutdown** interface configuration command. This symptom is observed with ISDN calls that are made on two phones through two Cisco AS5800 universal access servers that are running the c5800-p4-mz.122-6.4 image of Cisco IOS Release 12.2(6.4). There is no workaround.

- CSCdw41145

  When a rotary dial peer is used with the Debit Card 2.0.0 Tool Command Language (TCL), only the first and the last missed rotary attempts are sent to the RADIUS server. This symptom is observed on a Cisco AS5300 universal access server that is running Cisco IOS Release 12.2(2)XU03.

  This symptom occurs if more than two dial peers are tried in order to reach a destination when the Debit Card feature is used (with each dial peer set to use different priorities). This symptom occurs only if the **aaa accounting connection h323 start-stop radius** global configuration command is configured. There is no workaround.

- CSCdw52832

  A Cisco router boots the boot image in bootflash instead of booting the full Cisco IOS image from the disk if all of the following conditions are met:

  - The configuration register is set to autoboot.
  - There is no configuration in NVRAM.

  - The **boot system** command is not in the configuration.
  - There is a complete and bootable Cisco IOS image on the disk, and there is a boot image in bootflash.

  Workaround: Set the router to boot the image from the disk using the **boot system** global configuration command.

- CSCdw94847

  The call success rate (CSR) degrades about 5 percent when a Tool Command Language (TCL) 1.0 Debit Card script is used in a busy network environment. This symptom is observed on a Cisco AS5800 universal access server that is running Cisco IOS Release 12.2(7a) or Release 12.2(7b). Calls may be disconnected unexpectedly when this symptom occurs. This symptom may be caused by a slow response from the RADIUS server when calls are set up and torn down at the same time.

  Workaround: Use a faster RADIUS server.

- CSCdx06621

  A router may reload with a bus error while the shortest path first (SPF) is computed. This symptom is observed if multiple routers are advertising the same prefix in Type-5 or Type-7 link-state advertisements (LSAs). There is no workaround.

- CSCdx14383

  A memory leak may occur when an E1 controller uses E1-R2 signaling. This symptom is observed on an E1 controller that is installed on a Cisco AS5300 universal access server that is using E1-R2 signaling and that is running Cisco IOS Release 12.2(7). This symptom can be verified by examining the command output of the **show chunk | beg vtsp** EXEC command:

  ```
  1320      8  2276      537         0      537         0 VTSP EVENT pool 0x618CC5C8
  1320      8 713180      537         0      537         0 (data) 0x622BCA58
  32      0   852       20          0       20         4 Call Management 0x6182D0D0
  ```

  The value 0 (bold in the output above) indicates the number of voice telephony security parameter (VTSP) EVENT chunks that are in use. This value should be 0 if no calls are present (as in the case of the command output that is shown above). This value changes according to the number of active calls. A continuous increase of this value indicates that VTSP EVENT memory is not being released, eventually resulting in chunk memory allocation (MALLOC) failures. There is no workaround.

- CSCdx39412

  A gateway may use an incorrect cause code value to release calls that are disconnected because of the expiration of the Real-Time Transport Control Protocol (RTCP) timer. This symptom is observed on a Cisco AS5300 universal access gateway that has the RTCP timer feature enabled by issuing the **timer receive-rtcp** *timer* gateway configuration command to detect and release idle calls. There is no workaround.

- CSCdx46031

  After a call is stopped, the connection identity (conf-id) value is not displayed in the command output of the **debug voip aaa** privileged EXEC command. This symptom is observed if the **debug voip aaa** privileged EXEC command is issued while the **gw-accounting aaa** global configuration command is enabled.

  Workaround: To establish matching start and stop accounting routines, use the call ID in the following accounting start and stop routines:

  ```
  start_h323_ccapi_accounting(5)
  stop_h323_ccapi_accounting(5)
  ```

Resolved Caveats—Cisco IOS Release 12.2(7b)

Cisco IOS Release 12.2(7b) is a rebuild release for Cisco IOS Release 12.2(7). The caveats in this section are resolved in Cisco IOS Release 12.2(7b) but may be open in previous Cisco IOS releases.

- CSCdv43014

  With Systems Network Architectures Switching Services (SNASw), some downstream physical units (PU) may be stuck in the reset state and cannot be activated. The **show snasw pu** EXEC command or **show snasw dlus** EXEC command may show that the Dependent Logical Unit Requestor/Dependent Logical Unit Server (DLUR/DLUS) pipe is in the "Pend Inact" state. Data Link Control (DLC) traces may also show no activity on this pipe.

  Workaround: Restart SNASw.

- CSCdv60706

  Voice quality issues may occur in a Voice over Frame Relay (VoFR) environment if the G.726r32 codec is used with a 32-ms echo cancellation coverage on the voice port. This configuration works normally in a Voice over IP (VoIP) environment.

  Workaround: Lower the echo cancellation coverage to 16 ms or use another voice codec such as the G.729r8 or G.711 codec.

- CSCdv81177

  When voice calls are present, a Cisco 7200 router will repeatedly display the following message:

  ```
   %SYS-3-MGDTIMER: Timer has parent, timer link, timer = 623B6970.
  -Process= "CC-API_VCM", ipl= 4, pid= 112:
  ```

  These messages are harmless and do not affect the call completion or voice quality.

  There is no workaround.

- CSCdv84788

  A Versatile Interface Processor (VIP) may reload or record spurious access after class maps are configured for Frame Relay. There is no workaround.

- CSCdw16903

  On a Cisco router that is running Cisco IOS Release 12.2(7) or an earlier release, when routing traffic is sent between PRI/ISDN and H.323 Voice over IP (VoIP) network legs, a memory leak may occur and the router may reload. This condition occurs when the router is handling the passthrough Q Signaling (QSIG) messages from an ISDN call leg through a VoIP network. The memory leakage occurs when H.225 connection timeouts are experienced on the VoIP call legs. If this condition is occurring, a positive value is displayed for the "H.225 establish timeout" statistic when the **show h323 gateway h225** privileged EXEC command is issued. This leak will not occur when normal voice call traffic is handled.

  The number of timeouts can be reduced and the memory leak can be minimized by increasing the H.323 connection timeout value. The H.323 connection timeout value can be adjusted by issuing the **voice class h323** *tag* global configuration command. The adjusted value must subsequently be associated with the voice dial peers. The default value is 15 seconds and can be increased to a maximum of 30 seconds. There is no workaround.

- CSCdw18697

  A Cisco 7200 or 7500 router may pause indefinitely when Network Based Application Recognition (NBAR) is enabled.

  Workaround: Use the **ip nbar resources** *max-age initial-links expand-links* global configuration command.

For example, if the **ip nbar resources 600** *initial-links* **50** global configuration command is issued, the system will wait for 600 seconds (10 minutes) before it tries to clean up a flow.

Note: Use the maximum amount for the *initial-links* argument to specify the number of pre-allocation links that the resource manager should pre-allocate at initialization time according to what the system will allow.

- CSCdw38373

  On a Cisco 2600 router that has a 2-port serial low-speed asynchronous and synchronous WAN interface card (WIC 2 A/S) that is configured for binary synchronous communication (BISYNC) on port 0 and has the **physical-layer async** interface configuration command configured on port 1, the clear to send (CTS) signal on port 0 is inverted for a short period of time when BISYNC polling is started after the router is reloaded. This behavior causes an ATM machine to enter the error recovery mode and may prevent the ATM machine from recovering and reestablishing proper communication with the router.

  The configuration of the **physical-layer async** interface configuration command on port 1 overwrites the hardware configuration on port 0 that controls the CTS signals for port 0 and may interfere with previous CTS hardware configuration on ports that have been previously configured. This behavior affects the 2-port serial WAN interface card (WIC-2T).

  Workaround: After the ports have been initialized through a reload or after the **physical-layer async** interface configuration command is removed from the configuration of a port, issue the **shutdown** interface configuration command followed by the **no shutdown** interface configuration command on the serial interface to reinitialize the hardware settings.

- CSCdw39876

  A Cisco router that is connected to a Cisco Catalyst 5500 switch may reload with a bus error or enter a constant boot loop. The output from the reload indicates that 802.1q (dot1q) is the cause of this behavior even though the router is not configured for dot1q trunking. The looping stops after the

  Ethernet cable is physically disconnected from the switch. This behavior was observed on Cisco IOS Release 12.2(6.7).

  Workaround: Configure a native VLAN on the trunk and configure all the protocol attributes on the native VLAN instead of the main interface. The two configurations are equivalent. The advantage of configuring the VLAN as native is that all packets are received and sent as untagged.

- CSCdw48170

  On a Cisco 3810 router that is running Cisco IOS Release 12.1(13) or Release 12.2(6.8), it may not be possible to configure the **clock rate** interface configuration command. There is no workaround.

- CSCdw51050

  A Cisco router that is using Inter-Switch Link (ISL) encapsulation may experience spurious memory accesses and reload because of a bus error while a tagged packet is process-switched.

  Workaround: Use 802.1Q encapsulation. This workaround may require changes for 802.1Q encapsulation on the sides of the Ethernet switch and the router because both sides of the LAN should use the same type of encapsulation.

- CSCdw54869

  A Cisco router may reload with a bus error at an invalid memory location after the **no ip nbar resources** global configuration command is removed. This behavior occurs if the following conditions exist:

  – Network-Based Application Recognition (NBAR) is disabled. Class map, policy map, and service policy statements that are used for NBAR are removed from the configuration.

  - The configuration contains the **ip nbar resources** *max-age initial-links expand-links* global configuration command.

  Workaround: Remove the **no ip nbar resources** global configuration command before disabling NBAR.

- CSCdw56572

  If the configured burst size of low latency queueing (LLQ) is changed in a policy map that is attached to an interface and if the configured bandwidth of LLQ is not changed, priority queueing (PQ) will stop dropping packets even though traffic that is sent through the PQ is greater than the configured bandwidth while there is congestion. If the traffic that is going through PQ is much greater than the configured bandwidth, the minimum bandwidth guarantees of the classes are not met.

  Workaround: Remove and reattach the service policy.

- CSCdw58159

  A Cisco AS5300 universal access server responds with a "Release complete" message with a cause code of 0xD1 (invalid call reference value) when a 4 Electronic Switching System (4ESS) sends a setup message followed by a facility message. There is no workaround.

- CSCdw58272

  After a Cisco AS5800 universal access server has been running for more than 10 hours under stress conditions, modem ISDN Channel Aggregation (MICA) technologies modems may be marked as bad. There is no workaround.

- CSCdw74143

  On a Cisco router, the Route Switch Processor (RSP) reloads when a policy map is associated to a Frame Relay map class. This condition was observed on a router that had 380 interfaces in which each interface had distributed Frame Relay fragmentation (dFRF.12) configured. There is no workaround.

- CSCdw51935

  When serial interfaces that use Frame Relay are configured, the following message may be displayed:

  ```
  %RSP-3-BADBUFHDR: freeing MEMD pak, address 0 -Traceback= 603A0098 603A7D98 603AD718
  603B35F0 6035CA0C
  %RSP-3-BADBUFHDR: freeing MEMD pak, address 0 -Traceback= 603A0098 603A7D98 603AD718
  603B35F0 6035CA0C
  ```

  This message is displayed after Frame Relay-fragmented packets that are selected for selective packet discarding are reassembled. If the message is displayed repeatedly, the router has to be reloaded to return to normal working condition. There is no workaround.

- CSCdw57901

  ISDN service profile identifier 1 (SPID 1) and ISDN SPID 2 cannot be configured on a Cisco 1700, 2600, or 3600 router that uses the 2-port ISDN BRI voice interface card, S/T interface, network termination or network terminal equipment (VIC-2BRI-NT/TE) or the 2-port ISDN BRI voice interface card, S/T interface and terminal equipment (VIC-2BRI-S/T-TE). ISDN SPID 1 and ISDN SPID 2 cannot be configured on the BRI voice module (BVM) on a Cisco MC3810 multiaccess concentrator. There is no workaround.

- CSCdw86740

  When a service policy is applied to a large number of interfaces simultaneously, the service policy may overrun the interprocess communications (IPC) mechanism on a Cisco 7500 router.

Workaround: Break up the service policy and apply the service policy individually to a smaller group of interfaces.

Resolved Caveats—Cisco IOS Release 12.2(7a)

Cisco IOS Release 12.2(7a) is a rebuild of Cisco IOS Release 12.2(7). All caveats listed in this section are resolved in Cisco IOS Release 12.2(7a) but may be open in previous Cisco IOS releases.

- CSCdw29595

  The performance of the encryption path degrades when Cisco IOS Release 12.2(6.8) is used with a hardware encryption card. The loss in performance occurs because encrypted packets are process-switched instead of being fast-switched. This condition occurs when IP Security (IPSec) is applied to the interfaces while the hardware encryption card is used. There is no workaround.

- 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(7)

This section describes possibly unexpected behavior by Cisco IOS Release 12.2(7). All the caveats listed in this section are resolved in Cisco IOS Release 12.2(7). This section describes severity 1 and 2 caveats and select severity 3 caveats.

Access Server

- CSCdv08170

  Symptoms "DS-RS flow control has got out of sync" messages may be displayed when analog calls are cleared by entering the **clear spe** EXEC command.

  Conditions This symptom is observed on a Cisco AS5800 universal access server and may impact service traffic on the Cisco AS5800.

  Workaround There is no workaround.

- CSCdv21963

  Symptoms Negative acknowledgments (NAKs) from Modem ISDN channel aggregation (MICA) modems may be observed when analog calls disconnect.

  Conditions This symptom is observed on a Cisco AS5300.

  Workaround There is no workaround.

Basic System Services

- CSCdu53252

  Symptoms A ROM monitor (ROMmon) alarm is triggered if the rising threshold equals or exceeds 7001. Because the ROMmon probe is scheduled to sample every second, and the maximum physical bandwidth is 56 kbps (700 ifOutOctets per second), it should not be possible for ifOutOctets to be more than or equal to 7000 within a time difference of one second.

  ```
  rmon alarm 1 ifEntry.16.2 1 delta rising-threshold 7001 1 falling-threshold 0
  ```

  Conditions This symptom is observed on the serial interface of a Cisco 2600 series.

  Workaround There is no workaround.

- CSCdu71329

  Symptoms A Cisco router that is using a compression service adapter (SA-COMP/4) may use software compression instead of hardware compression when the **show compress** EXEC command is entered.

  Conditions This symptom is observed on a Cisco router that has a SA-COMP/4 compression service adapter.

  Workaround There is no workaround.

- CSCdv03625

  Symptoms A Cisco router that has a Route Switch Processor (RSP 8) does not respond or responds incorrectly to Simple Network Management Protocol (SNMP) requests for the "ciscoFlashPartitionTable" table and the "ciscoFlashFileTable" table with normal Personal Computer Memory Card International Association (PCMCIA) flashcards.

  Conditions This symptom is observed on a Cisco router that has an RSP 8 and that is running Cisco IOS Release 12.2(2)T or Release 12.2(2)T1.

  Workaround There is no workaround.

- CSCdv40395

  Symptoms A router may reload unexpectedly because of a bus error at a low address.

  Conditions This symptom is observed on an ISDN BRI interface of a Cisco 7200 series router while stack compression is enabled and if Cisco IOS Release 12.2(3), Release 12.2(3.6), or Release 12.2(5) is used.

  Workaround Disable compression on the ISDN BRI interface to prevent the router from reloading because of this bus error.

- CSCdv47081

  Symptoms A loss of synchronization between the compression peers and a Cisco router may occur, and the router may not complete the Frame Relay Implementation Agreement (FRF.9) negotiation.

  Conditions This symptom is observed when the router that has a serial interface and that is configured with Data Compression over FRF.9 compression.

  Workaround Enter the **shutdown** interface configuration command followed by the **no shutdown** interface configuration command simultaneously on both sides of the serial interface. When the Cisco IOS software is upgraded to correct this condition, both compression peers have to be upgraded. If only one compression peer is upgraded, negotiation may continue to fail.

- CSCdv51254

  Symptoms A Cisco Versatile Interface Processor (VIP) may reload at the vip_fib_fs process when the VIP is sending traffic.

Conditions This symptom is observed on a Cisco VIP.

Workaround There is no workaround.

- CSCdv51645

  Symptoms A Cisco 5300 accepts voice calls, sends access-request messages to RADIUS servers and receives access-accept messages from RADIUS servers, but the Cisco AS5300 terminates the call regardless of the response from the RADIUS server because of an authorization failure.

  Conditions This symptom is observed when the Cisco 5300 is upgraded from Cisco IOS Release 12.1(3a)X17 to Cisco IOS Release 12.2(5).

  Workaround There is no workaround.

- CSCdv56243

  Symptoms When virtual routing and forwarding (VRF) is used on a Cisco 6400 broadband aggregator, the node route processor (NRP) may not receive the RADIUS Stop Record Attribute 49 (Acct-Terminate-Cause) when a connection terminates.

  Conditions This symptom is observed on a Cisco 6400 broadband aggregator that has an NRP.

  Workaround There is no workaround.

- CSCdv60768

  Symptoms Cisco IOS software will reload if the target address for Response Time Reporter (RTR) Domain Name System (DNS) probes is longer than 92 bytes,

  Conditions This symptom is observed on a Cisco router.

  Workaround Avoid looking up host names that are longer than 92 bytes.

- CSCdv63230

  Symptoms The **if-needed** keyword of the **aaa authentication ppp default if-needed** global configuration command may not function normally.

  Conditions This symptom is observed on a Cisco AS5400.

  Workaround There is no workaround.

- CSCdv78855

  Symptoms Public buffer pools on a Cisco router are not incremented dynamically when free=min free=0.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.2(5).

  Workaround To set the min-free buffers, enter the **buffers verybig min-free** *number* global configuration command.

- CSCdv89415

  Symptoms The **rtr reaction-configuration** command can be used to trigger another probe when a timeout, a threshold violation, or a verify error event occurs. However, the probe that should be triggered is activated only once during the first occurrence of the reaction condition. If the reaction condition occurs again (for example, when the timeout condition clears) and if the triggered probe is in the pending state, the probe should be activated again.

  Conditions This symptom is observed on a Cisco 2600 series that is running Cisco IOS Release 12.2(3).

  Workaround There is no workaround.

- CSCdw01189

  Symptoms A queueing-related spurious access traceback may be observed with non-IP packets when class-based weighted fair queueing (CBWFQ) is used.

  Conditions This symptom is observed on a Cisco 7200 series.

  Workaround There is no workaround.

- CSCdw01726

  Symptoms A Simple Network Management Protocol version 3 (SNMPv3) user configuration is changed when a router is reloaded.

  Conditions This symptom is observed when an SNMPv3 user is created using message digest 5 (MD5) authentication by entering the following commands:

  ```
  Router# snmp group groupy v3 auth
  Router# snmp user abcdefghij groupy v3 auth md5 abcdefghij
  ```

  Then, the engine ID is then changed by entering the following command:

  ```
  snmp-server engineID local 00000009020000024B0008FE
  ```

  An SNMP walk is performed by entering the following command, the configuration is saved, and the router is reloaded.

  ```
  Router(config)# snmpwalk -v 3 -u abcdefghij -A abcdefghij -a MD5 -l AuthNoPriv
  device-name
  ```

  The SNMP walk is successful and the following debug header output is displayed when the **debug snmp** EXEC command is entered:

  ```
  Incoming SNMP packet : v3 packet security model: v3 security level: auth username:
  abcdefghij
  ```

  The router is reloaded and a second SNMP walk is performed by entering the following command:

  ```
  Router# snmpwalk -v 3 -u abcdefghij -A abcdefghij -a MD5 -l AuthNoPriv device-name
  ```

  After the second SNMP walk is performed, the command does not generate any output and the following debug header output is displayed when the **debug snmp** EXEC command is entered:

  ```
  Incoming SNMP packet : v3 packet security model: v3 security level: noauth : username:
  abcdefghij
  ```

  Workaround Do not change the default engine identity (ID).

- CSCdw30178

  A Cisco router that is running Cisco IOS Release 12.0(20.3)S1 may not be accessible through the Ethernet 0 interface.

  Workaround: Load the software onto the router, copy the running configuration file to the startup configuration, and reload the router.

IBM Connectivity

- CSCdv16277

  Symptoms A router that is running Cisco IOS Release 12.1(10.1) or a later release with data-link switching (DLSw) and Ethernet Redundancy (ER) may reload.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.1(10.1).

  Workaround There is no workaround.

- CSCdv51603

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

  Conditions This symptom is observed on a Cisco 1720 that is running Cisco IOS Release 12.2(2)T1 or Release 12.2(5) with the data-link switching plus (DLSw+) Ethernet Redundancy feature enabled.

  Workaround Remove the DLSw+ Ethernet Redundancy feature, and configure data-link switching (DLSW) with transparent bridging on the Ethernet segment of the router.

- CSCdv55198

  Symptoms In a network of Cisco 7200 routers that use the Network Processing Engine (NPE-225), source-route bridging (SRB) frames are dropped under light load conditions when data-link switching (DLSw) or TCP is used to connect SRB to the FDDI on the mainframe. DLSw circuits are disconnected if there is a high load.

  Conditions This symptom is observed in a network of Cisco 7200 routers that use the network processing engine (NPE-225).

  Workaround Use the NPE-200 instead of the NPE-225 network processing engine.

Interfaces and Bridging

- CSCdk27330

  Symptoms A Versatile Interface Processor (VIP) may reload if the following command sequence is entered on the controller of a Channelized T3 Interface Processor (CT3IP):

  ```
  t1 external 3 linecode b8zs cablelength 100
  no t1 3 timeslots 1-24
  no t1 3 clock source line
  ```

  All commands that are entered after the **no t1 3 timeslots 1- 24** command may cause the VIP to reload.

  Conditions This symptom is observed on a Route Switch Processor (RSP-2)

  Workaround To prevent the controller from reloading, enter the commands in either one of the following sequences:

  ```
  no t1 3 clock source line
  t1 external 3 linecode b8zs cablelength 100
  no t1 3 timeslots 1-24
  ```

  or

  ```
  no t1 3 clock source line
  no t1 3 timeslots 1-24
  t1 external 3 linecode b8zs cablelength 100
  ```

  Be certain to enter the **no t1 3 timeslots 1-24** command after the **no t1 3 clock source line** command.

- CSCds00250

  Symptoms The ifTable/ifXTabe is not populated for interfaces that have defined trunks that use 802.1Q encapsulation.

Conditions This symptom is observed on a Cisco router that has trunks that use 802.1Q encapsulation. CSCds00250 adds ifXTable support for 802.1Q and Inter-Switch Link (ISL) interfaces.

Workaround There is no workaround.

- CSCds44777

  Symptoms The data terminal ready (DTR) port adapter on a Cisco router does not continuously drop and pulse according to the time intervals configured with the **pulse-time** *seconds* interface configuration command. On the 4-port serial port adapter (PA-4T+) and Fast Serial Interface Processor (FSIP), the "RSP-3-RESTART" message may appear right before a Cisco router has to be restarted to recover a serial interface from a circuit outage that was configured by entering the **pulse-time** *seconds* interface configuration command

  Conditions This symptom is observed on a Cisco 7500 series router that a PA-4T+ port adapter, an 8-port serial port adapter (PA-8T), and an FSIP.

  Workaround There is no workaround.

- CSCdu71723

  Symptoms The following traceback messages may be displayed on a router:

  ```
  %ALIGN-3-SPURIOUS Spurious memory access made at 0x603DE76C reading 0x78
  %ALIGN-3-TRACE -Traceback= 603DE76C 6058CA04 6058C6D8 6058BF2C 607CAC8C 607CE4A0
  607C03F4 607C94DC
  ```

  Conditions This symptom is observed when an Simple Network Management Protocol (SNMP) walk query is performed on a Cisco router that is running Cisco IOS Release 12.1(6).

  Workaround There is no workaround.

- CSCdv11017

  Symptoms An output stuck condition may be observed on a Cisco router.

  Conditions This symptom is observed on a Cisco 7513 router that has a serial port adapter and that is running Cisco IOS Release 12.1(9).

  Workaround There is no workaround.

- CSCdv14065

  Symptoms Frame Relay, packet-by-packet compression, and access violation traceback messages that involve the "pbp_compress" or the "pbp_uncompress" address may be observed. The "BRI1:1: COMPRESS: invoked on bad context" or the "BRI1:1: DECOMP invoked on bad context" message may also be displayed.

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

  Workaround Disable payload compression.

- CSCdv37998

  Symptoms Interfaces that are created on a channelized T3 (CT3) single wide port adapter on a Versatile Interface Processor (VIP) may flap.

  Conditions This symptom is observed on a Cisco 7500 series router that is running Cisco IOS Release 12.0(16)S1 and that has a CT3 wide port adapter on a VIP.

  Workaround Reload the VIP.

- CSCdv51548

  Symptoms A multichannel T3 port adapter (PA-MC-2T3+) that is operating in the clear-channel mode does not send an alarm indication signal (AIS) after the PA-MC-2T3+ is administratively shut down.

Conditions This symptom is observed on a Cisco router that has a PA-MC-2T3+.

Workaround There is no workaround.

- CSCdv57768

  Symptoms The process that manages reset requests from hardware compression assist may not run, and asynchronous compression reset requests for Compression Control Protocol (CCP) PPP may not be processed.

  Conditions This symptom is observed after the variable holding ID for the process that manages reset requests from hardware compression assist is initialized.

  Workaround There is no workaround.

- CSCdv63695

  Symptoms The **ip mtu** *bytes* interface configuration command may be missing from a Token Ring interface after the interface is reloaded.

  Conditions This symptom is observed on a Cisco 7500 series that is running Cisco IOS Release 12.1(9).

  Workaround There is no workaround.

- CSCdv72634

  Symptoms The following debug messages may be displayed on a Cisco AS5800 universal access server and the performance of the Cisco AS5800 may be affected:

  ```
  DEC21140:FastEthernet0/1/0: Test traffic
  FastEthernet0/1/0: No VLANs configured on this hwidb
  ```

  Conditions This symptom is observed on a Cisco AS5800.

  Workaround There is no workaround.

- CSCdv74384

  Symptoms A Token Ring interface may not recover after a switch that it is connected to is power-cycled.

  Conditions This symptom is observed when a dedicated Token Ring port adapter (PA-4R-DTR) is used with a Versatile Interface Processor (VIP-2) on a Cisco 7500 series router. The Token Ring interface that is configured for full-duplex and 16 MB does not recover if the Cisco Catalyst 3920 switch that is configured with a full-duplex port (FDX-port) (to which the PA-4R-DTR interface is connected) is power-cycled.

  Workaround If the Cisco Catalyst 3920 switch port is configured for AUTO and not FDX-port, the PA-4R-DTR interface will recover in the half-duplex mode after the **shutdown** interface configuration command followed by the **no shutdown** interface configuration command is entered on the interface.

- CSCdv77513

  Symptoms A Versatile Interface Processor (VIP2-50 or VIP4-50) may reload.

  Conditions This symptom is observed on a Cisco 7500 series router that has a channelized T3 (CT3) single wide port adapter on a VIP2-50 or VIP4-50.

  Workaround There is no workaround.

- CSCdv90590

  Symptoms Integrated routing and bridging (IRB) may not work as expected on a Cisco router.

  Conditions This symptom is observed on a Cisco 7200 series router that has a Token Ring port adapter (PA-DTR).

Workaround There is no workaround.

- CSCdv90801

  Symptoms Packets are not marked with the Differentiated Services Code Point (DSCP) value that is specified in the policy map that is configured on an 802.1q subinterface when matching is done on the source IP address.

  Conditions This symptom is observed on a Cisco 2600 series.

  Workaround There is no workaround.

- CSCdw00126

  Symptoms Issues may be observed with Bridge-Group Virtual Interfaces (BVIs). The input queue may become wedged and the router may stop passing traffic when this symptom occurs.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.2(6.4) while bridging is configured.

  Workaround There is no workaround.

- CSCdw06815

  Symptoms Packets may not be forwarded if the virtual connection (VC) number is the same on both input and output ATM interfaces that are on the same bridge group.

  Conditions This symptom is observed on a Cisco 7200 series.

  Workaround Configure different VC numbers on the input and output interfaces.

- CSCdw39876

  A Cisco router that is connected to a Cisco Catalyst 5500 switch may reload with a bus error or enter a constant boot loop. The output from the reload indicates that 802.1q (dot1q) is the cause of this behavior even though the router is not configured for dot1q trunking. The looping stops after the Ethernet cable is physically disconnected from the switch. This behavior was observed on Cisco IOS Release 12.2(6.7).

  Workaround: Configure a native VLAN on the trunk and configure all the protocol attributes on the native VLAN instead of the main interface. The two configurations are equivalent. The advantage of configuring the VLAN as native is that all packets are received and sent as untagged.

IP Routing Protocols

- CSCds66047

  Symptoms A Cisco router that has a Versatile Interface Processor (VIP) may reload if the **show ip rsvp installed detail** EXEC command is entered while a Resource-Reservation Protocol (RSVP) session is installed on an interface that is configured to support Distributed Weighted Fair Queuing (DWFQ).

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

  Workaround There is no workaround.

- CSCds89720

  Symptoms Packets are dropped because a Cisco Express Forwarding (CEF) entry or a cache entry for a route that is not complete can be silently dropped without any indication of the drop in the output of the **show interface** EXEC command. This symptom occurs because the default minimum and maximum default queue size of the selective packet discard (SPD) feature is 73 and 74, and the default input queue size is 75.

Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.0(8) or Release 12.1(4).

Workaround There is no workaround.

- CSCdu08686

  Symptoms A router may generate router link states but may fail to generate network link states for a connected network. The Open Shortest Path First (OSPF) neighbors may come up correctly on all the routers in the network.

  Conditions This symptom is observed on a Cisco 7206VXR router that is running the OSPF Protocol and acting as a designated router (DR).

  Workaround Set the priority on the interface to 0 so that the router is not the DR for that link.

- CSCdu88697

  Symptoms A memory leak may occur while a Lightweight Directory Access Protocol (LDAP) packet is processed on a router that is running Network Address Translation (NAT).

  Conditions This symptom is observed while an LDAP packet is processed on a Cisco router that is running Cisco IOS Release 12.2(3)

  Workaround There is no workaround.

- CSCdu89525

  Symptoms A Cisco router may reload when an Enhanced Interior Gateway Routing Protocol (EIGRP) router is removed by entering the **no router eigrp** command.

  Conditions This symptom is observed when an EIGRP router is removed entering the **no router eigrp** command.

  Workaround There is no workaround.

- CSCdv06458

  Symptoms A Catalyst 3550 switch may reload if the **show ip eigrp neighbors** EXEC command is entered repeatedly while Enhanced Interior Gateway Routing Protocol (EIGRP) adjacencies are coming up.

  Conditions This symptom is observed under rare circumstances on a Catalyst 3550 switch. The **show ip eigrp neighbors** EXEC command has to be entered at just the right time for this condition to occur.

  Workaround There is no workaround.

- CSCdv10306

  Symptoms When a static route is configured through an interface and the interface is subsequently shut down, the static route is still shown as valid.

  Conditions This symptom is observed only if all of the following conditions are met:

  – A static route is configured via a gateway.

  – A static Address Resolution Protocol (ARP) of the gateway is configured.

  – Cisco Express Forwarding (CEF) is enabled.

  – An interface that shares the same subnet address as the gateway address is shut down.

  Workaround Clear the static route by entering the **clear ip route destination gateway** privileged EXEC command.

- CSCdv35791

  Symptoms A Border Gateway Protocol (BGP) route reflector is not advertising locally-sourced Multicast Border Gateway Protocol (MBGP) routes correctly.

  Conditions This symptom is observed on a Cisco 12000 series.

  Workaround Enter the **clear ip bgp *** EXEC command on the route reflector.

  Alternate Workaround Remove the route map and enter the **clear ip bgp *** EXEC command, replace the route map, and enter the **clear ip bgp *** EXEC command again.

  The suggested workarounds are effective until the periodic BGP scanner process is run. The BGP scanner process will invalidate the routes again.

- CSCdv40492

  Symptoms A Network Address Translation (NAT) port allocation failure may occur on a Catalyst switch.

  Conditions This symptom is observed after a sustained period of operation on a Catalyst 6000 switch that has a Multilayer Switch Feature Card (MSFC) and that is running Cisco IOS Release 12.1(7a)E3.

  Workaround To clear the translation table and allow NAT to function normally, reload the MSFC.

- CSCdv47188

  Symptoms If the first entry in the Multicast Border Gateway Protocol (MBGP) routing table is the supernet of the destination IP address, or if the MBGP route exists but does not have the best path, Reverse Path Forwarding (RPF) lookup will fail or will return a unicast Border Gateway Protocol (BGP) route if a unicast BGP route exists.

  Conditions This symptom is observed on a Cisco 12000 series.

  Workaround Remove the first entry, or add a dummy route that is smaller than the first entry. In the case of a MBGP route without a best path, change the network configuration to ensure that the specified destination address has the best path.

- CSCdv56698

  Symptoms Multicast traffic stops after the **shutdown** interface configuration command is entered followed by the **no shutdown** command interface configuration command on a Packet over SONET (PoS) interface. This condition may occur when any link-up or link-down event takes place.

  Conditions This symptom is observed on a Catalyst 6000 series.

  Workaround To clear this condition, enter the **clear ip mroute *** EXEC command on the PoS interface.

- CSCdv71515

  The bidirectional flag is not reset on a multicast route (mroute) entry when the group status changes from the bidirectional state to the dense state. There is no workaround.

- CSCdv85419

  Symptoms Two Multilayer Switch Feature Cards (MSFCs) may enter the “stuck-in-active” state while the two MSFCs are waiting for a neighboring MSFC to reply to an Enhanced Interior Gateway Routing Protocol (EIGRP) query.

  Conditions This symptom is observed under rare circumstances on two MSFCs. This symptom occurs when the MSFCs first receives a query that has a bad metric before receiving a second query that has an infinite metric. This condition clears after the two MSFC cards wait through the 3-minute Stuck in Active (SIA) route timer.

Workaround There is no workaround.

- CSCdv89039

  A Cisco router that is running Cisco IOS Release 12.2(5) may reload because of a bus error at the ipnat_unlock_parent_entry process. There is no workaround.

- CSCdw09196

  Symptoms An output interface is cut off when a virtual interface goes up or down.

  Conditions This symptom is observed after the **shutdown** interface configuration command followed by the **no shutdown** interface configuration command is entered on the virtual interface. This symptom is reflected in the output of the **show up mroute** EXEC command. When this symptom occurs, no packets other than Real-Time Transport Control Protocol (RTCP) packets are detected on the voice port.

  Workaround There is no workaround.

- CSCdw10106

  Symptoms A router may reload when the **clear ip nat trans *** EXEC command is entered after a large number of translations are created.

  Conditions This symptom is observed on a Cisco 7200 series.

  Workaround There is no workaround.

- CSCdw11274

  Symptoms A router that receives a gratuitous Address Resolution Protocol (ARP) for a static ARP entry with an alias keyword reloads because of a bus error.

  Conditions Further conditions under which these symptoms occur are not known at this time.

  Workaround Do not use an alias keyword on a static ARP entry. An alias keyword allows the router to answer ARP requests for the static ARP entry, but in many cases, an alias keyword is not required because the router must have the static ARP entry only for its own use.

- CSCdw11897

  Symptoms When network address translation (NAT) is used, a new FTP session may pause indefinitely if the response from the server is dropped after the response is translated by the router. The FTP session must be restarted from the client. As long as the passive response that is returned from the server is not dropped between the router and the client, the FTP session will operate normally.

  Conditions This symptom is observed with FTP sessions on a Cisco router.

  Workaround There is no workaround.

- CSCdw12678

  Symptoms When a DR/DF change occurs on interfaces that have static or virtual group membership, the interfaces are not added to the mroute state.

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

  Workaround There is no workaround.

- CSCdw17989

  Symptoms After CSCdt87405 is implemented, inconsistent and unpredictable behavior may be observed when Protocol Independent Multicast dense mode (PIM-DM) is used on certain point-to-point interfaces.

  Conditions This symptom is likely to be observed with tunnel interfaces.

Workaround There is no workaround.

ISO CLNS

- CSCdv72514

  Symptoms When partition avoidance is configured on two border routers in the Level 1 (intra-area) area and if one of the border routers loses all Level 1 adjacency and loses End System-to-Intermediate System (ES-IS) adjacency with the Level 1 router, the router that has lost all Level 1 and ES-IS adjacency reports that the Level 1 router is unreachable instead of forwarding packets (that are destined to the Level 1 router) through an alternate path to another border router that still has Level 1 adjacency with the Level 1 router.

  Conditions The condition described in this caveat occurs in a redundant Connectionless Network Service (CLNS) multiarea network that consists of one Level 1 (intra-area) router that has adjacencies with two border routers, each of which is running in multiple areas. A Level 2 (inter-area) adjacency exists between the two border routers.

  Workaround There is no workaround.

- CSCdw31942

  When a Cisco 12000 series line card is reloaded with microcode, the Intermediate System-to-Intermediate System (IS-IS) interface configuration may be lost.

  Workaround: Manually reconfigure the interface configuration.

Miscellaneous

- CSCdm00113

  Symptoms When an ATM-CES-OC3 port adapter card is removed and reinserted, all running configuration parameters are retained, except the parameters in the **atm max-channels** *number* interface configuration command.

  Conditions This symptom is observed on an ATM-CES-OC3 port adapter card.

  Workaround There is no workaround.

- CSCds28731

  Symptoms When a member link is shut down in a distributed Multilink PPP (dMLP) bundle, the Multilink interface may flap. The following sample syslog output is displayed when this condition occurs:

  ```
  %SYS-5-CONFIG_I: Configured from console by console
  %LINK-5-CHANGED: Interface Serial0/0/0:0, changed state to administratively down
  %LINK-3-UPDOWN: Interface Multilink1, changed state to down
  %LINEPROTO-5-UPDOWN: Line protocol on Interface Serial0/0/0:0, changed state to down
  %LINEPROTO-5-UPDOWN: Line protocol on Interface Serial0/0/1:0, changed state to down
  %LINEPROTO-5-UPDOWN: Line protocol on Interface Multilink1, changed state to down
  %LINK-3-UPDOWN: Interface Multilink1, changed state to up
  %LINEPROTO-5-UPDOWN: Line protocol on Interface Serial0/0/1:0, changed state to up
  %LINEPROTO-5-UPDOWN: Line protocol on Interface Multilink1, changed state to up
  ```

  Conditions This symptom is observed when a member link is shut down in a dMLP bundle on a Route Switch Processor (RSP-4).

  Workaround There is no workaround.

- CSCds44967

  Symptoms The following traceback messages are displayed continuously on a Network Switch Processor (NSP) console:

  ```
  00:04:15: -Traceback= 603832CC 603D4360 603CC864 600C11E4 600C11D0
  00:04:16: ASSERTION FAILED: file "../src-4k-nsp/nsp_pam_sunipdh_hw.c", line 884
  00:04:16: -Traceback= 603832CC 603D4360 603CC864 600C11E4 600C11D0
  00:04:16: ASSERTION FAILED: file "../src-4k-nsp/nsp_pam_sunipdh_hw.c", line 884
  00:04:16: -Traceback= 603832CC 603D4360 603CC864 600C11E4 600C11D0*
  ```

  Conditions This symptom is observed on a Cisco 6400 universal access concentrator.

  Workaround There is no workaround.

- CSCds69145

  Symptoms A router may reload after a process is suspended while it is deleting a label virtual circuit (LVC) and a second process deletes the same LVC while the first process is suspended. After the first process is suspended, the first process completes the deletion of the now non-existent LVC and causes the router reload.

  Conditions This symptom affects platforms that are running Cisco IOS Release 12.0 ST, 12.2, and Release 12.2 T.

  Workaround There is no workaround.

- CSCds82662

  Symptoms On a Cisco 7200 series I/O controller card that has a Fast Ethernet (FE) interface (RJ-45) that is configured with Protocol Independent Multicast (PIM) and full duplex, the line protocol flaps when the cable is removed or if the cable fails instead of entering the line protocol down state.

  Conditions This symptom is observed on a Cisco 7200 series I/O controller card that has an RJ-45 FE interface that is configured with PIM and full duplex.

  Workaround Remove either PIM or full duplex from the interface.

- CSCds82883

  Symptoms Border Gateway Protocol (BGP) aggregate routes on a provider edge (PE) router appear in the Virtual Private Network (VPN) routing/forwarding (VRF) and the Cisco Express Forwarding (CEF) table, but the routes do not appear in the tag forwarding table. This symptom prevents access to all networks that are covered by this aggregate address from other PE and customer edge (CE) routers on the same VPN.

  Conditions This symptom is observed on a Cisco router that is used as a PE router and that is running Cisco IOS Release 12.2.

  Workaround Define a VRF loopback interface with an IP address that aggregates all the IP addresses that are to be aggregated by entering the **aggregate-address** router configuration command.

- CSCdt10624

  Symptoms A Cisco router may reload unexpectedly if all Multiprotocol Label Switching (MPLS) Traffic Engineering (TE) tunnels are removed. This situation occurs under heavy load conditions (for example, when several thousand routes and several hundred TE tunnels are removed).

  Conditions This symptom is observed on a Cisco 12000 series router.

  Workaround There is no workaround.

- CSCdt45274

  Symptoms A Cisco AS5300 universal access server may reload with a bus error when attempts are made to clear Media Gateway Control Protocol (MGCP) connections that are tied to an announcement trunk on the Cisco AS5300 by shutting down the T1 controller.

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

Workaround There is no workaround.

- CSCdt68781

  The **show call resources voice** EXEC command is not available on a Cisco 7200 series router. There is no workaround.

- CSCdt88425

  Symptoms A Cisco 7500 series router that is functioning as a Multiprotocol Label Switching (MPLS) virtual private network (VPN) provider edge (PE) router may drop VPN traffic when there are multiple links going into the provider network, and the links have configurations that force packets to be punted to the Route Switch Processor (RSP). An example of such a configuration occurs when the router is configured for RSP-based weighted fair queueing (WFQ).

  To check if packets need to be punted to the RSP, enter the **show ip cef** *network* [*mask* [**longer-prefix**] [**detail**] EXEC command on the Versatile Interface Processor (VIP). The command output will show the punt adjacency for a given entry.

  To check if RSP-based WFQ is enabled, check the output of the **show interface** EXEC command.

  Conditions This symptom is observed on a Cisco 7500 series router that is functioning as an MPLS VPN PE router.

  Workaround If this condition occurs because RSP-based WFQ is enabled, perform any of the following:

  – Enable distributed weighted fair queueing (DWFQ).

  – Enable FIFO queueing.

  – If the condition is not related to queueing, disable load sharing.

- CSCdu00328

  Symptoms A Cisco 7500 series router may stop receiving packets on certain interfaces when a Cisco 6500 series switch that is connected through a port channel is reloaded.

  Conditions This symptom is observed on a Cisco 7500 router that is connected to a Cisco 6500 series switch through the port channel. This symptom does not occur if the port channel is removed.

  Workaround Run normal IP between the Cisco 7500 series router and the Cisco 6500 series switch without the port channel configuration.

- CSCdu20618

  Symptoms One side of a circuit emulation service (CES) E1 port of a Cisco LightStream LS1010 switch connection may remain consistently in the YELLOW alarm or ALARM INTEGRATION state.

  Conditions This symptom is observed on one side of a CES E1 port of a Cisco LightStream LS1010 switch connection.

  Workaround There is no workaround.

- CSCdu39550

  Symptoms If a ds0-group is removed from a T1 controller on a multiple digital signal level 0 (ds0) group controller, all of the custom channel-associated signaling (CAS) configurations for the remaining ds0-groups are removed, even if the corresponding ds0-groups are still configured.

Conditions This symptom is observed on a Cisco 3600 series that has ds0-groups configured on the gateway controller and that is running Cisco IOS Release 12.2(6).

Workaround Do not configure multiple ds0-groups and use only one ds0-group for each controller.

- CSCdu39773

  Symptoms A cable access router may run out of memory and reload. This symptom is caused by memory leaks that occur after event logging is enabled.

  Conditions This symptom is observed on a Cisco uBR900 series cable access router about six hours after a failed Data-over-Cable Service Interface Specifications (DOCSIS) configuration image upgrade attempt.

  Workaround There is no workaround.

- CSCdu46679

  Symptoms An output queue may become wedged after a few minutes. The following command output is displayed when the **show interface fast 0/1** EXEC command is entered:

  ```
  FastEthernet0/1 is up, line protocol is up Hardware is a vendor-specific chip Queueing
  strategy: fifo Output queue 40/40, 66826 drops; input queue 0/75, 0 drops
  ```

  Conditions This symptom is observed on a Fast Ethernet or Gigabit Ethernet interface that has a vendor-specific chip and that is running Cisco IOS Release 12.2(1).

  Workaround There is no workaround.

- CSCdu48008

  Symptoms The creation of two new processes and a 27 KB memory allocation may cause an interface to reset. The total amount of free memory decreases by 2000 bytes with each reset.

  Conditions This symptom is observed on a Cisco uBR900 series cable access router.

  Workaround There is no workaround.

- CSCdu54460

  Symptoms A software-forced reload may occur on a Cisco router because of a memory corruption.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.2(2.1). This symptom occurs when the router is configured as a Systems Network Architecture (SNA) switch.

  Workaround There is no workaround.

- CSCdu55250

  Symptoms Platforms that have fast CPUs may intermittently fail to boot if a Cisco IOS image is loaded from a 48-MB or a 128-MB Advanced Technology Attachment (ATA)-disk card. An "ATA_Status time out waiting for x" message (where "x" is a digit) is displayed when this symptom occurs. The platform will also return to the ROM monitor (ROMmon) mode. This condition can occur when a platform is booted from a 48-MB or a 128-MB ATA disk Personal Computer Memory Card International Association (PCMCIA) card. Linear Flash PCMCIA cards and cards of different capacities do not exhibit this condition.

  Conditions This symptom is observed only when a router is booting from 48-MB or 128-MB ATA-disk PCMCIA cards. Linear Flash PCMCIA and cards of other capacities have not exhibited this symptom.

  This symptom appears to be caused by random and intermittent internal noise on the ATA-disk card that causes it to occasionally respond slowly to a read request when an image is loaded. The symptom is more apparent on platforms that have fast CPUs because the time that the system waits for the ATA-disk card to return the data is less than the time on slower platforms.

Workaround Boot the router by using another device.

Alternate Workaround Use a different ATA-disk card or a linear Flash PCMCIA card, or use a boot helper image to load the desired image from the ATA-disk card.

- CSCdu62738

  Symptoms The firmware for a 2-Port RJ-48 Multiflex Trunk E1 with Drop and Insert (VWIC-2MFT-E1-DI) interface card does not update the internal configurations properly when the **ds0-group controller** configuration command is configured on the controller. This behavior may cause subsequent PRI calls to fail.

  Conditions This symptom is observed on a Cisco 2600 series.

  Workaround Power-cycle the router.

- CSCdu64572

  Symptoms The dot1dTpFdbTable MIB contains the transparent bridge table. If the MIB is traversed by a getnext request, every instance of every object in the table is returned. If a getone request is used to retrieve a particular instance of one of the dot1dTpFdbStatus elements, the error NO_SUCH_INSTANCE_EXCEPTION is returned.

  Conditions This symptom is observed on a Cisco uBR900 series router.

  Workaround There is no workaround.

- CSCdu65439

  Symptoms Extended Border Nodes (EBNs) that support Global Virtual Routing Nodes (GVRNs) will not calculate cross-subnet routes through a Systems Network Architecture (SNA) switch unless the SNA switch is also updated to support the GVRN enhancement to the Advanced Peer-to-Peer Networking (APPN) architecture and High Performance Routing (HPR) architecture. This update includes setting the GVRN indicator in the appropriate control vector and making sure that the costs are 0 for Transmission groups (TGs) to GVRNs.

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

  Workaround There is no workaround.

- CSCdu67066

  Symptoms The Layer 2 (L2) status on a multichannel DS1/PRI port adapter (PA-MC-4T1) may be unexpectedly changed to TEL_ASSIGNED. This symptom cannot be corrected by entering the **shutdown** interface configuration command followed by the **no shutdown** interface configuration command.

  Conditions This symptom is observed on a PA-MC-4T1 port adapter on a Cisco router.

  Workaround Reload the router.

- CSCdu73631

  Symptoms A Cisco router may experience a memory leak when both Generic Routing Encapsulation (GRE) and IP Security (IPSec) are configured.

  Conditions This symptom is observed on a Cisco 7200 series router.

  Workaround There is no workaround.

- CSCdv00231

  Symptoms A router may reload and display traceback messages if the crypto card is shut down while Internet Key Exchange (IKE) negotiation is in progress.

  Conditions This symptom is observed on a network in which two unit under test (UUT) crypto peer routers, UUT 1 and UUT 2, are separated by a forwarding router.

Workaround There is no workaround.

- CSCdv03920

  Symptom In a Signaling System 7 (SS7) Interconnect for Voice Gateway solution, calls can be rejected with "Cause i = 0x8095 (Call rejected)" cause code. The call success rate may decline until all calls are rejected because of a depletion of internal software resources.

  Conditions This symptom can be identified with the debug error message when the **debug voice rawmsg detail** EXEC command is entered:

  ```
  CDAPI: cdapi_create_msg(): FOR_RAW_MSGS queue is empty
  ```

  Workaround The router must be reloaded.

- CSCdv04500

  Symptoms In a Cisco Signaling System 7 (SS7) Interconnect for Voice Gateways Solution, if a time-division multiplexing (TDM) hairpinned call egresses the network access server on an ISDN or an NI2/Redundant Link Manager (RLM) interface and if there was no calling number present in the call setup, the NAS will use the destination pattern match of the best matching dial peer as the calling number. This behavior will result in either the calling number being incorrect if the pattern that is used is a valid number or the call may fail if the destination pattern contains wildcard characters.

  Conditions This symptom is observed on a Cisco AS5400 in a Cisco SS7 Interconnect for Voice Gateways Solution.

  Workaround Configure a dial peer by entering the **dial-peer voice number pots** global configuration command. To prevent the NAS from using a destination pattern as the calling number. No calling number will be sent in the setup on the outgoing call leg.

- CSCdv08117

  Symptoms When the 240-byte option is configured in the codec payload bytes selection under a Voice over IP (VoIP) dial peer, the Foreign Exchange Service (FXS) port pauses indefinitely after the call. The router has to be reloaded after this symptom occurs.

  Conditions This symptom is observed on a Cisco 3600 series.

  Workaround There is no workaround.

- CSCdv10743

  Symptoms A Protocol Independent Multicast-sparse mode (PIM-SM) shared tree is not pruned in full at the Protocol Independent Multicast-Rendezvous Point (PIM-RP) during a shortest path tree (SPT) switchover.

  Conditions This symptom is observed on a Catalyst 6000 Multilayer Switch Feature Card (MSFC).

  Workaround There is no workaround.

- CSCdv17524

  Symptoms A Cisco AS5800 universal access server may generate Modem ISDN channel aggregation status acknowledgement (MICA NAK) error messages, such as the following in the logging buffer:

  ```
  %MICA-3-NAK: NAK from modem 13 in state 0 -- payload 0x29
  ```

  This message may indicate that modem Ring No Answer (RNA) will increase.

  Conditions This symptom is observed on a Cisco AS5800 that is running Cisco IOS Release 12.2.

  Workaround There is no workaround.

- CSCdv18135

  Symptoms A digital signal processor timeout may occur after 40 minutes of testing with voice, fax, and Dual Tone Multifrequency (DTMF) digits on a Cisco AS5300 universal access server.

  Conditions This symptom is observed on a Cisco AS5300 when different voice codecs were used on different voice channels, and when Voice Active Detection (VAD) is enabled. Echo cancellation was enabled and set to 32 ms, and DTMF relay was enabled. About 1150 calls were made when the first DSP timeout occurred.

  Workaround There is no workaround.

- CSCdv18731

  Symptoms A software-forced reload may be observed on a router after a memory leak occurs.

  Conditions This symptom is observed on a Cisco 2650 router that has a High Density Voice Network Module (NM-HDV) card that is configured as a Multilink PPP (MLP) WAN interface while data and voice packets are going through the interface.

  Workaround Use Frame Relay encapsulation.

- CSCdv18939

  Symptoms Some objects in ifXEntry, such as ifHCInOctets and ifHCOutOctets, return a null value for objects while ifInOctets and ifOutOctets objects return correct values.

  Conditions This symptom is observed on a Cisco 6400 Network Switch Processor (NSP).

  Workaround There is no workaround.

- CSCdv21880

  Symptoms A Cisco 6400 Node Switch Processor (NSP) cannot establish a lock on a priority 2 or a priority 3 Building Integrated Timing Supply (BITS) clock when the priority 1 BITS clock source fails.

  Conditions This symptom is observed on a Cisco 6400 NSP.

  Workaround There is no workaround.

- CSCdv22431

  Symptoms Class-based marking does not work on ATM inverse multiplexing over ATM (IMA) interfaces that are in the Cisco Express Forwarding (CEF) switching path.

  Conditions This symptom is observed on the IMA interfaces of a Cisco router.

  Workaround There is no workaround.

- CSCdv25447

  Symptoms When a personal computer is connected to a Cisco AS5300 access server on Telnet port 25 is using the Simple Mail Transfer Protocol (SMTP), an error message is displayed when the personal computer attempts to send an attached Tag Image File Format (TIFF) file to a fax machine. This error message is displayed, even though the quality of the fax transmission is acceptable. The delivery system will attempt to send the fax again and may cause multiple deliveries of the same fax.

  Conditions This symptom is observed on a Cisco AS5300.

  Workaround There is no workaround.

- CSCdv25973

  Symptoms A Cisco AS5800 may reload because of an unexpected exception at “CPU signal 10, PC = 0x60C07CA8.”

Conditions This symptom is observed on a Cisco AS5800.

Workaround There is no workaround.

- CSCdv28249

  Symptoms All digital signal processors (DSPs) on the module of a Cisco router may go down and the following error message may be displayed:

  ```
  %VTSP-3-DSP_TIMEOUT: DSP timeout on event 6: DSP ID=0x4: D) Sep 4 16:11:56:
  DSP_TIMEOUT -- DSP error stats: 6, 1
  ```

  Conditions This symptom is observed on a Cisco 3660 that is running Cisco IOS Release 12.2(1b).

  Workaround There is no workaround.

- CSCdv28401

  Symptoms A T.38 fax relay call may fail. The fax call goes through, but it is disconnected abnormally.

  Conditions This symptom is observed when T.38 fax relay is configured on a connection trunk.

  Workaround There is no workaround.

- CSCdv33270

  Symptoms Resources may be associated with a virtual private dialup network (VPDN) group, even when there are no active calls.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.1(10)AA.

  Workaround There is no workaround.

- CSCdv34189

  Symptoms PPP for all analog calls may fail if the **clear spe** EXEC command is entered repeatedly. The NextPort digital signal processor (DSP) will train up successfully, but the Link Control Protocol (LCP) will not open.

  Conditions This symptom is observed only when a Service Processing Element (SPE) has active calls on one of its ports while the **clear spe** EXEC command is entered.

  Workaround Clear active calls on the SPE by entering the **clear interface async x/y** EXEC command before entering the **clear spe** EXEC command.

- CSCdv35003

  Symptoms A dial connection from a Cisco 800 router to a Cisco 3640 router may fail after a few days of operation. A reload of the Cisco 3640 router may allow the connection to be restored temporarily, but the connection may fail again.

  Conditions This symptom is observed on a Cisco 800 and a Cisco 3640 router.

  Workaround There is no workaround.

- CSCdv38171

  Symptoms An 8-port serial port adapter (PA-8T) interface may flap under a heavy load if the PA-8T is configured to receive a clock rate of more than 2015232 bps and when all the serial ports of an MX serial application-specific integrated circuit (ASIC) (MUESLIX) controller (either 0 through 3 or 4 through 7) are in use.

  Conditions This symptom is observed on a Cisco PA-8T port adapter interface.

  Workaround Configure clock rates that are less than or equal to 2015232 bps at the provider end.

- CSCdv38896

  Symptoms When a single-port Fast Ethernet 100BASE-FX (PA-FE-FX) port adapter is used on a Versatile Interface Processor (VIP) for a Cisco 7500 series, an online insertion and removal (OIR) changes the configuration of the Fast Ethernet interface from “duplex auto” to “spped auto.”

  Conditions This symptom is observed on a Cisco VIP for a Cisco 7500 series that is running Cisco IOS Release 12.2(3).

  Workaround There is no workaround.

- CSCdv39727

  Symptoms A universal gateway may reload when it runs a debit card application while it is under a heavy load.

  Conditions This symptom is observed on a Cisco AS5400.

  Workaround Enable call admission control to reject the call if the CPU usage is more than 92 percent.

- CSCdv40918

  Symptoms When the **tag-switching ip** global configuration command is disabled globally, the Tag Distribution Protocol (TDP) or a Label Distribution Protocol (LDP) will not be torn on a label-controlled ATM (LC-ATM) interface, even if the interface is not being used by any other application. The Tag Forwarding Information Base (TFIB) is properly maintained in spite of this condition. This symptom does not occur if non-ATM interfaces are used.

  Conditions This symptom is observed on a Cisco 7200 series.

  Workaround There is no workaround.

- CSCdv41817

  Symptoms A user may experience difficulty loading a Toolkit Command Language (TCL) script onto a Cisco router by using FTP. There is no observed packet loss on the network when this symptom occurs.

  Conditions This symptom is observed on a Cisco 3600 series router that is running Cisco IOS Release 12.2(3). The FTP server uses a vendor-specific application.

  Workaround There is no workaround.

- CSCdv43113

  Symptoms A Cisco voice gateway 200 may reload with a segmentation violation (SegV) exception after the voice parameters echo-cancel coverage and output attenuation are changed.

  Conditions This symptom is observed on a Cisco VG200.

  Workaround There is no workaround.

- CSCdv43373

  Symptoms A Gigabit Ethernet interface on a Cisco 7500 router may experience interprocess communication (IPC) memory buffer problems after the output becomes stuck and may display the following message:

  ```
  %RSP-3-RESTART: interface GigabitEthernet0/0/0, not transmitting Output Stuck on
  GigabitEthernet0/0/0
  ```

  Conditions This symptom is observed on the Gigabit Ethernet interface of a Cisco 7500 series.

  Workaround Avoid using autonegotiation.

- CSCdv44651

  Symptoms An IP Security (IPSec) packet is not sent to a BRI after a security association (SA) is successfully established. This symptom continues to occur, even when the packets are process-switched or after the multilink is disabled.

  Conditions This symptom is observed on a Cisco 1700 series that is running Cisco IOS Release 12.2(3).

  Workaround Either disable the dialer-map statements and enable the dialer-string statements under the BRI interface or add another dialer-map statement for the crypto peer.

- CSCdv44860

  Symptoms A “set” that is configured on a main interface service policy has no effect on the subinterface traffic. Packets that are switched out of a subinterface are classified correctly by the policy, but the set counter is not incremented.

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

  Workaround Apply the policy map to the subinterface.

- CSCdv45394

  Symptoms When a PPP over Ethernet (PPPoE) client attempts to establish a TCP (HTTP) connection to some websites, debugs from Cable Modem Termination System (CMTS) indicate responses that have acknowledge (ACK) and synchronize (SYN) flags that are sent to the virtual access interface and IP PPP encapsulation (Network Control Program [NCP] type 0x21) is displayed. The protocol analyzer on the Ethernet segment reports that “no response” IP packets are originating from the CMTS.

  Conditions This symptom is observed on a Cisco uBR7200 series that is running Cisco IOS Release 12.2(3).

  Workaround There is no workaround.

- CSCdv45416

  Symptoms Multilink PPP (MLP) may fail if the fragments are smaller than 1000 bytes in size.

  Conditions This symptom is observed on a Cisco 2600 series that is running Cisco IOS Release 12.2(5).

  Workaround There is no workaround.

- CSCdv45674

  Symptoms Spurious memory access may be observed on a Cisco uBR900 series cable access router when the Cisco uBR900 boots up.

  Conditions This symptom is observed on a Cisco uBR900.

  Workaround There is no workaround.

- CSCdv45745

  Symptoms Excessive output drops may occur on a serial port adapter (such as a DS3, High-Speed Serial Interface [HSSI], or E1) on a Cisco 7200 series or a Cisco 7400 series router that has a Network Service Engine-1 (NSE-1) when Parallel Express Forwarding (PXF) is enabled.

  Conditions This symptom is observed on the serial port adapter of a Cisco 7200 series or Cisco 7400 series router that has an NSE-1.

  Workaround Disable PXF.

- CSCdv45770

  Symptoms After running for a certain period of time, hairpinned calls and normal voice calls may begin to be dropped on Cisco voice gateways. Over time, software resources will be lost and no new calls will be accepted.

  Conditions This symptom is observed if the **idsn bchan-negotiate resend-setup** command is configured on a Cisco IOS release that contains the fix for CSCdv30465.

  Workaround Do not enable the **idsn bchan-negotiate resend-setup** command.

- CSCdv46312

  Symptoms A switch may reload when the **no tag-switching ip** interface configuration command is configured on an interface that has the **tag-switching ip** interface configuration command enabled on its subinterfaces.

  Conditions This symptom is observed on a Catalyst 6000 switch that has a Multilayer Switch Feature Card (MSFC).

  Workaround There is no workaround.

- CSCdv46469

  Symptoms A logon window may fail intermittently when fast connections are attempted by changing source IP addresses, changing source ports, or when a fixed source IP address is used by changing source ports that use authentication proxy authentication.

  Conditions This symptom is observed on a Cisco 2500 series.

  Workaround There is no workaround.

- CSCdv46826

  Symptoms When an erroneous piggyback message is received from a call agent that has two connection identities (IDs) (such as when the connection IDs are bound together with an embedded event), a reload will occur. The specific message is as follows:

  ```
  200 5 OK . DLCX 47845 aaln/0 MGCP 1.0 NCS 1.0 C: 11123 I: 2 I: 2 X: 1234111111 R:
  hd(A, E(R(hu(N), hf(N), [0-9*#T](D)), S(dl(to=0))))
  ```

  Conditions This symptom is observed on a Cisco uBR900.

  Workaround Do not send an erroneous piggyback message.

- CSCdv46863

  Symptoms Packets are not marked correctly with the intended differentiated services code point (DSCP) when the **ip multicast routing** global configuration command is enabled.

  Conditions This symptom is observed on a Cisco 7200 series.

  Workaround There is no workaround.

- CSCdv47546

  A Cisco AS5300 universal access gateway that is running Cisco IOS Release 12.2(1a) and that is used as a Voice over IP (VoIP) gateway may experience a gradual memory leak. There is no workaround.

- CSCdv47664

  Symptoms The online insertion and removal (OIR) of a Versatile Interface Processor (VIP) in a Cisco 7500 series router may cause Cisco Express Forwarding (CEF) to become disabled on VIP cards in other slots.

  Conditions This symptom is observed on a Cisco 7500 series.

  Workaround Enter the **microcode reload** global configuration command after a failed OIR.

- CSCdv48301

  Symptoms A call that is made with a debit card application on the plain old telephone service (POTS) side is disconnected after being established. The call is later reconnected on the receiving end when the number is entered from the calling phone according to the prompt instructions. After the call is established for the second time, the user on the phone that is called cannot hear anything from the user on the calling phone.

  Conditions This symptom is observed on a Cisco AS5300 series and a Cisco AS5800 universal access server.

  Workaround There is no workaround.

- CSCdv49142

  Symptoms The R2 trunk of a Cisco 3600 series router that is connected to a public switched telephone network (PSTN) line may stop accepting calls and return a busy signal if the call load exceeds 45 incoming calls.

  Conditions This symptom is observed on a Cisco 3600 series.

  Workaround There is no workaround.

- CSCdv49923

  Symptoms Inverse Address Resolution Protocol (ARP) does not work when a permanent virtual circuit (PVC) bundle is tested on an ATM.

  Conditions This symptom is observed on a Cisco router.

  Workaround There is no workaround.

- CSCdv50040

  Symptoms This caveat corrects a defect that causes a failure when objects are set in the docsDevEvent group by using a data-over-cable service interface specification (DOCSIS) configuration file.

  Conditions This symptom affects a Cisco uBR900 series.

  Workaround There is no workaround.

- CSCdv50045

  Symptoms If there is more than one filter specified through the Multimedia Cable Network System (MCNS) configuration file by using the create-and-go status, the last filter is not set.

  Conditions This symptom is observed on a Cisco uBR900 series cable access router and affects only Cisco cable access router platforms. This symptom is observed if multiple filters are set at once by using the command line tool to select the status as “create-and-go”. This symptom is introduced by CSCdu39778.

  Workaround There is no workaround.

- CSCdv50046

  Symptoms A Cisco Catalyst 6500 switch that is running Cisco IOS Release 6.3(1) with two Supervisor Engine 2 (WS-X6K-SUP2-2GE) with a Multilayer Switch Feature Card 2 (WS-F6K-MSFC2) and that has a FlexWAN module (WS-X6182-2PA) with an enhanced ATM OC3 multimode port adapter that is running Cisco IOS Release 12.1(7a)E1 may experience a buffer leak on the MSFC2 and display the following message:

  ```
  Small buffers, 104 bytes (total 36773, permanent 50, peak 88803 @ 1w5d): 25 in free
  list (20 min, 150 max allowed) 95159588 hits, 286991 misses, 316049 trims, 352772
  created 17027 failures (0 no memory)
  ```

The sscop_sendSdPdu process is not releasing the memory buffers and causes memory allocation (malloc) errors, which cause interprocess communication (IPC) issues that may subsequently cause the FlexWAN module to be disabled and the following error message to be displayed:

```
%SYS-2-MALLOCFAIL: Memory allocation of 276 bytes failed from 0x40210A74, pool I/O,
alignment 32
```

Conditions This symptom is observed only if the Catalyst 6509 is started up without any configuration, or if the Cisco Catalyst 6509 has just been configured with a new configuration.

Workaround Start the Catalyst 6509 after the configuration is saved to NVRAM and when further changes are made to the configuration.

- CSCdv50143

  Symptoms An access server may reload after it is enabled by entering the **debug tdm dynamic** EXEC command is enabled.

  Conditions This symptom is observed when digital signal processor (DSP)-less time-division multiplexing (TDM) is performed.

  Workaround Do not enable TDM dynamic debugging.

- CSCdv50283

  Symptoms A 2-port serial WAN interface card on a Cisco 3640 router that is connected to external encryption equipment may lose the capability to resynchronize with the external encryption equipment because the **pulse-time** *seconds* interface configuration command may stop functioning when both serial interfaces are enabled on the line card. The **pulse-time** *seconds* interface configuration command works normally when only one interface is used on the card.

  Conditions This symptom is observed on a 2-port WAN interface card on a Cisco 3640 router that is running Cisco IOS Release 12.2(3).

  Workaround There is no workaround.

- CSCdv51463

  Symptoms A Cisco router may experience issues with the Address Resolution Protocol (ARP) when Cisco Express Forwarding (CEF) is enabled.

  Conditions This symptom is observed on a Cisco 2600 router that is running Cisco IOS Release 12.1(10).

  Workaround Disable CEF.

- CSCdv52116

  Symptoms The atmInterfaceMaxVccs MIB value does not match the number of maximum active virtual circuits (VCs) that are seen in the output of the **show interface** EXEC command.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.2(4)T.

  Workaround There is no workaround.

- CSCdv52628

  Symptoms On a Cisco AS5300 universal access server that is running Cisco IOS Release 12.2(2)XA with VCware 9.08, most of the digital signal processor (DSP) resources in the access server are in the “Inuse” state after the access server has been running for a while. This behavior causes calls to be disconnected with “resource unavailable” stated as the reason.

  A secondary effect of this symptom relates to another problem on the Cisco AS5300. The customer has three dial peers with same destination pattern (00T) but a different priority. Two of the dial peers that have a higher priority are Voice over IP (VoIP) dial peers, and the third is a plain old telephone service (POTS) dial peer.

The Cisco AS5300 may fail to match the highest priority dial peer and is matching two of the dial peers, twice. When the Cisco AS5300 finally selects the third dial peer because there are no resources for the other two, it is too late because the call has already been disconnected.

Conditions This symptom is observed on a Cisco AS5300 that is running Cisco IOS software and VCware 9.08.

Workaround Reload the Cisco AS5300 to free up the DSP resources.

- CSCdv52629

  Symptoms A Cisco AS5300 universal access gateway may reload.

  Conditions This symptom is observed on a Cisco AS5300 when an embedded notification request (E) action is specified in the Requested Events (R:) parameter of a Media Gateway Control Protocol (MGCP) Notification Request (RQNT).

  Workaround Send a separate RQNT request.

- CSCdv53218

  Symptoms Modems are marked as "BAD" after analog calls are cleared on a Cisco AS5800 universal access server by entering the **clear spe** EXEC command.

  Conditions This symptom is observed on a Cisco AS5800.

  Workaround There is no workaround.

- CSCdv53233

  The console of a Cisco AS5800 router shelf may display several "No active radius servers found" messages followed by "Radius server is responding again" (previously dead) messages when the server is working normally and authenticating users. This condition does not impact service.

  Workaround: Remove the **radius-server deadtime** *minutes* global configuration command from the router.

- CSCdv54518

  Symptoms Fast switching does not work on a Cisco uBR7200 universal broadband router for PPP over Ethernet (PPPoE) sessions on a cable interface.

  Conditions This symptom is observed on a Cisco uBR7200 series.

  Workaround Enable Cisco Express Forwarding (CEF) on the incoming (backhaul) interface or disable fast switching on the outgoing cable interface.

- CSCdv54898

  Symptoms Abnormal and premature disconnects and a low call success rate may be observed on a Cisco AS5800.

  Conditions This symptom is observed on a Cisco AS5800 that is running a continuity test (COT). There are no modem cards installed on the system when this symptom occurs.

  Workaround Disable COT, or add a modem card to the Cisco AS5800.

- CSCdv55001

  Symptoms Data that is received on a modem connection may be corrupted when AT commands are entered or when an EXEC session is initiated.

  Conditions This symptom is observed on a Cisco AS5800 or a Cisco AS5850.

  Workaround There is no workaround.

- CSCdv55003

  Symptoms A Cisco 7206 router that has a Network Processing Engine (NPE-150) and that is running Cisco IOS Release 12.2(5) may reload unexpectedly because of a bus error. This symptom is indicated in the command output of the **show version** EXEC command:

  ```
  System returned to ROM by bus error at PC 0x60665188, address 0xDEADC207
  ```

  Conditions This symptom is likely to occur if the following features are configured:

  - IP Real-Time Protocol (RTP) with header compression
  - Queueing service policy (configured on the multilink interface)
  - Weighted Random Early Detection (WRED) (configured in the quality of service (QoS) service policy)

  Workaround Do not configure the features described above.

- CSCdv56165

  Symptoms A Cisco AS5800 universal access server router shelf may reload unexpectedly when system processing engines (SPEs) that are already marked as BAD are cleared by entering the **clear spe** [*slot* | *slot*/*spe*] EXEC command. The service of the router shelf may be impacted when this symptom occurs.

  Conditions This symptom is observed on a Cisco AS5800.

  Workaround There is no workaround.

- CSCdv56330

  Symptoms The **carrier-delay** [*seconds*] interface configuration command should prevent an interface from being declared as down before the carrier delay timer expires. This expected behavior does not always occur.

  Conditions This symptom is observed on a Cisco router.

  Workaround To maintain the routes in the routing table, use a static route to null0, and set an administrative distance that is higher than the administrative distance that is used by routing protocols, such as the Routing Information Protocol (RIP) or the Enhanced Interior Gateway Protocol (EIGRP) by entering the **ip route 10.10.1.1 255.255.2550 null0 250** global configuration command.

- CSCdv56410

  Symptoms A Cisco router may reload because of a memory leak.

  Conditions This symptom is observed when a plain old telephone service (POTS) dial-peer rotary is configured and when the terminating switch sends a disconnect with a progress indicator (PI).

  Workaround On routers that are running Cisco IOS Release 12.2(1) or a later release, configure the **voice call convert-discpi-to-prog** global configuration command. This command will convert an inbound ISDN disconnect message with a PI to an H.225 progress message that has the same PI value.

- CSCdv56652

  Symptoms Calls do not go through when R2 semi compelled signaling is configured.

  Conditions This symptom is observed on a Cisco AS5300.

  Workaround There is no workaround.

- CSCdv57549

  Symptoms The Fast Ethernet interface of a Node Route Processor (NRP-1) enters the RESET state after the NRP-1 is booted.

Conditions This symptom is observed when the other interface that is connected to the Fast Ethernet interface is in the down state. If the connected interface is in the up state, the Fast Ethernet interface of the NRP-1 does not enter the RESET state and works as expected.

Workaround The Fast Ethernet interface comes out of the RESET state if both of the connected interfaces on the NRP and the neighbor are flapped a few times.

- CSCdv58382

  Symptoms A cable access router may not be able to handle a Data-over-Cable Service Interface Specifications (DOCSIS) configuration file that has a large number of Simple Network Management Protocol (SNMP) objects (more than 256).

  Conditions This symptom is observed on a Cisco uBR900 series cable access router.

  Workaround There is no workaround.

- CSCdv58739

  Symptoms The **transmitter-delay** *microseconds* interface configuration command is not supported on a serial WAN interface card.

  Conditions This symptom is observed on the 1-port serial WAN interface card (WIC-1T) and the 2-port asynchronous and synchronous WAN interface card (WIC-2A/S).

  Workaround There is no workaround.

- CSCdv59947

  Symptoms The following warning message may be displayed on the console of a router:

  ```
  % Command "tag-switching tag-range ..." obsolete; use "mpls label range...". %
  ```

  This message is informational and does not cause affect the operation of the router.

  Conditions This symptom is observed on the Catalyst 6000 Multilayer Switch Feature Card (MSFCs) of a Cisco router.

  Workaround There is no workaround.

- CSCdv60041

  Symptoms A router may reload because of a bus error that points to a valid address that belongs to the main memory. However, this symptom continues to occur after the memory is replaced. When this symptom occurs, the output of the **show log** EXEC command indicates that the Program Counter (PC) is corrupted:

  ```
  %ALIGN-1-FATAL: Corrupted program counter pc=0x618CDE04, ra=0x0, sp=0x61E81520
  ```

  Conditions This symptom is observed on a Cisco 7140.

  Workaround Use a Cisco 7500 series router or another platform as a temporary workaround.

- CSCdv60200

  Symptoms Calls that are received on a Q-Signaling (QSIG) interface are released with a user busy signal if there are no available digital signal processor (DSP) resources. The **isdn disconnect-cause** interface configuration command is not a viable workaround because it overrides all causes and the user busy signal.

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

  Workaround There is no workaround.

- CSCdv60987

  Symptoms A router may reload when the **show flash all** EXEC command is entered. Since Cisco IOS Release 12.2(2), the **show flash all** EXEC command has become part of the **show tech** EXEC command. This condition is noticeable only on low-end systems that support multiple banksizes for internal Flash.

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

  Workaround Replace multiple banksize Flash with uniform banksize Flash.

- CSCdv61300

  Symptoms A Cisco gatekeeper normally adds the destinationInfo parameter to the location confirmation (LCF) message that it returns in response to an location request (LRQ). This functionality was added to Cisco IOS Release 12.1(5)XM and later releases. This functionality ensures that if the dialed number identification Service (DNIS) was translated by a Gatekeeper Transaction Message Protocol (GKTMP) application residing over a gatekeeper, the newly translated digits will reach back to the originating gatekeeper.

  However, it may not be possible to ensure that the terminating gatekeeper (TGK) is using a Cisco IOS release or is a third-party gatekeeper that supports the functionality to add the destinationInfo parameter to the LCF message. In this case, the directory gatekeeper (DGK) that translates the DNIS must keep track of the translation and add the translation to the LCF message before the directory gatekeeper returns the message to the previous gatekeeper in the forwarding chain. This behavior is based on the assumption that the LCF message has a return path that goes through the DGK.

  The fix for this behavior will cause the DGK to retain the destination information from the received LRQ and the attached route server that modifies it (destination information) before the DGK forwards the LRQ to the terminating gatekeeper. If the LCF message that is received from the TGK does not have the destination information, the cached destination information is inserted into the LCF and sent to the originating gatekeeper.

  Conditions This symptom is observed on a Cisco gatekeeper.

  Workaround There is no workaround.

- CSCdv62549

  Symptoms The Multiprotocol Label Switching (MPLS) tags that are associated with a virtual private network (VPN) (vrf x.y.z.w) and a default route (0.0.0.0) are inconsistent between the main Cisco Express Forwarding (CEF) table and the distributed CEF (dCEF) table on the outbound Versatile Interface Processor (VIP) card.

  Conditions This symptom is observed on a Cisco 7500 series router that is running Cisco IOS Release 12.1(8a)E2.

  Workaround To recover from this condition, enter the **clear ip route vrf** *vrf-name* EXEC command.

- CSCdv62566

  Symptoms A Cisco uBR7200 series universal broadband router that has several cable modem cards installed may pause indefinitely and prevent console access.

  Conditions This symptom is observed on a Cisco uBR7200 series that has several cable modem cards installed.

  Workaround Power-cycle the Cisco uBR7200.

- CSCdv63719

  Symptoms A NextPort modem card may fail to establish all channel-associated signaling (CAS) calls that are made after the initial call is established.

Conditions This symptom is observed on a Cisco AS5800.

Workaround There is no workaround.

- CSCdv63800

  Symptoms If an Advanced Technology Attachment (ATA) disk is inserted after the router has booted up, the inode numbers of the files that are displayed may not be correct. This symptom does not occur if an ATA disk is removed and reinserted into the same slot while the router is running. However, if the ATA disk that is removed is reinserted into a different slot, the inode information that is displayed may be incorrect.

  Conditions This symptom is observed on a Cisco router that has an ATA disk.

  Workaround There is no workaround.

- CSCdv64020

  Symptoms A router may display "out of memory" errors when traffic is sent across a large number of interfaces that are set up for IP Security (IPSec) protection, but the interfaces do not have any established IPSec tunnels.

  Conditions This symptom is observed on a Cisco 7200 series.

  Workaround Arrange the network topology so that such traffic patterns do not occur.

- CSCdv65014

  The originating end of a Cisco AS5300 universal access server that is receiving ISDN overlap calls may experience hung digital signal processors (DSPs) if there are no dial peer matches for the calls. There is no workaround.

- CSCdv65027

  Symptoms The command-line interface (CLI) does not prompt for the **erase** keyword when the **copy** [**/erase**] *source-url destination-url* EXEC command is entered. This behavior does not allow a file system to be erased by entering the **copy** [**/erase**] *source-url destination-url* EXEC command.

  Conditions This symptom is observed on a Cisco router.

  Workaround Enter the **erase filesystem:** command before entering the **copy** EXEC command.

- CSCdv66216

  Symptoms A router may reload.

  Conditions This symptom is observed when the **show ip vrf** EXEC command is entered for virtual private network (VPN) routing/forwarding (VRF) instances that are being unconfigured by entering the **no ip vrf** command script. This symptom affects releases that contain the Multiprotocol Label Switching (MPLS) VPN feature.

  Workaround Do not enter the **show ip vrf** EXEC command for VRF instances that are being processed by the **no ip vrf** command script.

- CSCdv66856

  Symptoms Attempts to set up an IP Security (IPSec) connection with another router may fail.

  Conditions This symptom is observed when an attempt is made on a router to set up an IPSec connection with another router after the router is enrolled with a subordinate Certificate Authority (CA).

  Workaround There is no workaround.

- CSCdv67011

  Symptoms A router may reload because of a bus error.

Conditions This symptom is observed on a Cisco 7140.

Workaround There is no workaround.

- CSCdv67136

  Symptoms A Parallel Express Forwarding (PXF) complex may reload. The following output is displayed when the **show pxf crash** EXEC command is entered:

  ```
  PXF tmc: MAC XID: 00000001 IHB status: 0xFFBFF00F External memory exception on column
  0 (0x00000004)
  ```

  Conditions This symptom is observed on a Network Service Engine-1 (NSE-1).

  Workaround Disable PXF by entering the **no ip pxf** global configuration command.

- CSCdv67410

  A Cisco 7200VXR router that is using any unchannelized serial port adapter (PA) and any processor other than the Network Processing Engine (NPE-300) may experience line flaps at high traffic rates and display the following message:

  ```
  MUESLIX-1-HALT: Mx serial: Serial6/0 TPU halted: cause 0x3 status 0x00371A00
  ```

  Carrier transitions and wedged output queues may also occur. This condition affects the following port adapters:

  - PA-T3
  - PA-2T3
  - PA-T3+
  - PA-2T3+

  Multichannel port adapters such as the PA-MC-T3 or the PA-MC-2T3+ are not affected. This condition affects only the Cisco 7200VXR router. There is no workaround.

- CSCdv67499

  Symptoms When a Systems Network Architecture Switching Services (SNASw) port is configured on an Ethernet interface with the Hot Standby Router Protocol (HSRP), it is possible to configure the standby MAC address and use this address as a destination MAC address for downstream devices. This feature allows for a redundant MAC address in an Ethernet or bridged network. However, when the primary HSRP interface fails, the backup becomes HSRP active, but the SNASw port transitions from active to inactive, and no connections can be made.

  Conditions When this symptom occurs, it is necessary to restart the SNASw port using the **snasw start port** *port-name* privileged EXEC command, where *port-name* is the name configured for the SNASw port. This condition occurs only on platforms that contain Ethernet hardware that support only unicast addresses.

  This symptom may also occur if the MAC address on the interface has been changed, even if HSRP is not configured. If the burned-in MAC address is overridden with the **mac-address** interface configuration command, or if the value of the MAC address changes, the SNASw port will become inactive and remain inactive. Thereafter, the SNASw port has to be manually reactivated by using the **snasw start port** *port-name* privileged EXEC command.

  When a fix is provided to use the standby address, the SNASw port will still be stopped and restarted to use the new address. Normally this will cause all links that use the port to be disrupted. However, as the port was previously in backup mode, there will be no use impact when the port is restarted.

  Workaround There is no workaround.

- CSCdv67719

  Symptoms Output Distributed Committed Access Rate (DCAR) on a subinterface does not work in distributed Cisco Express Forwarding (dCEF) mode for packets that are coming in from the same Versatile Interface Processor (VIP).

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

  Workaround Use the police feature that is provided by the service policy.

- CSCdv68765

  Symptoms If an Advanced Technology Attachment (ATA) disk is inserted after the router has booted up, the inode numbers of the files that are displayed may not be correct. This symptom does not occur if an ATA disk is removed and reinserted into the same slot while the router is running. However, if the ATA disk that is removed is reinserted into a different slot, the inode information that is displayed may be incorrect.

  Conditions This symptom is observed on a Cisco router that has an ATA disk.

  Workaround There is no workaround.

- CSCdv68767

  Symptoms The Cisco Express Forwarding (CEF) “receive” entry may not be created in the Virtual Private Network routing/forwarding (VRF) instance for an imported secondary IP address. This symptom may cause difficulties when the secondary IP address in the VRF instance is pinged.

  Conditions This symptom is observed on a Cisco uBR7200 series.

  Workaround There is no workaround.

- CSCdv69322

  Symptoms NO_RING_DESCRIPTORS and DSP_TIMEOUT errors may be observed on a Cisco 2600 series when it places an analog call to another Cisco 2600 series on the terminating side. Digital signal processor (DSP) timeout errors may also occur when the call is disconnected.

  Conditions This condition is observed when the Compressed Real-Time Transfer Protocol (CRTP) and fast switching are enabled. The same errors occurred when Cisco Express Forwarding (CEF) was used. The voice port pauses indefinitely in the FXSLS_PARK state, and no calls can be made through the voice port when this condition occurs. The paused voice port can be cleared by reloading the router but the errors may reoccur.

  Workaround Disable CRTP and enable fast switching, or enable CRTP and disable fast switching.

- CSCdv69604

  Symptoms A router may reload when certain modifications are made to a Frame Relay map class while the Assured Forwarding (AF) policer is enabled.

  Conditions This symptom is observed on a Cisco 7200 series that is running Cisco IOS Release 12.2(3).

  Workaround Shut down the affected interfaces before attempting to modify the Frame Relay map class.

- CSCdv69646

  Symptoms New IP Security (IPSec) tunnels are not established.

  Conditions This symptom is observed on a Cisco router under heavy load conditions with short rekeying timers.

  Workaround There is no workaround.

- CSCdv69882

  Symptoms When a fax-relay call is connected, a spurious memory access error may occur in the ssaConnect function.

  Conditions This symptom is observed on a Cisco AS5800.

  Workaround There is no workaround.

- CSCdv70222

  Symptoms The **show voicecard transcode** EXEC command indicates that there are ten active sessions, even when there are no active calls.

  Conditions This condition is observed on a Cisco Catalyst 4224 access gateway switch.

  Workaround Reload the Access Gateway Module (AGM).

- CSCdv70284

  Symptoms A router may not be able to download a file by using FTP. The vty session may pause indefinitely when an attempt is made to download a file by using FTP.

  Conditions This symptom is observed when a user attempts to download a file onto the router using FTP.

  Workaround Enter the **copy tftp flash** command to download the file by using TFTP instead of FTP.

- CSCdv70677

  Symptoms If a Cisco voice gateway receives a session initiation protocol (SIP) acknowledge (ACK) request that does not match an existing call, the voice gateway will send back a "481 Call Leg/Transaction does not exist" response instead of ignoring the ACK request.

  Conditions This symptom is observed on a Cisco voice gateway.

  Workaround There is no workaround.

- CSCdv71337

  Symptoms On a Cisco Catalyst 8540 MSR ATM switch router that has one CPU that is running Cisco IOS Release 12.1(10.5) and another CPU that is running either an earlier Cisco IOS Release 12.1 release or Cisco IOS Release 12.0, the contents of the flashcard are not listed when the **dir sec-slot0:** EXEC command is entered and the contents of the bootflash are not listed when the **dir sec-bootflash:** command is entered.

  Conditions This symptom is observed on a Cisco Catalyst 8540 MSR ATM switch router that has one CPU that running Cisco IOS Release 12.1(10.5) and another CPU that is running either an earlier Cisco IOS Release 12.1 release or Cisco IOS Release 12.0.

  Workaround Load the same image on both processors. Use the following upgrade procedure when you are upgrading from an earlier release to Cisco IOS Release 12.1(10.5):

  a. Ensure that the Cisco IOS Release 12.1(10.5) image is loaded on both the primary and secondary flashcard or bootflash while the older image is still running on both processors. Note that the prior image must be deleted from the device by entering the **squeeze** *file-system*: EXEC command.

  b. Modify the **boot system** global configuration command to specify the new image as the first choice.

  c. Copy the running configuration to the startup configuration.

  d. Reload the secondary CPU so that it starts running the Cisco IOS Release 12.1(10.5) image.

  e. After the secondary CPU comes back up, perform a switchover so that both processors are running the Cisco IOS Release 12.1(10.5) image.

This compatibility condition will be corrected in releases following Cisco IOS Release 12.1(10.5).

- CSCdv71453

  Symptoms A router that is using IP with the Cisco Appliance Server Architecture (CASA) enabled may reload when a client sends a large frame to the forwarding agent (FA). This large frame is then fragmented outbound to the Local Director (LD) as the IP CASA header which causes the frame to be larger than the interface maximum transmission unit (MTU) between the FA and the LD. In return, the LD sends a bad IP CASA frame back to the FA, which can cause the router to reload. The following error message is displayed when this condition occurs:

  ```
  System returned to ROM by bus error at PC 0x0, address 0x0
  ```

  A Local Director caveat has been created to track this issue (CSCdv70142). The Local Director code was version 3.2.2.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.2(3).

  Workaround Configure the client to send smaller packets.

- CSCdv71487

  Symptoms A router that is configured as an H.323 gatekeeper may reload with a bus exception error.

  Conditions This symptom is observed on a Cisco router that is configured as an H.323 gatekeeper when a Location Request (LRQ) timeout occurs. This symptom may affect the 7200-js image if the router is used as an H.323 gatekeeper. The 7200-js image works normally if the router is not configured as an H.323 gatekeeper.

  Workaround There is no workaround.

- CSCdv71868

  Symptoms The tag-switching function does not work after it is enabled on a switch.

  Conditions This symptom is observed on the Cisco Catalyst 8540, Cisco Catalyst 8510, and Cisco LightStream 1010 switch router.

  Workaround There is no workaround.

- CSCdv72508

  Symptoms The **transmitter-delay** *delay* interface configuration command is not supported with the following WAN interface cards (WICs):

  - Dual-serial port WAN interface card (WIC-2A/S)
  - WIC-2A/S (on a Cisco 1700 router)
  - 1-port serial WAN interface card (WIC-1T)

  Conditions This symptom is observed on the cards listed above.

  Workaround There is no workaround.

- CSCdv72547

  Symptoms A router may reload if NetFlow is sending packets that are locally generated through a tunnel.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.2(5).

  Workaround Disable Cisco Express Forwarding (CEF).

- CSCdv72745

  Symptoms An Access Gateway Module (AGM) may reset if the gatekeeper process on the AGM is shut down by entering the command-line interface (CLI).

Conditions This symptom is observed on a Cisco Catalyst 4224 that has an AGM and that is running Cisco IOS Release 12.2(5).

Workaround Do not enable the gatekeeper process.

- CSCdv74851

  Symptoms When a Cisco 6400 node route processor (NRP-1) is used in an integrated routing and bridging (IRB) architecture, the NRP may experience a bus error and reload.

  Conditions This symptom is observed on a Cisco 6400 that is running Cisco IOS Release 12.2(2b) or Release 12.2(2)T1.

  Workaround Disable Cisco Express Forwarding (CEF) switching globally by entering the **no ip cef** global configuration command and use fast switching instead. Alternatively, a routed bridge encapsulation (RBE) architecture can be used.

- CSCdv75625

  Symptoms A router may reload and display CPU hog messages.

  Conditions This symptom is observed on a Cisco 4700 that is running the c4500-w3-mz image of Cisco IOS Release 12.2 with DistributedDirector.

  Workaround Configure a DistributedDirector access list to limit the number of host names for which DistributedDirector performs load balancing.

- CSCdv76445

  Symptoms A router may not register with its gatekeeper after the router is reloaded.

  Conditions This symptom is observed under rare circumstances on a Cisco 3660 that is configured as a voice gateway.

  Workaround To register the gateway with the gatekeeper, enter the **shutdown** interface configuration command followed by the **no shutdown** interface configuration command on the Fast Ethernet interface.

- CSCdv76640

  Symptoms When a PBX is passing Q-Signaling (QSIG) messages to other PBXs, a memory leak may occur.

  Conditions This symptom is observed on a Cisco 2600 series that is running Cisco IOS Release 12.2(5).

  Workaround There is no workaround.

- CSCdv78225

  Symptoms The formula that is used to calculate the signal-to-noise ratio (SNR) that is used by the controller chip is incorrect. This DDTS corrects the formula that is used for calculating the SNR values that are reported by the controller chip. This DDTS also implements the newest algorithm to calculate the SNR as recommended by the chip manufacturer.

  Conditions This symptom is observed on a Cisco uBR7200 series.

  Workaround There is no workaround.

- CSCdv79054

  Symptoms A multichannel STM-1 Port Adapter (PA-MC-STM1) may lose a few hundred bytes of memory each time a channel group is added or deleted.

  Conditions This symptom is observed on a Cisco 7500 series that has a PA-MC-STM1 port adapter.

  Workaround There is no workaround.

- CSCdv80069

  Symptoms "BADSHARE: Bad refcount in datagram_done" errors may be observed on a router when hardware compression is enabled. The router stops forwarding the packet after this error occurs.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.2(2)T. The router has to be reloaded or power-cycled to be restored to a working condition.

  Workaround There is no workaround.

- CSCdv80102

  Symptoms A one-way audio condition may occur after a call is transferred. The public switched telephone network (PSTN) user can hear the IP phone user, but the IP phone user does not hear the PSTN user.

  Conditions This symptom is observed on a Cisco Catalyst 4224 that is running Cisco IOS Release 12.1(5) or Release 12.2(5a) after codec selection changes are made within the transcoding session.

  Workaround There is no workaround.

- CSCdv80116

  A cable modem will not function if baseline privacy interface (BPI) is enabled.

  Workaround: Disable BPI.

- CSCdv82578

  Symptoms An IP packet that is generated on a provider edge (PE) router (that is functioning in a Multiprotocol Label Switching [MPLS] Virtual Private Network [VPN] environment) and that is forwarded into the MPLS traffic engineered (TE) tunnel may not get to its destination even though the packet may go out with multiple copies of the tunnel encapsulation.

  Transit traffic is not affected by this symptom.

  Conditions This symptom is observed if all of the following conditions are present:

  – The packet is generated locally and is destined to a prefix in a VPN routing/forwarding (VRF) table that is reachable through the MPLS cloud.

  – The packet is sent out through an MPLS TE tunnel.

  – There is load sharing to get to the remote PE router.

  Workaround Avoid load sharing in the core.

  Alternate Workaround Do not run the VPN or the TE feature.

- CSCdv83850

  Symptoms An ATM circuit emulation service (CES) port adapter (PA-A2) may send out Operation, Administration, and Maintenance (OAM) cells that have several seconds of delay and cause the line protocol to go down when the port adapter is overloaded. This symptom does not affect the enhanced ATM port adapter (PA-A3).

  Conditions This symptom is observed on the PA-A2 port adapter.

  Workaround There is no workaround.

- CSCdv83946

  Symptoms On a serial link that has both Weighted Fair Queuing (WFQ) and Multilink PPP (MLP) enabled in its configuration, the link may jam and cease further transmission.

Conditions This condition occurs under rare circumstances while the link is an active member of a multilink bundle when the link goes down because of a physical link failure and comes back up again later to join a bundle. This sequence may occur, for example, if a serial cable for a live connection is unplugged and then reconnected.

This condition can be recognized by entering the **show interface** EXEC command on the serial link in question and examining the output queue count for the interface. When this condition is present, the output queue has an extremely large value (a value that is actually a negative number but is printed as a large positive number).

Workaround This condition can be avoided by configuring the serial link to use FIFO queuing instead of fair queuing.

- CSCdv84086

  Symptoms In Cisco IOS software that is running Multiprotocol Label Switching (MPLS) Traffic Engineering (TE), the Link Management (LM) module may remove a Label Switched Path (LSP) while it is in the process of preempting other LSPs in order to admit the original one. This may result in a software reload.

  Conditions This symptom is observed if a teardown request for the LSP is received immediately after a reservation request is received for the same LSP. The problem is triggered only when the preemption of other LSPs is necessary in order to admit the LSP in question, or when an unlikely timing of interactions between LM and RSVP occurs.

  Workaround There is no workaround.

- CSCdv84504

  Symptoms Calls that are sent through a unit under test by using E1 R2 and H.323 signaling do not contain any calling party information in the Q.931 setup that is sent through the IP cloud. This condition does not occur if the incoming interface is an ISDN interface.

  Conditions This symptom is observed on a router that is running Cisco IOS Release 12.2(5).

  Workaround There is no workaround.

- CSCdv84510

  Symptoms The Token Ring Inter-Switch Linking (TR-ISL) encapsulation is not listed as a subinterface encapsulation option on the command-line interface (CLI) when the **encapsulation** *encapsulation-type* interface configuration command is entered on a Cisco 4500 router.

  Conditions This symptom is observed on a Cisco 4500 that is running Cisco IOS Release 12.1(10).

  Workaround There is no workaround.

- CSCdv84526

  Symptoms The cable modem can be restored to its factory default settings by entering the **write erase** command followed by a reload. The expected behavior is for the docsDevSwAdminStatus MIB to be set to the allowProvisioningUpgrade MIB during the initialization cycle. However, the modem sets the MIB variable to 0, which is an undefined value. As a result, software upgrade information that is contained in the configuration file is ignored.

  Conditions This symptom is observed on a Cisco CVA122, Cisco uBR905, Cisco uBR910, Cisco uBRr924, and Cisco uBR925 that is running Cisco IOS Release 12.2(6) or Release 12.2 T.

  Workaround Use the Simple Network Management Protocol (SNMP) to set the MIB object to the correct state.

- CSCdv86358

  Symptoms A router may reset after a row is activated in the cfcRequestTable.

Conditions This symptom is observed on a Cisco 6400 that is running Cisco IOS Release 12.2(2b).

Workaround There is no workaround.

- CSCdv86818

  Symptoms When low latency queueing (LLQ) is configured in a policy map, inherent policing may be activated according to the parameters of the priority queue (rate and burst-size). Drops can be observed when policing is applied, even when the burst size has not been reached (not congested). The packets are process switched and policed regardless of the congestion level.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.2(4)T. This symptom is observed when express forwarding (EF) is not configured with the assured forwarding (AF3) drop preference level.

  Workaround There is no workaround.

- CSCdv88497

  Symptoms The TCP dropback feature of a router may cause upstream data packets to be dropped.

  Conditions This symptom is observed on a Cisco uBR900 router. This symptom may significantly affect the performance of upstream FTP transfers and can affect other types of TCP upstream data-type traffic.

  Workaround There is no workaround.

- CSCdv89358

  Symptoms When Committed Access Rate (CAR) is implemented for every source IP address on a Cisco 7600 series router that has a FlexWAN card, the card may reload when there is high volume of traffic (200k packets/s).

  Conditions This symptom is observed on a Cisco 7600 series router that has a FlexWAN card.

  Workaround There is no workaround.

- CSCdv89981

  Symptoms A router may reload if the **ds0-group 30** controller configuration command is configured on any time slot and used with any signaling type on the last controller of an E1 trunk card.

  Conditions This symptom is observed on a Cisco AS5400.

  Workaround Avoid using 30 as the group number in the last controller.

- CSCdv90913

  Symptoms A Cisco AS5300 that has T1 controller Extended Superframe (ESF) framing may not indicate that it is in the remote loopback mode if the **loopback remote** interface configuration command is configured to send in-band loopback packets through a channel service unit (CSU).

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

  Workaround There is no workaround.

- CSCdv90919

  Symptoms When a user configures an ISDN trunk for overlap receiving and sends a setup message with no called party number in order to obtain a dial tone, the connected PBX allows the calling party to hear the dial tone but continues to collect digits that are sent over the ISDN link as INFO messages. If the router has an incoming dial peer that has an exact match to the calling party number, a progress indicator (PI) value is not returned in the SETUP_ACK message. This behavior prevents the dial tone on the router from being heard.

  Conditions This symptom is observed on a Cisco router that has an ISDN trunk that is configured for overlap receiving. This symptom is observed with Cisco IOS Release 12.2(6).

Workaround There is no workaround.

- CSCdw00055

  Symptoms The non-variable-length dial-plan matching character "$" permits a user to force a match on a destination pattern that consists of a fixed number of digits. The affected user has calls to phone numbers that share the same first set of prefix digits, but the user has a complete set of digits that are different in number. In the sample configuration below, calls to router 1 (RTR 1) have 9 digits that start with "01152" while calls to router 2 (RTR 2) have 11 digits that start with "01152".

```
dial-peer voice 1 voip
 destination-pattern 01152....$
 session target ipv4:IP_ADDR_RTR1
 ip precedence 5

dial-peer voice 2 voip
 destination-pattern 01152......
 session target ipv4:IP_ADDR_RTR2
 ip precedence 5
```

  To eliminate the ambiguity as to which dial peer matches the destination pattern that consists of a fixed number of digits, the "$" character is used, so that a call to RTR 2 will not match on dial peer 1. This configuration works with Cisco IOS Release 12.1 and 12.2(1a) images that support the "$" dial-peer matching character.

  However, in Cisco IOS Release 12.2(1.1) and Release 12.2(2)T1, the dial plan no longer permits a destination pattern that terminate with the "$" character to be matched at all; thus, the dial plan prevents calls that use the specific dial peer to be completed.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.2(1.1) or Release 12.2(2)T1.

  Workaround Configure the destination-pattern interface configuration command to end in "T?$" instead of the "$" character.

- CSCdw00333

  A service policy is not applied to a Fast Ethernet interface after the configuration is saved to NVRAM and after a router is reloaded. This condition was observed on a Cisco 2600 series router that was running Cisco IOS Release 12.2(5) and on a Cisco 1700 series router that was running Cisco IOS Release 12.2(4)T. There is no workaround.

- CSCdw00559

  Symptoms When a user attempts to delete an entry from the ipNetToMediaTable table and if the associated ifIndex value is greater than the number of nonvirtual interfaces in the system, the user cannot delete the entry successfully and receives a "WrongValue" error. This behavior has been fixed by removing the relevant logic.

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

  Workaround There is no workaround.

- CSCdw01123

  Symptoms The **channel-group timeslots** *timeslot-list* controller configuration command cannot be configured if a preceding attempt to configure the **pri-group** [**timeslots** *range*] controller configuration command is not successful. This symptom is observed if the **channel-group timeslots** *timeslot-list* controller configuration command covers the same timeslot range on one T1 controller. The following is a sample output of what a user may see when this symptom occurs:

```
Router(config-controller)# pri-group timeslots 1-24

%Controller tdm clock does not have data capability
%Insufficient HDLC resource for pri-group - it has been removed
```

```
Router(config-controller)# channel-group 5 timeslots 1-24
%Timeslot 24 already used by unknown group #00000017
```

Conditions This symptom is observed on a Cisco router only if a user attempts to configure the **channel-group timeslots** *timeslot-list* controller configuration command immediately after an unsuccessful preceding attempt to configure the **pri-group** [**timeslots** *range*] controller configuration command.

Workaround Reload the router.

- CSCdw01406

  Symptoms A router may stop passing traffic after one of the B channels is dropped because the load on the channel falls below the load threshold.

  Conditions This symptom is observed only when a 1-port ISDN-BRI WAN interface card (WIC-1B-S/T) is plugged into a 2 10/100 Ethernet 2 WAN card slot network module (NM-2FE2W). Two Cisco 3600 routers that were running Cisco IOS Release 12.2(3b) exhibited this behavior when one of the routers used a BRI to dial into the other router that has a PRI. This symptom does not occur when Cisco IOS Release 12.1(5)T9 is used.

  Workaround Configure the **dialer load-threshold 1** interface configuration command on the affected interfaces.

- CSCdw02805

  Symptoms When Connectionless Network Service (CLNS) traffic is sent through an ATM permanent virtual circuit (PVC) that has quality of service (QoS) configured, traceback messages that are related to hqf_vip_decode_encaps may be displayed.

  Conditions This symptom is observed on a Cisco 7500 series that is running Cisco IOS Release 12.2(4)T.

  Workaround There is no workaround.

- CSCdw02869

  Symptoms A Cisco 7206VXR router that is configured with Multiprotocol Label Switching (MPLS) and the Web Cache Communication Protocol (WCCP) may reload because of a bus error and display the following message in the log:

  ```
  %ALIGN-1-FATAL: Corrupted program counter pc=0x0, ra=0x60F82504, sp=0x628D48F0
  %ALIGN-1-FATAL: Corrupted program counter pc=0x0, ra=0x60F82504, sp=0x628D48F0
  ```

  The crashinfo file will contain the following message:

  ```
  Unexpected exception, CPU signal 10, PC = 0x0
  $0 : 00000000, AT : 00000030, v0 : 00000000, v1 : 00000001
  a0 : 6333CA68, a1 : 628A1428, a2 : 5E19160A, a3 : 6325DB98
  t0 : 0000883E, t1 : 62BF8700, t2 : 629D80A0, t3 : 625D0000
  t4 : 00000030, t5 : 00000000, t6 : D4989620, t7 : 6333CA68
  s0 : 00000003, s1 : 00000000, s2 : 62942B80, s3 : 628A144C
  s4 : 6293B998, s5 : 628A1428, s6 : 6293A714, s7 : 5E1915E0
  t8 : 6060E108, t9 : 62A62468, k0 : 00000000, k1 : 00000000
  gp : 6238A280, sp : 628D48F0, s8 : 628D4BA8, ra : 60F82504
  EPC : 00000000, ErrorEPC : 604E54D4, SREG : 3400F903
  Cause 00000008 (Code 0x2): TLB (load or instruction fetch) exception
  -Traceback= 0 60F82504 60F81F58 60F89848 601053F0 601091A0
  ```

  Conditions This symptom is observed on a Cisco 7206VXR that is running Cisco IOS Release 12.2(6).

  Workaround Disable the WCCP redirection.

- CSCdw03079

  Symptoms The "IPC LC Message Handler" process takes up a large amount of CPU memory to perform a statistics update.

  Conditions This symptom is observed when a Cisco AS5850 that is handling a heavy call load.

  Workaround There is no workaround.

- CSCdw03762

  Symptoms A router that is configured for E1 R2 signaling and has r2-xxx r2-non-compelled register configured may experience calls that do not go through. However, r2-compelled and r2-semi-compelled calls are going through.

  Conditions This symptom is observed on a Cisco 7200 series.

  Workaround There is no workaround.

- CSCdw04473

  A dial shelf controller (DSC) card may reload after the **dir slot0:** or **show slot0:** command is entered after a Personal Computer Memory Card International Association (PCMCIA) card is removed and reinserted. This condition affects Cisco IOS Release 12.2(1)XS1 and Release 12.2(6). There is no workaround.

- CSCdw05298

  Symptoms A Cisco DistributedDirector (DD) either may not return a Canonical Name (CNAME) record in response to a Domain Name System (DNS) query for a host name when it is supposed to or may return an incorrect CNAME record in response to a DNS query for a host name that is an official name.

  Conditions This symptom is observed on a Cisco DistributedDirector (DD) that is running Cisco IOS Release 12.1 or Release 12.2.

  Workaround There is no workaround.

- CSCdw07307

  Symptoms When debit card calls are made, the user hears a dial tone instead of prompts because the debit card Tool Command Language (TCL) script could not be loaded from the remote server. This is a normal default behavior, but it poses a security issue. Without the prompts for account number and password, calls can proceed to complete the two stage dialing without being required to be authenticated or pay for the toll.

  Conditions This symptom is observed on a Cisco AS5400 that is running Cisco IOS Release 12.2(2)XB.

  Workaround Run the debit card TCL script from Flash memory instead.

- CSCdw07967

  Symptoms A router that is configured with class-based weighted fair queueing (CBWFQ) and Weighted Random Early Detection (WRED) on Frame Relay virtual circuits (VCs) that are configured with Frame Relay IP Real Time Protocol (RTP) header compression may reload.

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

  Workaround There is no workaround.

- CSCdw08302

  Symptoms An interface on a router may go down if the router has a fast serial port adapter and that is using any processor other than the Network Processing Engine (NPE-300). The following message may be displayed when this symptom occurs:

```
%MUESLIX-1-STARTFAIL: Mx serial, Serial3/0 Start Failed at enable port
%MUESLIX-1-STOPFAIL: Mx serial, Serial3/2 Stop Failed at disable port
```

Conditions This symptom is observed on a Cisco 7200VXR router that is using any processor other than the Network Processing Engine (NPE-300) and that is running Cisco IOS Release 12.2(4.1) or a later release while a fast serial port adapter (such as the 4-port serial port adapter [PA-4T+] or the 8-port serial port adapter [PA-8T]) is used.

Workaround Perform an online insertion and removal (OIR) on the port adapter interface.

- CSCdw09507

  On a terminating router that is running Cisco IOS Release 12.2(6) and that is configured for ISDN or Signaling System 7 (SS7), if the router sends an ALERT message without a progress indicator (PI), a dial tone is heard instead of a ringback tone.

  Workaround, Configure the terminating router to always send a PI with the ALERT message. If we send CC_PROG_INBAND (PI = 8) in the alert message, a ringback will be received.This can be accomplished by configuring the **progress_ind alert enable 8** dial peer configuration command on the outgoing plain old telephone service (POTS) dial peer of the terminating router.

- CSCdw09570

  Symptoms If the **debug condition interface** EXEC command is used to enable conditional debugging on an interface, some serial debugs such as High-Level Data Link Control (HDLC) keepalive debugs will also be enabled even if the **debug serial interface** EXEC command is not configured.

  Conditions This symptom is observed on a Cisco 10000 series that is running Cisco IOS Release 12.0 ST.

  Workaround There is no workaround.

- CSCdw13574

  When more than one permanent virtual connection (PVC) is configured, the ATM Circuit Emulation Services (CES) port adapter (PA-A2) may receive output drops when the peak cell rate (PCR) is reached. The interface continues to experience output drops even after the traffic flow is stopped. The output drops stop after the **shutdown** interface configuration command is entered on the interface followed by the **no shutdown** interface configuration command. There is no workaround.

- CSCdw14254

  ISDN interfaces are not usable because the **isdn spid** interface configuration command that assigns service profile identifier (SPIDs) for the channels is not accepted. When this behavior occurs, the interface cannot communicate properly with ISDN switches. There is no workaround.

- CSCdw16710

  Real-Time Transport Protocol (RTP) header compression becomes inactive on a Frame Relay subinterface after a header compression instance is deleted using the **no frame-relay ip rtp header-compression** interface configuration command while fast switching is used with IP header compression.

  Workaround: Reenable header compression on the subinterface using the **frame-relay ip rtp header-compression** interface configuration command.

- CSCdw18482

  When a vendor-specific Mobile Station (MS) talks to a Cisco gateway general packet radio service (GPRS) support node (GGSN), the MS may send the “IP Header Compression” IP Control Protocol (IPCP) option when it is activating the Protocol Data Packet (PDP) context. Cisco GGSN will always reject this PDP context request because this option is not supported by GGSN.

Cisco GGSN should instead accept this PDP context request (if authentication and other configurations are successful) and reject the IPCP option. The idea is to allow GGSN to reject IP header compression but not reject the PDP context. GGSN should reject any unsupported IPCP option but GGSN should allow the PDP context to go through if authentication is successful. There is no workaround.

- CSCdw20152

  When a Quality of Service (QoS) service policy with bandwidth {kbps} command is attached to an ATM permanent virtual connection (PVC), the following error message may be displayed:

  ```
  bandwidth assignment must be at least 1% of link rate
  ```

  Workaround: Use the **bandwidth percent** {value} command instead.

- CSCdw21652

  When a quality of service (QoS) service policy that has the **bandwidth kbps** command is attached to an ATM permanent virtual circuit (PVC), the following error message may be displayed:

  ```
  bandwidth assignment must be at least 1% of link rate
  ```

  Workaround: Use the **bandwidth percent** command instead.

- CSCdw25191

  A Cisco router may reload if the **no tag ip** global configuration command is entered after the router has rebooted. This condition occurs when the **no tag ip** global configuration command is entered after thousands of tag bindings have been established for hundreds of destinations.

  Workaround: Use the **no tag ip** interface configuration command on each interface instead of using the **no tag ip** global configuration command on the router.

- CSCdw27574

  In Cisco IOS Release 12.2(6.7), the maximum digit length is reduced from 128 to 13 digits in a replacement pattern for translation rules.

  Workaround: Split the translation and configure part of the translation on the inbound leg and the other half of the translation on the outbound leg.

- CSCdw33027

  While fixing vulnerabilities mentioned in the Cisco Security Advisory: Multiple SSH Vulnerabilities (http://www.cisco.com/warp/public/707/SSH-multiple-pub.html) we inadvertently introduced an instability in some products. When an attacker tries to exploit the vulnerability VU#945216 (described in the CERT/CC Vulnerability Note at http://www.kb.cert.org/vuls/id/945216) the SSH module will consume too much of the processor's time, effectively causing a DoS. In some cases the device will reboot. In order to be exposed SSH must be enabled on the device.

  Affected product lines are:

  * All devices running Cisco IOSÆ Software supporting SSH. This includes routers and switches running Cisco IOS Software.

  * Catalyst 6000 switches running CatOS.

  * Cisco PIX Firewall.

  * Cisco 11000 Content Service Switch family.

  No other Cisco product is vulnerable. It is possible to mitigate this vulnerability by preventing, or having control over, the SSH traffic.

  This advisory is available at http://www.cisco.com/warp/public/707/SSH-scanning.shtml.

- CSCin00545

  Packets are switched by a Route Switch Processor (RSP) instead of a Versatile Interface Processor (VIP) when distributed Cisco Express Forwarding (dCEF) is enabled. To determine if this condition is occurring, issue the **show ip cef summary** command and the **show cef interface** command on the RSP and the VIP. The router is switching using Cisco Express Forwarding (CEF) via the RSP instead of the VIP if you receive the following output when you enter each of the commands on the RSP and the VIP:

  ```
  RSP# show ip cef summary
  IP Distributed CEF with switching

  VIP# show ip cef summary
  IP Distributed CEF without switching

  RSP# show cef interface
  POS4/0/0 is up (if_number 22)
  IP Feature CEF switching turbo vector

  VIP# show cef interface
  POS4/0/0 is up (if_number 22)
  IP VIP to RSP switching turbo vector
  ```

  There is no workaround.

- CSCuk28041

  Symptoms If an ISDN Signaling System 7 (SS7) call from a Cisco SC 2200 signaling controller and a Cisco AS5800 access server is terminated from the Cisco SC2200 signaling controller with a specific termination code, the code may not be propagated to the call source.

  Conditions This symptom is observed on a Cisco SC 2200 signaling controller and a Cisco AS5800 universal access server that is running Cisco IOS Release 12.1(5)XM4.

  Workaround There is no workaround.

- CSCuk28260

  Symptoms When a Versatile Interface Processor (VIP) on a Cisco 7500 series runs out of memory and a memory allocation failure (MALLOCFAIL) occurs, the VIP may reload and the following error message will be displayed:

  ```
  0:04:46: %SYS-2-MALLOCFAIL: Memory allocation of 65556 bytes failed from 0x600A7F14,
  pool Processor, alignment 16

  -Process= "CEF IPC Background", ipl= 2, pid= 8

  -Traceback= 600AB18C 600AC958 600A7F1C 600A8868 602BEABC 602BF444 602BF6E4 60296B5C
  6029C498 6029F674 602A7C90 602B2A74 602B0AAC 602B0D1C 602B0E94 602B15BC

  00:04:46: %FIB-4-RADIXINSERT: Error trying to insert prefix entry for X.X.X.X/32

  %ALIGN-1-FATAL: Illegal access to a low address addr=0x66, pc=0x60299DC0,
  ra=0x60299DB4, sp=0x60F514D8
  ```

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

  Workaround There is no workaround.

- CSCuk30474

  A line card may be stuck in an off-for-download state on a Cisco 7500 router or a Cisco 12000 router. This condition is indicated by the output of the **show cef linecard** EXEC command. This condition is caused by an interprocess communication (IPC) error with another line card during the Forwarding Information Base (FIB) table download process. There is no workaround.

TCP/IP Host-Mode Services

- CSCdv38764

  Symptoms When a file transfer is initiated from a front-end processor (FEP) that is attached to a Cisco 7204 router and destined to an FEP that is attached to a Cisco 2612 router, the **show tcp** EXEC command does not show retransmitted packets or that the retransmission timeout timer is waking up. Several acknowledgements (ACKs) are seen when the **show tcp brief** [**all**] EXEC command is entered. In Cisco IOS Release 12.2(4.2), a large number of "fast transmitted" packets are shown on the Cisco 7204 when the **show tcp** EXEC command is entered.

  Conditions This symptom is observed when Cisco IOS Release 12.0(7)T is running on both the Cisco 7204 FEP and the Cisco 2612 FEP that are connected through a Fast Ethernet (FE) connection with equal cost and the Enhanced Interior Gateway Routing Protocol (EIGRP) enabled.

  Workaround Eliminate equal cost network paths.

- CSCdv51360

  Symptoms A data-link switching (DLSw) peer may be stuck in the AB_PEND state and a TCP session may be stuck in the SYNSENT state after an IP outage occurs between two DLSw routers.

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

  Workaround Use the **show tcp brief** EXEC command to determine the Transmission Control Block (TCB) of the hung TCP session. Enter the **clear tcp tcb** *address* privileged EXEC command to clear the TCB of the hung TCP session. The DLSw peers will reconnect as long as there is IP connectivity between the DLSw peers.

VINES

- CSCdv81746

  Symptoms A router that has more than 1000 Banyan Virtual Integrated Network Service (VINES) routes may reload when the **clear vines neighbor *** EXEC command is entered.

  Conditions This symptom is observed on a Cisco 3600 series that is running Cisco IOS Release 12.2(5.08).

  Workaround Ensure that no VINES debugging commands, such as the **debug vines routing** command or the **debug vines state** command, are enabled.

Wide-Area Networking

- CSCds38864

  Symptoms A router may reload or display spurious memory access traceback messages when the **show int virtual-access x configuration** EXEC command is entered.

  Conditions This symptom is observed on a Cisco router that is running a Packet Data Serving Node (PDSN) image of Cisco IOS Release 12.1(3)XS.

  Workaround There is no workaround.

- CSCdu62228

  Symptoms A memory corruption may occur on a Versatile Interface Processor 2 model 50 (VIP2-50) and a PA-A1-OC3 port adapter when cell mode Multiprotocol Label Switching (MPLS) is performed.

Conditions This symptom is observed on the interface of the VIP on a Cisco 7500 series that is running Cisco IOS Release 12.1(8) when resources are low for the Tag Virtual Circuits (TVCs) on the interface of the VIP.

Workaround There is no workaround.

- CSCdu88657

  Symptoms Some issues may be observed with distributed Cisco Express Forwarding (CEF) when an access group is configured on a dialer interface that is bound to a PRI.

  Conditions This symptom is observed on a Cisco 7500 series that is running Cisco IOS Release 12.2.

  Workaround Reload the Cisco 7500 series with the access group and dCEF in the configuration. The access group cannot be removed and reconfigured on the dialer interface.

- CSCdv00201

  Symptoms With some Cisco IOS 12.2 PI development releases, when PPP hardware compression is configured and enabled on a PPP over Frame Relay circuit (meaning that the router is equipped with the proper compression hardware and the PPP link peer is also running PPP compression), a system may reload.

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

  Workaround There is no workaround.

- CSCdv14997

  Symptoms A memory leak may be observed with the Integrated Local Management Interface (ILMI) response on a router.

  Conditions This symptom is observed on a Cisco 3660 that is running Cisco IOS Release 12.2(1a)

  Workaround There is no workaround.

- CSCdv19662

  Symptoms On configurations that have the ISDN switchtype set to primary-ni, if a STATUS message is received from the switch and both sides of the call do not have a matching call state, the STATUS message is responded to with a RELEASE message and the call is subsequently torn down.

  Conditions This symptom is observed on a Cisco AS5300 that is running Cisco IOS Release 12.2(2)XA.

  Workaround There is no workaround.

- CSCdv22680

  Symptoms A Cisco AS5300 that is running Cisco IOS Release 12.1(6.01) and has ISDN Large Scale Dialout (LSDO) configured in a point of presence (POP) with Multilink PPP (MMP) may reload repeatedly with a corrupted counter.

  Conditions This symptom is observed on a Cisco AS5300 that is running Cisco IOS Release 12.1(6.01) or Release 12.1(8).

  Workaround There is no workaround.

- CSCdv30179

  Symptoms A router may display the following message on the console:

  ```
  %SCHED-2-WATCH: Attempt to enqueue uninitialized watched queue (address 0). -Process=
  "IP Input", ipl= 0, pid= 14 -Traceback= 6025A7F0 6022B564 606B97C0 6022B4AC 60474608
  604768E8 602CC4B4 602CA9B0 602CAAAC 602CAC20 60246F64 60246F50
  ```

  Conditions This symptom is observed on a Cisco 3640 that is running Cisco IOS Release 12.0(17).

Workaround There is no workaround.

- CSCdv32421

  Symptoms When a Layer 2 Tunneling Protocol (L2TP) dials out on a dialer profile interface, a L2TP Network Server (LNS) may fail to attempt successive calls after the first call is torn down.

  Conditions This symptom is observed on a Cisco 7200 series that is running Cisco IOS Release 12.2(3.5) or Release 12.2(3.6)T2.

  Workaround There is no workaround.

- CSCdv38127

  Symptoms A router that is using Multilink PPP (MLP), Virtual Private Dialup Network (VPDN), Multiprotocol Label Switching (MPLS), and has keepalives enabled may reload when the router is attempting to bring up the second link.

  Conditions This symptom is observed on a Cisco router that is using MLP, VPDN, MPLS, and has keepalives enabled when the router is attempting to bring up the second link.

  Workaround Disable keepalives.

- CSCdv42491

  Symptoms A router may reload with a bus error displaying the following error message:

  ```
  %ALIGN-1-FATAL: Illegal access to a low address addr=0x50, pc=0x6135D584,
  ra=0x60636AD0, sp=0x62338E68
  ```

  Conditions This symptom is observed on a Cisco 7200 router.

  Workaround There is no workaround.

- CSCdv42995

  Symptoms Callback calls are not made when user profiles are obtained from authentication, authorization, and accounting (AAA) and a callback server may reload when the **clear interface dialer** EXEC is entered.

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

  Workaround There is no workaround.

- CSCdv48783

  Symptoms When a router is configured to switch X.25 over TCP (XOT) traffic, the router may not be able to include necessary flow control facility in the call confirm packet that is going to the source X.25 host.

  Conditions This symptom is observed when the flow control facility that is specified by the source X.25 host differs from the facility that is required by the destination host.

  Workaround Enforce facility negotiation by entering the **x25 routing acknowledge local** global configuration command and the **x25 subscribe flow-control always** global configuration command.

- CSCdv55637

  Symptoms When a virtual connection (VC) is torn down on the port adapter, the le-arp entries continue to use the VC.

  Conditions This symptom is observed on a Cisco 7500 series that has a dual-width ATM port adapter (PA-A3-OC12). This symptom occurs when there are vendor-specific workstations attached via ATM that are using FORE ATM NIC drivers.

  Workaround Enter the **clear lane le-arp** privileged EXEC command on the Cisco 7500 series.

- CSCdv56962

  Symptoms A router that has the **dialer watch-group** *group-number* interface configuration command configured on the BRI interface may reload and display the following messages when the **no shutdown** interface configuration command is entered on the BRI interface:

```
00:09:11: %LINK-3-UPDOWN: Interface BRI0:1, changed state to down 00:09:11:
%LINK-3-UPDOWN: Interface BRI0:2, changed state to down 00:09:12: TDMB channel # 99
Timeslots ( X 48K, . 56K,* 64K, - skipped)

0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1

- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - 00:09:12:

00:09:12: % Clock rate line <speed> is not configured (or incorrect) on Serial 1

00:09:12: %LINK-3-UPDOWN: Inte

=== Flushing messages ===

Queued messages: CPU exception: reason = FORCE_CRASH(1495518) sigval = 1200 Last CPU
Exception Register Context: PC = 0x0011bde4 MSR = 0x00009032 CR = 0x39000039 LR =
0x0011bda4 CTR = 0x002f2914 XER = 0xa000403b DAR = 0x906000a8 DSISR = 0x000000e7 DEC
= 0x0000e920 TBU = 0x00000000 TBL = 0x52b8bcc5 IMMR = 0x30000013 R0 = 0x00000000 R1
= 0x01aa8788 R2 = 0x00020000 R3 = 0x00000000 R4 = 0x00000000 R5 = 0xffffff00 R6 =
0x01682448 R7 = 0x906000a0 R8 = 0x30000000 R9 = 0x01aa655c R10 = 0x01aa64e0 R11 =
0x00000000 R12 = 0x00000003 R13 = 0x00013430 R14 = 0x00000000 R15 = 0x00000000 R16 =
0x00000000 R17 = 0x00000000 R18 = 0x01664118 R19 = 0x00000001 R20 = 0x00000000 R21 =
0x00000000 R22 = 0x00000000 R23 = 0x00000000 R24 = 0x016842e4 R25 = 0x00000000 R26 =
0x00e00000 R27 = 0x013d0000 R28 = 0x01682448 R29 = 0x00000000 R30 = 0x0168517c R31 =
0x01664118

Stack trace:

Frame 00: SP = 0x01aa8788 PC = 0x0011bde4 Frame 01: SP = 0x01aa8800 PC = 0x00149350
Frame 02: SP = 0x01aa8828 PC = 0x001600d4 Frame 03: SP = 0x01aa8848 PC = 0x00303750
Frame 04: SP = 0x00000000 PC = 0x7c6802a6
```

  Conditions This symptom is observed on a Cisco MC3810 series router that is running Cisco IOS Release 12.2(3) or Release 12.0(7))XK2.

  Workaround There is no workaround.

- CSCdv57479

  Symptoms When users configure a virtual routing/forwarding (VRF) instance and the **ip unnumbered** *type number* interface configuration command under a PPP subinterface, the Data-Link Connection Identifier (DLCI) changes under that subinterface may cause ping failures even when DLCI is active.

  Conditions This symptom is observed on a Cisco 7500 series router that is running Cisco IOS Release 12.1(8a)E.

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

- CSCdv60021

  Symptoms When E1 channels are configured to receive ISDN-PPP calls, the channels may not achieve the full 64 kBps bandwidth capacity of a B channel.

  Conditions This symptom is observed on a Cisco 7200 series that has a dialer interface and that is running Cisco IOS Release 12.1(9).

  Workaround To avoid this symptom, configure the **ppp multilink** interface configuration command on the dialer interface associated with the E1 channels.

- CSCdv60341

  Symptoms A vendor-specific Layer 2 Tunneling Protocol (L2TP) Access Concentrator (LAC) is not removing the PPP 0x7E flag with more recent versions of the Cisco IOS software. As a result, PPP frames are not recognized at the L2TP Network Server (LNS) and PPP sessions are not coming up.

  Conditions This symptom is observed on a Cisco 7200 series or Cisco 7400 series router that is running Cisco IOS Release 12.1 T or Release 12.2 DD.

  Workaround Use Cisco IOS Release 12.0 T on the LNS.

- CSCdv63243

  Symptoms A router may reload when global switch commands are configured.

  Conditions This symptom is observed on a Cisco 3600 series that is running Cisco IOS Release 12.2(5.8).

  Workaround There is no workaround.

- CSCdv65523

  Symptoms When an idle timeout request is received from a RADIUS server when a call is made, the idle timeout is not reset to the static configuration for asynchronous interfaces after the call is disconnected.

  Conditions This symptom is observed on a Cisco AS5400 that is running Cisco IOS Release 12.1(5)XM3.

  Workaround There is no workaround.

- CSCdv66688

  Symptoms Virtual Private Dialup Network (VPDN) calls may not start after the **authen-before-forward** command is configured.

  Conditions This symptom is observed on a Cisco AS5400 universal access server that is running an image based on Cisco IOS Release 12.2(2)XA.

  Workaround There is no workaround.

- CSCdv72301

  Symptoms The redirecting number is suppressed if the presentation indicator (PI) in oct3a is indicated as “restricted”.

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

  Workaround There is no workaround.

- CSCdv74812

  Symptoms Non-Facility Associated Signaling (NFAS) failover recovery on the primary DMS-100 switch may cause the backup D channel to remain in the maintenance busy state after a failure of the LIF_StartTimer.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.2(3)PI.

  Workaround There is no workaround.

- CSCdv76067

  Symptoms Certain PPP commands, such as the **ppp authentication** interface configuration command cannot be configured on a virtual template or under a template.

  Conditions This symptom is observed on a Cisco 2600 series that is running Cisco IOS Release 12.2 or Release 12.2(6.1)T.

  Workaround There is no workaround.

- CSCdv77179

  Symptoms Dialer Watch dials continuously even after the primary asynchronous interface is restored. The Dialer Watch dials persistently in an attempt to bring up the link when the interface on the other side does not respond.

  Conditions This symptom is observed on a Cisco 7100 series that is running Cisco IOS Release 12.2(4)T.

  Workaround There is no workaround.

- CSCdv78082

  Symptoms The B channels will stop working if the **shutdown** interface configuration command followed by the **no shutdown** interface configuration command is entered on the controller trunks and the controllers. The **show isdn nfas group** privileged EXEC command can be used to verify the state of the B channels.

  Conditions On a Cisco AS5850 that is running Signaling System 7 (SS7) and that is running Cisco IOS Release 12.2(2)XB02,

  Workaround There is no workaround.

- CSCdv79944

  Symptoms Incoming synchronized 64K V.110 calls are wrongly flagged as Personal Handyphone Internet Access Forum Standard (PIAFS) calls.

  Conditions This symptom is observed on a Cisco 3660 that is running Cisco IOS Release 12.1 XM or Release 12.2 T.

  Workaround There is no workaround.

- CSCdv80153

  Symptoms A memory corruption may be observed on a router.

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

  Workaround There is no workaround.

- CSCdv81925

  Symptoms As of Cisco IOS Release 12.0(6.1) and above, setting International Telecommunication Union Telecommunication Standardization Sector (ITU-T) X.3 parameter 3:128 (Selection of data forwarding character) provided an unprotected non-standard packet dispatch on the semicolon character.

  In Cisco IOS Releases 12.1(9.5) and 12.2(2.5), a defect fix validated all Cisco supported X.3 parameter values to comply with IUT-T X.3 standards. In particular, only settings 3:0 through 3:127 were allowed. This disallowed selection of dispatch on the semicolon character.

  Due to customer dependencies on dispatching on semicolon, the validation check for parameter 3 is temporarily being suppressed. In a subsequent release, a mechanism will be deployed explicitly permitting non-standard dispatching of characters by a Cisco specified enabling command. This will restore validation checking for parameter 3 for standard usage and permit extended non-standard dispatch characters.

  Conditions The conditions that pertain to this caveat are described above.

  Workaround There is no workaround.

- CSCdv87976

  Symptoms Point-to-Point Protocol over Ethernet (PPPoE) session virtual interfaces may not be reclaimed properly by the system.

  Conditions This symptom is observed under rare circumstances on a Cisco 6400 that is running Cisco IOS Release 12.2(3.6)B01 or Release 12.2 T.

  Workaround There is no workaround.

- CSCdv88723

  Symptoms A memory leak may occur for Signaling System 7 (SS7) Continuity Test (COT) transponder calls at the egress gateway during stress testing. The egress gateway is a voice-only system that handles interactive voice response (IVR) calls.

  Conditions This symptom is observed on a Cisco AS5800 that is running Cisco IOS Release 12.1(5)XM06.

  Workaround There is no workaround.

- CSCdv89745

  Symptoms On a Cisco 7500 series, if the **software** keyword is not included in the **compress** {**predictor** | **stac** [**distributed** | **software**]} interface configuration command for a virtual template that is associated with PPP over a Frame Relay circuit, the **compress stac** interface configuration is blocked. When this symptom occurs, PPP software compression for PPP over Frame Relay cannot be configured.

  Conditions This symptom is observed on a Cisco 7500 that is running Cisco IOS Release 12.2(6.4) or Release 12.1(11.6).

  Workaround There is no workaround.

- CSCdv90564

  Symptoms A buffer leak may occur in the small buffer pool of a router:

  ```
  Public buffer pools:
  Small buffers, 104 bytes (total 581, permanent 50, peak 581 @ 00:00:02):
       27 in free list (20 min, 150 max allowed)   <----
       21644506 hits, 6890 misses, 47 trims, 578 created
       205 failures (0 no memory)
  ```

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.2(5.4) and that is configured for X.25 switching.

  Workaround There is no workaround.

- CSCdw00412

  Symptoms A router may reload with a bus error and display the following stack trace message:

  ```
  Stack trace from system failure: FP: 0x62D0AA90, RA: 0x604A8ED0 FP: 0x62D0AAB0, RA:
  0x604A6DAC FP: 0x62D0AAD8, RA: 0x6114BB84 FP: 0x62D0AAF0, RA: 0x61147DD0 FP:
  0x62D0AB68, RA: 0x60736064 FP: 0x62D0ABA0, RA: 0x60736928 FP: 0x62D0ABE0, RA:
  0x607316A8 FP: 0x62D0ADE0, RA: 0x60731DE8
  ```

  Conditions This symptom is observed after the **debug sanity** EXEC command is entered on a Cisco router that is running Cisco IOS Release 12.1(11).

  Workaround There is no workaround.

- CSCdw00924

  Symptoms On a PPP multilink bundle that has multiple links, if one of the links departs from the bundle while data is enqueued for output at the bundle interface, the output mechanism on the bundle may stall, halting any further output from that bundle. The output queue on the bundle becomes full, causing packets that are forwarded to that bundle to be dropped and the affected bundle to stop transmitting packets.

  Conditions This symptom is observed on a Cisco router that has a PPP multilink bundle and that is running Cisco IOS Release 12.1 or Release 12.2.

  Workaround There is no workaround.

- CSCdw01642

  Symptoms A Cisco AS5800 may be restarted by a bus error at PC 0x603D2EC4, address 0xC.

  Conditions This symptom is observed on a Cisco AS5800 that is running Cisco IOS Release 12.2.

  After the fix for this caveat is implemented, the counters on the virtual access interface may show incorrect values when IP Cisco Express Forwarding (CEF) is enabled and used for Layer 2 Tunneling Protocol (L2TP) sessions on high end routers. Please ensure that the fix for CSCdv57640 is also present in the image if this is an issue.

  Workaround There is no workaround.

- CSCdw02819

  Symptoms If the number range of the B channels of the **isdn busy dsl** *number* **b_channel** *number* interface configuration command is configured with 31 as the last channel (for example: isdn busy dsl 0 b-channel 17-31), the command is not written into the configuration.

  Conditions This symptom is observed on a Cisco Catalyst 4224 that is running Cisco IOS Release 12.1(5)YE3.

  Workaround There is no workaround.

- CSCdw07264

  Symptoms A Cisco Router Switch Processor (RSP) may reload if the TCP/IP header compression on an X.25 map is configured and unconfigured several times.

  Conditions This symptom is observed on a Cisco RSP that is running Cisco IOS Release 12.2(6).

  Workaround There is no workaround.

- CSCdw08887

  When the ring-again feature is used between PBXs that are configured for Q-signaling (QSIG) with gateways in between, the second setup message (which is signal only) does not pass the correct information to the far-end PBX and causes the call to fail. There is no workaround.

- CSCdw11765

  Symptoms PPP Link Control Protocol (LCP) is not accepting sent CONFACK that is negotiated on an asynchronous interface for a virtual profile.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.2(6.5).

  Workaround There is no workaround.

- CSCdw12748

  Symptoms Frame Relay datastream payload compression for Cisco encapsulated Data-Link Connection Identifiers (DLCIs) does not work and negotiation fails.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.2(6.4) or Release 12.2(6.1)T.

Workaround There is no workaround.

- CSCdw14064

  A Cisco 3640 router that is running Cisco IOS Release 12.2(6) and has an ISDN interface that is configured using the **isdn protocol-emulate network** interface configuration command may reload with a bus error. There is no workaround.

- CSCdw26352

  A Cisco 1417 router that has a PPP over ATM (PPPoA) configuration that uses a virtual template interface may experience a wedged input queue on the virtual access interface. This condition may cause the line to be dropped. There is no workaround.

- CSCuk30274

  A protocol emulate network cannot be configured for the NET 5 switch type. There is no workaround.

Resolved Caveats—Cisco IOS Release 12.2(6j)

Cisco IOS Release 12.2(6j) is a rebuild release for Cisco IOS Release 12.2(6). The caveats in this section are resolved in Cisco IOS Release 12.2(6j) but may be open in previous Cisco IOS releases.

- CSCdz71127

  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

- 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(6i)

Cisco IOS Release 12.2(6i) is a rebuild release for Cisco IOS Release 12.2(6). The caveats in this section are resolved in Cisco IOS Release 12.2(6i) but may be open in previous Cisco IOS releases.

The following information is provided for each caveat:

Symptoms—A description of what is observed when the caveat occurs.

Conditions—The conditions under which the caveat has been known to occur.

Workaround—Solutions, if available, to counteract the caveat.

- CSCdx65232

  Symptoms A memory allocation (MALLOC) failure may occur on a router.

  Conditions This symptom is observed on a Cisco router when an H.323 call is set up during a fax load.

  Workaround There is no workaround.

- CSCdx68422

  Symptoms A severe memory leak may occur in an H.323 environment after channel- associated signaling (CAS) Feature Group-B (FGB) voice calls (on 8 T1 lines) are run for a long duration (more than 20 hours).

  Conditions This symptom is observed on a Cisco AS5400.

  Workaround There is no workaround.

- CSCdx77088

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

  ```
  System was restarted by error - a Software forced crash, PC 0x60396E7C at 4500 Software
  (C4500-A3JS-M), Version 12.2(8.1), MAINTENANCE INTERIM SOFTWARE Compiled (current
  version) Image text-base: 0x60008948, data-base: 0x61116000 Stack trace from system
  failure: FP: 0x618A8458, RA: 0x60396E7C FP: 0x618A8458, RA: 0x603952F4 FP: 0x618A8480,
  RA: 0x6039D584 FP: 0x618A84A0, RA: 0x603A0CC8 FP: 0x618A84C0, RA: 0x60398BDC FP:
  0x618A8558, RA: 0x6037E1F0 FP: 0x618A85A0, RA: 0x6174B1F0
  ```

  Conditions This symptom is observed on a Cisco 4500 router that is running Cisco IOS Release 12.2(8.1).

  Workaround There is no workaround.

- CSCdy35576

  Symptoms A Cisco AS5400 universal gateway may reload after memory resources are depleted.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.2(12) when H.323 calls are placed or received under stress conditions.

  Workaround There is no workaround.

- CSCdy68974

  Symptoms I/O memory fragmentation occurs with various digital signal processor (DSP) timeout errors causing alarms to be triggered.

  Conditions This symptom is observed on a Cisco AS5300 with Dual Tone Multifrequency (DTMF) path confirmation enabled.

  Workaround There is no workaround.

Resolved Caveats—Cisco IOS Release 12.2(6h)

Cisco IOS Release 12.2(6h) is a rebuild release for Cisco IOS Release 12.2(6). The caveats in this section are resolved in Cisco IOS Release 12.2(6h) but may be open in previous Cisco IOS releases.

The following information is provided for each caveat:

Symptoms—A description of what is observed when the caveat occurs.

Conditions—The conditions under which the caveat has been known to occur.

Workaround—Solutions, if available, to counteract the caveat.

- CSCdx19436

  Symptoms Overlap calls may fail under certain circumstances.

  Conditions This symptom occurs if the ISDN overlap-receiving timer (T302) expires during a call. When this symptom occurs, the ISDN stack will send an empty info message to the application and set the info_complete flag to “true”. The call is then rejected even though an outgoing dial peer is available to route the call using the called number in the setup or in any subsequent info digits.

  Workaround There is no workaround.

- CSCdx37937

  Symptoms Advice of charge (AOC) ISDN messages are terminated on a voice-enabled gateway.

  Conditions This symptom is observed on a Cisco gateway that has voice enabled and that is running Cisco IOS Release 12.2(6a).

  Workaround There is no workaround.

- CSCdy16847

  Symptoms The Advice of Charge at the end of the call (AOC-E) facility information element (IE) is not passed across Voice over IP (VoIP) links if the AOC-E facility IE is received as part of an ISDN release message.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.2(6a).

  Workaround There is no workaround.

- CSCdy17772

  Symptoms A Voice over IP (VoIP) connection does not pass the Advice of Charge at the end of the call (AOC-E) facility information element (IE) transparently when the AOC-E facility IE is included with a progress indicator in the DISCONNECT message.

  Conditions This symptom is observed when the progress indicator IE and a facility IE are part of a DISCONNECT message.

  Workaround There is no workaround.

- CSCdy18949

  Symptoms An ISDN BRI interface does not use the T302 timer as an interdigit timer.

  Conditions This symptom is observed only with voice calls on an ISDN BRI interface that is configured for overlap receiving on a Cisco router that is running Cisco IOS Release 12.2(6e). This symptom does not affect modem or data calls. The inbound dial peer for the voice call does not have the **direct-inward-dial string** dial-peer configuration command configured.

  Workaround There is no workaround.

- CSCuk36585

  Symptoms A gateway that has an ISDN PRI interface does not use T301 as an interdigit timer.

  Conditions This symptom is observed on an ISDN PRI interface on a Cisco gateway that is running Cisco IOS Release 12.2(6g) and that is configured for overlap receiving.

  Workaround There is no workaround.

Resolved Caveats—Cisco IOS Release 12.2(6g)

Cisco IOS Release 12.2(6g) is a rebuild release for Cisco IOS Release 12.2(6). The caveats in this section are resolved in Cisco IOS Release 12.2(6g) but may be open in previous Cisco IOS releases.

The following information is provided for each caveat:

Symptoms—A description of what is observed when the caveat occurs.

Conditions—The conditions under which the caveat has been known to occur.

Workaround—Solutions, if available, to counteract the caveat.

- CSCdx76632

  Symptoms A Cisco AS5300 that is functioning as a voice gateway may reload because of an incoming bus error exception.

  Conditions This symptom is observed on a Cisco AS5300 that is running Cisco IOS Release 12.2(6d).

  Workaround There is no workaround.

- CSCdw16903

  Symptoms When routing traffic is sent between PRI/ISDN and H.323 Voice over IP (VoIP) network legs, a memory leak may occur and the router may reload.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.2(7) or an earlier release, and occurs when the router is handling the passthrough Q Signaling (QSIG) messages from an ISDN call leg through a VoIP network. The memory leakage occurs when H.225 connection timeouts are experienced on the VoIP call legs. If this condition is occurring, a positive value is displayed for the "H.225 establish timeout" statistic when the **show h323 gateway h225** privileged EXEC command is issued. This leak will not occur when normal voice call traffic is handled.

  The number of timeouts can be reduced and the memory leak can be minimized by increasing the H.323 connection timeout value. The H.323 connection timeout value can be adjusted by issuing the **voice class h323** *tag* global configuration command. The adjusted value must subsequently be associated with the voice dial peers. The default value is 15 seconds and can be increased to a maximum of 30 seconds.

  Workaround There is no workaround.

- CSCdw37839

  Symptoms A Cisco AS5400 does not send a Simple Network Management Protocol (SNMP) LinkUp trap when the cable of an E1 controller is plugged into the Cisco AS5400, which is incorrect behavior.

Conditions This symptom is observed on a Cisco AS5400 that is running Cisco IOS Release 12.2(2)XB1 after the cable of the E1 controller is first unplugged and then plugged in again. Note that when the cable of the E1 controller is unplugged, the Cisco AS5400 does send an SNMP LinkDown trap, which is correct behavior.

Workaround There is no workaround.

- CSCdw39876

  Symptoms A Cisco router that is connected to a Cisco Catalyst 5500 switch may reload with a bus error or enter a constant boot loop. The output from the reload indicates that 802.1q (dot1q) is the cause of this behavior even though the router is not configured for dot1q trunking. The looping stops after the Ethernet cable is physically disconnected from the switch.

  Conditions This symptom is observed on a Cisco router that is running Cisco IOS Release 12.2(6.7).

  Workaround Configure a native VLAN on the trunk and configure all the protocol attributes on the native VLAN instead of the main interface. The two configurations are equivalent. The advantage of configuring the VLAN as native is that all packets are received and sent as untagged.

- CSCdw89164

  Symptoms A memory allocation failure (MALLOCFAIL) message is displayed when a cable is unplugged from the serial interface of a router.

  Conditions This symptom is observed on a Cisco 7200 series router when a Cisco IOS release that contains the fix for CSCdt40038 is used. This symptom affects the PA-4T, PA-8T, PA-H, PA-E3, and PA-T3 port adapters. The occurrence of this symptom depends on the erroneous bit patterns that are received from the serial line that is down.

  Workaround Bring the line back up to enable the memory usage to return to normal.

- CSCdx23472

  Symptoms Inbound overlap calls to a router may fail.

  Conditions This symptom is observed on a Cisco 2600 router that is configured for BRI Q-signaling (QSIG) and overlap receiving. This symptom occurs only if ISDN SHORT-CALL-REFERENCE is configured on the BRI interface. The inbound overlap calls will work if there is an exact matching dial peer.

  Workaround Ensure that there is an exact matching dial peer for inbound overlap calls.

- CSCdx46031

  Symptoms After a call is stopped, the connection identity (conf-id) value is not displayed in the command output of the **debug voip aaa** privileged EXEC command.

  Conditions This symptom is observed if the **debug voip aaa** privileged EXEC command is issued while the **gw-accounting aaa** global configuration command is enabled.

  Workaround To establish matching start and stop accounting routines, use the call ID in the following accounting start and stop routines:

  ```
  start_h323_ccapi_accounting(5)
  stop_h323_ccapi_accounting(5)
  ```

- CSCdy14424

  Symptoms A repeatedly reloading Versatile Interface Processor (VIP) may cause a network outage.

  Conditions This symptom is observed when there is a faulty VIP or faulty hardware in the chassis.

  Workaround There is no workaround.

Resolved Caveats—Cisco IOS Release 12.2(6f)

Cisco IOS Release 12.2(6f) is a rebuild release for Cisco IOS Release 12.2(6). The caveats in this section are resolved in Cisco IOS Release 12.2(6f) but may be open in previous Cisco IOS releases.

- CSCdt26332

  A Cisco 2600 series router that is running Cisco IOS Release 12.2 T may reload when ATM Adaptation Layer Type-5 (AAL5) Transparent Common Channel Signaling (TCCS) is configured. There is no workaround.

- CSCdw26306

  If the **write memory** EXEC command is issued simultaneously with the **show config** privileged EXEC command or the **show running-config** EXEC command via two individual Telnet sessions by two different users, output similar to the following may be displayed:

  ```
  bGc nx
  ^@^@^@^A^A^A^@^@^A^@^@^E\^@^@^@^@^@^@^@^@^@^@^^@^@^@^@^@^@^A^@^@^@^@^@^@^@^@^@^
  @^@^@^@^@^@^@^@^@^@^@^@^@^@^@^@^@^@^@^@^@^@^@^@^@^@^@^@^@^@^@^@^@^@^@^@^@^@^@^@^
  ```

  This symptom is observed on a Cisco 7500 router that is running Cisco IOS Release 12.1(10)E. There is no workaround.

- CSCdw69187

  Cisco IOS software may not recognize the online insertion and removal (OIR) of a port adapter, and OIR events may not be captured. This symptom is observed on a Cisco 7200 or Cisco 7400 router that has a Network Service Engine-1 (NSE-1) while the Level 3 (L3) Cache Bypass feature is enabled. The Cisco 7400 has to be reloaded before a new port adapter is recognized.

  Workaround: Avoid using the L3 Cache Bypass feature on a Cisco 7200 or Cisco 7400 that has an NSE-1 if the installation of a port adapter using an OIR procedure is anticipated.

- CSCdx34255

  NVRAM becomes very busy after the **write memory** EXEC command is entered to store a very large configuration. A vty session may appear to be active after the TCP session has ended. Neither the vty session nor the line can be cleared. Memory allocation (MALLOC) failures may occur on the slave Route Switch Processor (RSP). These symptoms are observed on a router that has master and slave cards if a very large configuration is stored using the **write memory** EXEC command on the master card.

  Workaround: Reload the slave RSP using the slave console port.

- CSCdx59037

  A Cisco 3660 router that is running Cisco IOS Release 12.2(6e) or Release 12.2(10.6) and that is using the busyout monitor feature on the voice port may not be able to bring up the trunk connections after the Cisco 3660 is reloaded. This symptom occurs when the **busyout monitor** voice-port configuration command is entered to trigger permanent virtual circuit (PVC) monitoring for connections in a Voice over ATM (VoATM) environment.

  Workaround: Perform one of the following workarounds:

  - Configure both the master and slave routers as master routers. This configuration removes the need for the answer mode to be configured on either of the routers.
  - Enter the **shutdown** interface configuration command followed by the **no shutdown** interface configuration command on the voice port of the router after the router reloads.

- CSCdx60187

  When a permanent virtual circuit (PVC) is configured for an average bandwidth, the actual bandwidth that is used for that PVC in the transmit direction may not be accurate. This symptom is observed on a Cisco MC3810 access concentrator that is running Cisco IOS Release 12.2(7b). There is no workaround.

- CSCdx70390

  The CiscoVoiceAtmDialControlMIB MIB is not available for the Cisco 7200 router. There is no workaround.

Resolved Caveats—Cisco IOS Release 12.2(6e)

Cisco IOS Release 12.2(6e) is a rebuild release for Cisco IOS Release 12.2(6). The caveats in this section are resolved in Cisco IOS Release 12.2(6e) but may be open in previous Cisco IOS releases.

- CSCdv88338

  A segmentation violation (SegV) exception may occur on a Cisco 2610 router that is running Cisco IOS Release 12.2(3). There is no workaround.

- CSCdw20980

  If you perform an online insertion and removal (OIR) of a Versatile Interface Processor (VIP) in a Cisco 7500 series router or use the Single Line Card Reload (SLCR) feature after a VIP has reloaded unexpectedly, and if there are static routes defined that use the interfaces on the failed VIP, traffic that is using those static routes may fail. The static routes include those that are defined within a Multiprotocol Label Switching (MPLS) Virtual Private Network (VPN) Routing and Forwarding (VRF) instance.

  Workaround: Enter the **clear cef linecard** *slot- number* **adjacency** command on the affected VIP.

- CSCdw50476

  A call is rejected because a display information element (IE) is added to a Q.931 setup packet. When a call is received from a vendor-specific client, user information that is included in the H.225 call setup packet is forwarded to a class 5 switch in the form of a Q.931 packet that is filled with display IE that is converted from the user information. However, the Q.931 standard reads the Q.931 packet as if it was sent only from the network side to the user side and the class 5 switch rejects the call. The display IE should not be included in the setup packet when a Cisco AS5300 universal access server is set as the user side by default. There is no workaround.

- CSCdw55474

  The "%VTSP-3-DSP_TIMEOUT: DSP timeout on event 6:" message may be displayed on the console when a call is being set up. This symptom is observed on Cisco 2600, 3600, and 7200 series routers that have a voice digital signal processor (DSP) and that is running Cisco IOS Release 12.2(6a). The DSP resets automatically but the current call is dropped. There is no workaround.

- CSCdw59988

  If the **busyout forced** voice-port configuration command is issued on a channel-associated signaling (CAS) voice port during an active call, the call is disconnected. No new outgoing calls can be made even after the **no busyout forced** voice-port configuration command is issued on the voice port. When this condition occurs, incoming calls can still be received. Further outgoing calls can be made after the first incoming call is received.

Workaround: Enter the **shutdown** interface configuration command followed by the **no shutdown** interface configuration command on the CAS T1 controller or the CAS voice port.

- CSCdx05828

  During overlap receiving on a Cisco voice gateway that is running Cisco IOS Release 12.2(6b) or Release 12.2(9)S, if an information message carries two digits and the call setup message has a progress indicator (PI) value of three, the voice gateway loses the second digit of the information message and calls an incorrect number. If the call setup message does not have a PI, all digits are collected correctly. There is no workaround.

- CSCdx05883

  On a Cisco voice gateway you can modify the progress indicator (PI) value in an alerting message by using the **progress_ind alert enable** *pi-number* command (where the *pi-number* argument has a value of 1, 2, or 8) on the outgoing dial peer of the terminating gateway, but it is not possible to strip off the PI entirely. There is no workaround.

- CSCdx11366

  On a Cisco 7200 router that is running Cisco IOS Release 12.2(8)T, the maximum number of modular quality of service command-line interface (MQC) policy maps on a Cisco 7200 router is limited to 256. CSCdv64193 imposed the restriction on the maximum number of policy maps that can be issued on a router to 256.

  Workaround: Use Cisco IOS Release 12.2 T or 12.2(8)T1. In Cisco IOS Release 12.2(8)T1 and 12.2 T, the maximum number of policy maps that can be configured on a platform is based on what a given platform can support.

Resolved Caveats—Cisco IOS Release 12.2(6d)

Cisco IOS Release 12.2(6d) is a rebuild release for Cisco IOS Release 12.2(6). The caveats in this section are resolved in Cisco IOS Release 12.2(6d) but may be open in previous Cisco IOS releases.

- CSCdv75121

  If the write memory command is entered on a Cisco router that has a line card and if the line card reloads while the **write memory** command is being processed, the master Route Switch Processor (RSP) may cause the router to pause indefinitely or reload. There is no workaround.

- CSCdv83875

  On a Cisco 7500 series Versatile Interface Processor 4 (VIP4) that is configured with a PA-2FE port adapter, after you have reloaded the microcode while the router was forwarding traffic, the router may stop sending traffic. Entering the **shutdown** command followed by the **no shutdown** command solves the condition only temporarily.

  Workaround: Reload the microcode while there is no egress traffic on the router.

- CSCdv84788

  A Versatile Interface Processor (VIP) may reload or record spurious access after class maps are configured for Frame Relay. There is no workaround.

- CSCdw04194

  If the IP maximum transmission unit (MTU) on a point-to-point interface changes while there are multiple adjacencies (of different link types) on an interface, only one adjacency will have the correct MTU configured. There is no workaround.

- CSCdw04669

  A Cisco router reloads if the encapsulation is changed from PPP to High-Level Data Link Control (HDLC) on a Packet over SONET interface that has the **mpls traffic-eng autoroute** command enabled and for which the autorouting first has occurred and then has cleared. There is no workaround.

- CSCdw20980

  When an online insertion and removal (OIR) is performed on a Versatile Interface Processor (VIP) that is installed on a Cisco 7500 router or when the Single Line Card Reload (SLCR) feature is used, traffic forwarding issues may occur after the VIP reloads. If the router uses either a static or a connected route to send traffic out of an interface that is on the failed VIP, forwarding may stop after an OIR or an SLCR procedure is performed.

  Workaround: Issue the **clear cef linecard adjacency** EXEC command to recover from this condition.

- CSCdw29063

  A Cisco router may experience a bus error and reload after the **clear ip bgp *** command is issued at the console and a large number of routes are imported. There is no workaround.

- CSCdw31637

  Misaligned or spurious memory accesses may be detected on a Versatile Interface Processor (VIP) at the hqf_get_policymap() process. There is no workaround.

- CSCdw67214

  On a Cisco 7507 router that has a Versatile Interface Processor 2-40 (VIP2-40) that is installed with a dual-port Fast Ethernet port adapter (PA-2FE-TX) and configured as an Inter-Switch Link (ISL), IP packets that are larger than 1484 bytes are not passed. There is no workaround.

- CSCdw71400

  An invalid cache adjacency exists on a line card but not on the Route Processor (RP).

  Workaround: Issue the **clear cef linecard** *slot-number* **adjacency** EXEC command on the line card.

- CSCuk30474

  A line card may be stuck in an off-for-download state on a Cisco 7500 router or a Cisco 12000 router. This condition is indicated by the output of the **show cef linecard** EXEC command. This condition is caused by an interprocess communication (IPC) error with another line card during the Forwarding Information Base (FIB) table download process. There is no workaround.

Resolved Caveats—Cisco IOS Release 12.2(6c)M1

Cisco IOS Release 12.2(6c)M1 is a rebuild of Cisco IOS Release 12.2(6). All caveats listed in this section are resolved in Cisco IOS Release 12.2(6c)M1 but may be open in previous Cisco IOS releases.

- CSCdw55474

  When a call is set up, the following console message may appear:

  ```
  "%VTSP-3-DSP_TIMEOUT: DSP timeout on event 6:"
  ```

  The digital signal processor (DSP) in question is then automatically reset, but the current call is dropped. There is no workaround.

Resolved Caveats—Cisco IOS Release 12.2(6c)

Cisco IOS Release 12.2(6c) is a rebuild of Cisco IOS Release 12.2(6). All caveats listed in this section are resolved in Cisco IOS Release 12.2(6c) but may be open in previous Cisco IOS releases.

- CSCdv81177

  When voice calls are present, a Cisco 7200 router will repeatedly display the following message:

  ```
   %SYS-3-MGDTIMER: Timer has parent, timer link, timer = 623B6970.
  -Process= "CC-API_VCM", ipl= 4, pid= 112:
  ```

  These messages are harmless and do not affect the call completion or voice quality.

  There is no workaround.

- CSCdw16710

  Compression does not occur on a Frame Relay subinterface when using fast switching and IP header compression after having deleted a header compression instance using the **no frame-relay ip rtp header-compression** command.

  Workaround: Re-enable header compression on the subinterface with the **frame-relay ip rtp header-compression** command.

- CSCdw27574

  Translation rules are limited to 13 digits.

  Workaround: Split the translation and configure part on inbound and other part on outbound call leg (up to 26 characters again).

- CSCdw65903

  An error can occur with management protocol processing. 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(6b)

Cisco IOS Release 12.2(6b) is a rebuild release for Cisco IOS Release 12.2(6). The caveats in this section are resolved in Cisco IOS Release 12.2(6b) but may be open in previous Cisco IOS releases.

- CSCdu52672

  With Multiprotocol Label Switching (MPLS) traffic engineering, when a link on a tunnel headend is protected with Fast Reroute (FRR), 40 to 120 ms of traffic may be lost for traffic with destinations that go through the tunnel and that are learned using autoroute. The loss of traffic occurs after the FRR process has taken place. This condition occurs because the prefix is removed from the routing table after the first Shortest Path First (SPF) trigger is received. The prefix is readded after the SPF calculation is completed.

  Workaround: Implement one of the following workarounds:

  - For Cisco IOS images that have the Intermediate System-to-Intermediate System (IS-IS) backoff algorithm, assign short intervals when using the **prc-interval** *seconds* router configuration command to reduce the delay.
  - Use forwarding adjacencies. This will prevent packet lost because the shortest path tree will not change. (If you run i-shortest path first [SPF], the SPF computation time will be less than 1 ms regardless of the topology size.) Forwarding agents (FAs) are used to advertise tunnels into the Interior Gateway Protocol (IGP) using a fixed metric. Therefore all routers in the area will see the traffic engineering (TE) tunnel as a normal adjacency. If the tunnel changed path from an SPF perspective, there are no changes and nothing is done on the routing information base (RIB), Cisco Express Forwarding (CEF) line cards.

- CSCdu89525

  A Cisco router may reload when an Enhanced Interior Gateway Routing Protocol (EIGRP) router is removed using the **no router eigrp** command.

  Workaround: Do not remove the EIGRP router after it has been configured.

- CSCdv06458

  Under rare circumstances, a Cisco router may reload if the **show ip eigrp neighbors** EXEC command is issued repeatedly while Enhanced Interior Gateway Routing Protocol (EIGRP) adjacencies are coming up. There is no workaround.

- CSCdv56410

  A Cisco router may reload because of a memory leak. This condition occurs when a plain old telephone service (POTS) dial-peer rotary is configured and when the terminating switch sends a disconnect with a progress indicator (PI).

  Workaround: On routers that are running Cisco IOS Release 12.2(1) or a later release, configure the **voice call convert-discpi-to-prog** global configuration command. This command will convert an inbound ISDN disconnect message with a PI to an H.225 progress message that has the same PI value.

- CSCdv69439

  On a Cisco router that is running Cisco IOS Release 12.2(5.8)T, an Enhanced Interior Gateway Routing Protocol (EIGRP) route is not removed from the routing table even if the route does not exist any longer. There is no workaround.

- CSCdv72301

  The redirecting number is suppressed if the presentation indicator (PI) in oct3a indicates “restricted”. There is no workaround.

- CSCdv76445

  Under rare circumstances, a Cisco 3660 router that is configured as a voice gateway will not register to its gatekeeper after the router is reloaded.

  Workaround: To cause the gateway to register with the gatekeeper, enter the **shutdown** interface configuration command followed by the **no shutdown** interface configuration command on the Fast Ethernet interface.

- CSCdv85419

  Under rare circumstances, two Cisco Catalyst 6000 Multilayer Switch Feature Cards (MSFCs) that are running Cisco IOS Release 12.1(8a)E5 may become stuck in the active state while the two MSFCs are waiting for a neighboring MSFC to reply to an Enhanced Interior Gateway Routing Protocol (EIGRP) query. This condition occurs when the MSFCs first receive a query with a worse metric before receiving a second query with an infinite metric. This condition clears after the two MSFCs wait through the 3-minute stuck in active (SIA) route timer. There is no workaround.

- CSCdv90919

  When a user configures an ISDN trunk for overlap receiving and sends a setup message with no called party number in order to obtain a dial tone, the connected PBX allows the calling party to hear the dial tone but continues to collect digits that are sent over the ISDN link as INFO messages.

  If the router has an incoming dial peer that has an exact match to the calling party number, a progress indicator (PI) value is not returned in the SETUP_ACK message. This behavior prevents the dial tone from the router from being heard. There is no workaround.

- CSCdw07967

  A Cisco router that has class-based weighted fair queueing (CBWFQ) with Weighted Random Early Detection (WRED) on Frame Relay virtual circuits (VCs) and Frame Relay IP Real Time Protocol (RTP) header compression may reload. There is no workaround.

- CSCdw09507

  On a terminating router that is running Cisco IOS Release 12.2(6) and that is configured for ISDN or Signaling System 7 (SS7), if the router sends an ALERT message without a progress indicator (PI), a dial tone is heard instead of a ringback tone.

  Workaround: Configure the terminating router to always send a PI with the ALERT message. If CC_PROG_INBAND (PI = 8) is sent in the alert message, a ringback will be received.This can be accomplished by configuring the **progress_ind alert enable 8** dial peer configuration command on the outgoing plain old telephone service (POTS) dial peer of the terminating router.

- CSCdw14064

  A Cisco 3640 router that is running Cisco IOS Release 12.2(6) and that has an ISDN interface that is configured using the **isdn protocol-emulate network** interface configuration command may reload with a bus error. There is no workaround.

- CSCdw14262

  Cisco Voice over IP (VoIP) gateways that are running a Cisco IOS Release 12.2(1a) IP plus image may experience a high CPU memory utilization condition at the CCH323_CT process. There is no workaround.

- CSCdw16602

  Cisco IOS software will release a call after the software receives an ISDN disconnect with cause=user busy. There is no workaround.

- CSCdw26331

  Calls may receive a “no route to destination” message and an incorrect clearing cause code (instead of a user busy cause code) when calls are placed to a Foreign Exchange Station (FXS) on a busy interface. Depending on the equipment that is used, the caller may receive a “number unobtainable” message or fast busy tones instead of a busy tone when this condition occurs.

  Workaround: Add a “huntstop” on the dial peer that is assigned to the FXS interface.

- CSCdw29011

  If a caller who is connected to the BRI port on a Cisco 2600 router calls a busy number (that is connected via the PRI port of a Cisco AS5300 access server) via an H.323 network using gatekeepers, the caller who is connected to the Cisco 2600 router will receive a Q.931 Disconnect message with a Normal Call clearing cause code instead of a user busy cause code from the BRI port. The caller will also not hear any tones. There is no workaround.

Resolved Caveats—Cisco IOS Release 12.2(6a)

Cisco IOS Release 12.2(6a) is a rebuild release for Cisco IOS Release 12.2(6). The caveats in this section are resolved in Cisco IOS Release 12.2(6a) but may be open in previous Cisco IOS releases.

- CSCdv22431

  Class-based marking does not work on ATM inverse multiplexing over ATM (IMA) interfaces that are in the Cisco Express Forwarding (CEF) switching path. This condition was observed in Cisco IOS Release 12.2(2)T and Release 12.2(3.5)T. There is no workaround.

- CSCdv48301

  A call is made with a debit card application on the plain old telephone service (POTS) side is disconnected after being established by turning off the phone on the receiving end. The call is later reconnected by entering the number from the calling phone according to the prompt instructions. After the call is established for the second time, the phone that is called cannot hear anything from the calling phone. This condition is observed with Cisco AS5300 and AS5800 universal access servers. There is no workaround.

- CSCdv56330

  The **carrier-delay** [*seconds*] interface configuration command should prevent an interface from being declared as down before the delay timer expires. This expected behavior does not always occur.

  Workaround: To keep a list of present routes on the routing table, use a static route of null0 and a higher administrative distance such as ip route **10.10.1.1 255.255.2550 null0 250**.

- CSCdv88497

  The TCP dropback feature of a Cisco uBR900 router may cause upstream data packets to be dropped. This condition can significantly affect the performance of upstream FTP transfers and can affect other types of TCP upstream data-type traffic. There is no workaround.

Resolved Caveats—Cisco IOS Release 12.2(6)

This section describes possibly unexpected behavior by Cisco IOS Release 12.2(6). All the caveats listed in this section are resolved in Cisco IOS Release 12.2(6). This section describes severity 1 and 2 caveats and select severity 3 caveats.

Access Server

- CSCdv08170

  On a fully loaded Cisco AS5800 universal access server, "DS-RS flow control has got out of sync" messages may be displayed when analog calls are cleared using the **clear spe** EXEC command. This condition may impact service on the access server. There is no workaround.

Basic System Services

- CSCdm71775

  If you perform a write erase that erases the configuration in NVRAM, the boot variables are not changed.

  Workaround: Change the boot configuration and configuration register, then save the configuration before erasing NVRAM.

- CSCdu11749

  When a large number of Resource Reservation Protocol (RSVP) sessions are made on a Cisco 3810 router that is running ATM, some of the RSVP reservations and their associated switched virtual circuits (SVCs) may get torn down. This symptom does not occur when only a single RSVP session is created. There is no workaround.

- CSCdu31922

  The command output of the **show process cpu** EXEC command indicates that the CPU on a Cisco universal broadband router is permanently set at 100 percent. This condition is observed on a Cisco uBR904 universal broadband router that is running Cisco IOS Releases 12.1(3) through 12.1(8) but does not appear to impact the performance of the router. There is no workaround.

- CSCdu36153

  The Flash MIB implementation for a High End System (HES) in Cisco IOS software does not provide correct information for the following objects:

  - ciscoFlashCode
  - ciscoFlashChipDescr
  - ciscoFlashDeviceInitTime

  There is no workaround.

- CSCdu59691

  A Cisco 7500 router that is running the rsp-jsv-mz.121-7.E image of Cisco IOS Release 12.1(7)E may experience a software-forced reload.

  Workaround: Disable Cisco Express Forwarding (CEF) on the router.

- CSCdu64618

  A Cisco AS5300 universal access server may reload unexpectedly because of a bus error at PC 0xD0D0D0D, address 0x0, and there is no stack trace available after the **show stack** command is entered. There is no workaround.

- CSCdu68063

  PPP authentication is not performed after AAA preauthentication.

  Workaround: Enable PPP authentication locally on the network access server (NAS) interface.

- CSCdu87239

  When a very large number of managed chunks is allocated, the chunk manager may cause a router to unexpectedly reload when those chunks are freed. There is no workaround.

- CSCdv10848

  A router stops responding to the command-line interface (CLI), pauses indefinitely and subsequently reloads if the POST data has the following attributes:

  - is exactly equal to the content-length data
  - does not have a “CRLF” at the end
  - ends with the “&” character

  There is no workaround.

- CSCdv11755

  A Cisco MC3810 multiservice access concentrator or a Cisco IAD2420 series integrated access device (IAD) may reload when a Voice over IP (VoIP) session initiation protocol (SIP) or VoIP call goes from a Foreign Exchange Office Loop Start (FXOLS) to a Foreign Exchange Station Loop Start (FXSLS). There is no workaround.

- CSCdv15024

  Symptoms The unspecified bit rate (UBR) switched virtual circuits (SVCs) call reserved bandwidth is equal to the peak cell rate (PCR).

  Conditions Symptoms appear in affected Cisco IOS software releases.

  Workaround There is no workaround.

- CSCdv17691

  A router may reload if the **show running-config** privileged EXEC command is issued while the community string in the **snmp-server community** *string* global configuration command is set to a string that is more than 128 characters.

  Workaround: Avoid using community names that have more than 128 characters.

- CSCdv27602

  When a Cisco AS5300 router that is running Cisco IOS Release 12.2(3) with Network Access Server (NAS) is configured with the **radius-server attribute 25 include-in-access-req** command, the NAS may not send the radius-server Class attribute 25 in its access-request as expected. There is no workaround.

- CSCdv35992

  A Cisco AS5300 or AS5400 universal access server that is running Cisco IOS Release 12.2(2)XA1 may allocate an extra IP address from the local IP pool during the AAA preauthentication process. This address is not freed after the user disconnects.

  Workaround: To free the IP address, perform one of the following steps:

  – Remove the dialer rotary group and encapsulation PPP from the D channel using the following interface configuration commands:

  ```
  Router(config-if)# no dialer rotary-group 1
  Router(config-if)# no encapsulation ppp
  ```

  or

  – Remove the **radius-server attribute 8 include-in-access-req** global configuration command from the configuration.

  or

  – Reload the router.

- CSCdv51254

  A Versatile Interface Processor (VIP) may reload at the vip_ip_fib_fs process while it is sending traffic. There is no workaround.

- CSCdv63230

  The **if-needed** keyword of the **aaa authentication ppp default if-needed** global configuration command may not function normally. There is no workaround.

DECnet

- CSCdu66029

  A Cisco 7200 series router that is running Cisco IOS Release 12.2(1a) may reload with a bus error exception when sending DECnet pings.

  Workaround: Disable the **clns send-rdpdu** interface command on the interface that is reloading when a ping is sent using the **no clns send-rdpdu** command.

IBM Connectivity

- CSCdv16760

  Beginning with Cisco IOS Release 12.1(10.1), data-link switching plus (DLSw+) Ethernet Redundancy functionality is unstable, causing possible router reloads, spurious memory accesses, and incorrect cache information.

  Workaround: Use transparent bridging, rather than Ethernet Redundancy, to connect Ethernet LANs to DLSw+ without redundancy.

- CSCdv34678

  Cisco IOS Release 12.1(10) software will fail to correctly determine the Fiber Distributed Data Interface (FDDI) port adapter revision level. FDDI port adapters with revision levels 1.03 to 1.10 and 1.14 and later revisions can process the routing information field (RIF) of source-route bridging (SRB) frames in hardware. Cisco IOS Release 12.1(10) software may incorrectly read the revision

level as 1.1 and begin processing SRB frames in software. This condition impacts performance and incorrectly reports drops when a frame is dropped after the frame has transversed the source-bridge ring-group number. There is no workaround.

Interfaces and Bridging

- CSCds38187

  A Cisco Router with a Route Switch Processor 4 (RSP4) may appear to fast-switch multicast traffic when the inbound interface is configured as a port-channel interface for multicast distributed switching. The following command output is displayed when the router is configured for distributed switching:

  ```
  Router# show interface fa3/0/0 stat
  FastEthernet3/0/0
  Switching path Pkts In Chars In Pkts Out Chars Out Processor 2972 369408 6945 536775
  Route cache 0 0 24402 2781828 Distributed cache 0 0 0 0 Total 2972 369408 31347 3318603
  ```

  There is no workaround.

- CSCdt15266

  A Cisco 7100 router that is running c7100-jk2o3s-mz.121-5a.E image of Cisco IOS Release 12.1(5a)E may experience spurious memory access when an Ethernet interface is enabled. There is no workaround.

- CSCdu18904

  A Cisco 7200 router that is running Cisco IOS Release 12.1(6)E may experience memory allocation errors. The output of the show buffers EXEC command shows a value for Normal buffers that is higher than normal.

  ```
  Normal buffers, 512 bytes (total 51788, permanent 2048):
  2 in free list (1024 min, 4096 max allowed)
  486895337 hits, 6751474 misses, 220923 trims, 270663 created 48760
  failures (0 no memory)
  ```

  There is no workaround.

- CSCdu25697

  A Cisco 7200 series router that is running Cisco IOS Release 12.2(3) with a PA-A3 ATM port adapter may reload when you enter the **no tag-control-protocol vsi slaves 18** command. There is no workaround.

- CSCdu39979

  Symptoms On the Cisco 7200 series routers and Cisco 7500 series routers, Multiprotocol Label Switching (MPLS) packets entering 802.1Q Ethernet VLAN sub-interfaces will not be Cisco express forwarding (CEF) switched. In the Cisco 7500 series routers, distributed CEF switching also fails.

  Conditions The above symptoms occur when an 802.1Q Ethernet VLAN interface is configured for MPLS switching.

  Workaround There is no workaround.

- CSCdv72634

  Symptoms One or more of the following messages may be seen on Cisco AS5800 series universal gateways or Cisco7200 series router:

  ```
  "DEC21140:FastEthernet0/1/0: Test traffic"

  "FastEthernet0/1/0: No VLANs configured on this hwidb" (this message may be seen when there are no VLAN subinterfaces)

  "FastEthernet0/1/0: CEF pre-processing failed But sub-interface identified as FastEthernet0/1/0.100" (this message may be seen when there are some VLAN subinterfaces)
  ```

  Conditions These messages occur on Fast Ethernet interfaces on Cisco AS5800 series universal gateways and Cisco 7200 series routers when the incoming packet is more than 900 bytes in length.

  Workaround There is no workaround.

- CSCdu74968

  A Cisco router that is running Cisco IOS Release 12.1(8a)E1 with a channelized E1 ISDN PRI port adapter (PA-2CE1) or a channelized T1 ISDN PRI port adapter (PA-2CT1) and that has class-based fair weighted queueing (CBWFQ) configured may experience a reload. There is no workaround.

- CSCdv00074

  A Cisco 7200 series router that has a PA-A2 ATM port adapter for PPP over Asynchronous (PPPoA) transfer mode termination may become unstable and generate the continuous flow of "ti1575_forced" error messages if the **debug atm error** EXEC command is enabled. A nonzero value is displayed when the **show controller atm** EXEC command is entered.

  Workaround: Replace the PA-A2 port adapter with a PA-A3 port adapter.

- CSCdv27019

  There is a continuous leak of memory when transparent bridging is configured and when an access control list (ACL) is applied to an interface. There is no workaround.

- CSCdv27118

  Cisco IOS Release 12.2(3) may not successfully support the Simple Network Management Protocol (SNMP) Management Information Base (MIB) for fast ethernet subinterfaces in the **ifIndex Mib** object. There is no workaround.

- CSCdv28013

  A Cisco Catalyst 6000 switch or a Cisco 7500 series router with a T1/E1 or T3/E3 port adapter may fail to perform TFTP after a certain number of online insertion and removals (OIRs) are performed on the Versatile Interface Processor (VIP) or on Flex WAN cards that have T1/E1 or T3/E3 port adapters installed. There is no workaround.

- CSCdv31338

  A High CPU utilization condition may occur when a Cisco 7206VXR router that is running Cisco IOS Release 12.1(9) is installed with a PA-A2-4T1C-OC3SM or PA-A2-4T1C-T3ATM port adapter. In the command output from the **show process cpu** EXEC command, the uSecs of Net Background and ATM periodic indicate increasing values.

  Workaround: Enter the **no shutdown** command on the ATM interface.

- CSCdv41775

  A Cisco 3620 series router that is running Cisco IOS Release 12.2(1b) may report alignment errors when it has source-route bridging (SRB) enabled and display the following error message in the router log:

```
%ALIGN-3-TRACE: -Traceback= 602C0E24 602C6BC0 60F11AAC 60F61B88 60F61104 6021C030
603FA5E8 603FA98C
```

There is no workaround.

- CSCdv77513

  A Cisco 7500 series router that is running Cisco IOS Release 12.2 with a Channelized T3 (CT3) single wide port adapter on a Versatile Interface Processor (VIP2-50 or VIP4-50) may experience a VIP reload. There is no workaround.

IP Routing Protocols

- CSCdr37000

  A Cisco 7500 router that is running a Cisco IOS Release prior to release 12.2(5.6) with distributed Cisco Express Forwarding (dCEF) and Network Address Translation (NAT) may fail to transmit pings that are sent between two routers through the Cisco 7500 router.

  Workaround: Use Cisco IOS Release 12.2(5.6) or a later release.

- CSCds79395

  Under rare circumstances, a Cisco 6400 node route processor (NRP) may reload with the following message:

  ```
  %SYS-3-BADMAGIC: Corrupt block at 624D0C38 (magic 0D0D0D0D)
  ```

  This was observed when IP Network Address Translation (NAT) functionality was used. This problem has been resolved in Cisco IOS Release 12.2(5.4) or a later release.

  Workaround: Use Cisco IOS Release 12.2(5.4) or a later release.

- CSCdu15729

  After a Cisco 6400 broadband aggregator is reloaded, the static routes to null0 are not distributed to the Border Gateway Protocol (BGP) and the routes have to be manually reentered to trigger the redistribution. There is no workaround.

- CSCdu45793

  A Cisco router propagates the Resource Reservation Protocol (RSVP) path message as a labeled packet using the Label Distribution Protocol (LDP) learned label. As a result the path message traverses the LDP Label Switched Path (LSP), and the IP router alert option present in the Path message is ignored by routers along the LDP LSP until the Path message reaches the router at the end-point of the LDP LSP. This condition occurs if:

  – The router configured for Multiprotocol Label Switching (MPLS) traffic engineering.

  – The router is also configured for Label Distribution Protocol (LDP) label distribution.

  – The router receives an Resource Reservation Protocol (RSVP) traffic engineering (TE) Path message for a TE tunnel Label Switched

  Path (LSP) and the message has the following properties:

  – The RSVP path message includes no Explicit Route object.

  – The LSP destination is one for which LDP has learned a label from the destination's IP routing next hop and the label learned is neither implicit-null nor explicit-null.

  Workaround: Either of the following workarounds will prevent the router from propagating the RSVP path message as a labeled packet. However, each may have the undesirable effect of causing traffic that should be labeled with LDP learned labels to be forwarded unlabeled.

Workaround 1: Disable LDP on the router by using the **no mpls ip** global configuration command.

Workaround 2: Disable LDP on router interfaces that may be outgoing interfaces for RSVP TE tunnel LSPs by using the **interface no mpls ip** global configuration command for the interfaces in question.

Workaround 3: Configure the router that is the next hop router for the LSP(s) in question to not advertise a label for the LSP destination(s) by using the **mpls ldp advertise-labels** global configuration command.

- CSCdu60821

  Symptoms The **ip host-routing** global configuration command is enabled and if routing is disabled, the networking device will stop all forms of routing and remove static routes that are defined in a configuration.

  Conditions This symptom is observed when the **no ip host- routing** global configuration command is issued in configuration terminal mode on a networking device.

  Workaround To issue the **no ip host-routing** global configuration command, first enable the command using the **ip host- routing** global configuration command and then disable the command immediately using the **no ip host-routing** global configuration command. Do not exit the global configuration mode before issuing the **no ip host-routing** global configuration command.

- CSCdv04283

  A Cisco router that is running Cisco IOS Release 12.2(3) may reload unexpectedly with a software-forced reload when running Enhanced Interior Gateway Routing Protocol (EIGRP). There is no workaround.

- CSCdv13170

  Symptoms When multicast packets are fast switched, spurious access messages will appear and cause a high CPU load.

  Conditions Fast switching of multicast packets is enabled.

  Workaround There is no workaround.

- CSCdv17722

  Symptoms A Cisco router that is running Multiprotocol Label Switching (MPLS) Traffic Engineering (TE) may reload with a bus error exception in the rsvp_rrr_path_query.

  Conditions The failure happens when a Cisco router configured for MPLS TE is under stress. Memory allocation failures were also seen before the reload. The router must be running Cisco IOS Release 12.1 T, 12.2 or 12.2 T.

  Workaround There is no workaround.

- CSCdv18044

  Symptoms A memory leak of approximately 1KB occurs for individual Multicast Source Discovery Protocol (MSDP) connection retry intervals. The default is 60 seconds.

  Conditions Symptom appears on a Cisco router that is running Cisco IOS Release 12.1(8a)E03 when an MSDP peer with a higher IP address fails.

  Workaround Use the MSDP configuration command, **ip msdp shutdown** *{peer-address|peer-name},* to shut down the session to the unreachable peer.

- CSCdv21918

  A router may reload if NetFlow-data is exported to a multicast address.

  Workaround: Do not configure a multicast address; use a unicast address instead.

- CSCdv22980

  Symptoms A Cisco router may reload with illegal access to low address.

  Conditions A Cisco router configured with Network Address Translation (NAT) may reload with illegal access to a low address. This condition is triggered by the attempt to allocate memory in the interrupt path.

  Workaround Disable Cisco Express Forwarding (CEF) switching and fast switching.

- CSCdv25204

  After several hours of operation, a Cisco 1750 router that has Network Address Translation (NAT) and Port Address Translation (PAT) enabled may fail to establish new PAT sessions. New PAT sessions cannot be established from a single add-pool with overload. This condition does not occur when a non-overload configuration is used. There is no workaround.

- CSCdv30101

  A Cisco 7206VXR router that is running Cisco IOS Release 12.2(5) may experience a software-forced reload in the "IP NAT Ager" process and a watchdog timeout. There is no workaround.

- CSCdv40616

  Some type 3 link-state advertisements (LSAs) may be generated with MAX-AGE for a virtual private network (VPN) Open Shortest Path First (OSPF) network after the corresponding Border Gateway Protocol (BGP) updates are received for a site that has a backdoor link. The **clear ip route** *destination gateway* privileged EXEC command can be used to force LSA generation. There is no workaround.

- CSCdv46892

  On a Cisco router that is running Cisco IOS Release 12.0(19)ST, the Border Gateway Protocol (BGP) does not mark the autonomous system (AS) paths that exceed the limit configured by the **bgp maxas-limit** configuration command as invalid. There is no workaround.

ISO CLNS

- CSCdr09770

  Configuring a tunnel bandwidth requirement change to a Multiprotocol Label Switching/traffic engineering (MPLS/TE) tunnel might cause Intermediate System-to-Intermediate System (IS-IS) routes that are accessible through that tunnel interface and their corresponding Cisco Express Forwarding (CEF) entries to be unnecessarily reinstalled when subsequent shortest path calculations are done.

  Workaround: If MPLS/TE announces new tunnel information to IS-IS routes after the bandwidth change has taken effect, this spurious RIB updates behavior can be cleared. The following are a few actions that can clear this behavior:

  – Configuring an MPLS/TE tunnel metric

  – Adding or removing MPLS/TE tunnels to the same tail-end as the tunnel that changed bandwidth. This can include both the current MPLS/TE tunnel and additional tunnels to the same tail-end.

- CSCdu76096

  After a DECnet neighbor is removed from a network, the neighbor may still be advertised in Intermediate System-to-Intermediate System (IS-IS), link-state packet (LSP), until the LSP times out. The new LSP that is generated contains the correct information. This condition is observed in Cisco IOS Release 12.0(5)T.

  Workaround: Enter the **clear isis *** EXEC command.

- CSCdu79216

  DECnet Phase IV and Phase V translation may not work after an upgrade from Cisco IOS Release 12.0(18) to Release 12.1(9) or 12.2(1b). Packets that arrive at the router are not translated or sent to the end node but are instead looped into the network until the lifetime expires. There is no workaround.

Miscellaneous

- CSCdp75419

  When voice compression modules (VCMs) are used on a Cisco 3810 router, voice is not heard at either end of the connection in rare instances. Subsequent calls may be successful without any further intervention. There is no workaround.

- CSCds24749

  A bus error in crypto_classify_packet may cause a Cisco 7100 series router to reload. There is no workaround.

- CSCds25141

  An spatial reuse protocol (SRP) interface on a Cisco UBR7246 router that is running Cisco IOS Release 12.0(10)SC1 or a later release may not allow IP traffic to pass. When this condition occurs, the SRP interface will record “input errors” and “ignored” when viewing the output of the show interface srp x/y command (where x=slot, y=port, example: 1/0).

  Workaround: Reload the router. Upon reboot, the SRP interface will allow IP traffic to pass.

- CSCdt04761

  A provider edge (PE) router may reload while it is switching traffic if the Label Distribution Protocol (LDP) label becomes unavailable.

  This condition occurs:

  – If the router is functioning as an autonomous system boundary router (ASBR) in a interAS virtual private network (VPN) environment.

  or

  – If the router is functioning as a PE router in a Multiprotocol Label Switching (MPLS) VPN environment.

  This condition is triggered when the **no mpls ip** interface configuration command is entered on the router or a connected neighbor or if a LDP or Tag Distribution Protocol (TDP) is lost.

  This condition affects Cisco IOS Release 12.1(5)T, earlier versions of Cisco IOS Release 12.2 and 12.2 T, and all platforms that support the MPLS VPN PE functionality.

- CSCdt40038

  On a Cisco 7200 series router that is running Cisco IOS Release 12.1(5a), a PA-8T synchronous serial port adapter that is configured with High-Level Data Link Control (HDLC) over leased lines may have ports 4 to 7 or ports 0 to 4 going in the up or down state without any visible cause.

  Workaround: Reload the router.

- CSCdt44914

  During large topology changes, an ATM interface that has tag switching enabled may enter and remain in the not TDP ready state. This condition can be verified by issuing the **show tag tdp discovery** EXEC command. Tag switching is consequently inactive on the interface that has tag switching enabled. Wait for at least a minute for the Tag Distribution Protocol (TDP) to clean up active tag virtual circuits (TVCs) on the ATM switch. If the output from the **show atm interface** EXEC command indicates that there are existing TVCs, TDP will not become active. There is no workaround.

- CSCdt46360

  A Cisco 3640 router that is running Cisco IOS Release 12.1(2a) with the c3640-is-mz image and that has a dual-port high-density voice network module (NM-HDV-2E1, revision 1.1) with an E1 (drop and insert, revision 1.0) card, a digital signal processor (DSP) with Voice over Frame Relay (VoFR) may pause indefinitely or give a busy signal. Abnormal disconnects cause the telephony call leg to stay active. You can diagnose this situation in the output of the **show isdn** {**status**} and **show voice dsp** EXEC commands, and the **show call active** [**brief**] privileged EXEC command.

  Workaround: Reboot the router.

- CSCdt60299

  Symptoms A Cisco router may reload with the following conditions when traffic shaping is configured:

  ```
  System returned to ROM by error - a Software forced crash, PC 0x<hexvalue> at <time date>
  ```

  Conditions Symptoms appear when a Cisco router is running Cisco IOS Release 12.1(5)T1 or 12.2(1a). Traffic shaping is configured by enabling the **show version** EXEC command following the reload.

  Workaround There is no workaround.

- CSCdt63459

  On a Cisco 7513 router that has a Route Switch Processor 4 (RSP4) that is configured with 128 MB DRAM and that is carrying 110,000 routes, entering the **clear cef linecard** EXEC command may cause all available memory to be consumed.

  Workaround: Enter the **clear ip bgp** {*} EXEC command before entering the **clear ip cef linecard** EXEC command.

- CSCdt82257

  Traffic shaping is not supported in Parallel Express Forwarding (PXF) on a Network Service Engine-1 (NSE-1). PXF does not punt the packets as expected.

  Workaround: Disable PXF.

- CSCdt94383

  A Cisco 6400 Node Route Processor (NRP) may reload with a bus error when it is configured to use PPP over ATM (PPPoA). There is no workaround.

- CSCdu00328

  A Cisco 7500 series router may stop receiving packets on certain interfaces when you reload a Cisco 6500 series switch that is connected through a port channel. This situation does not occur if you remove the port channel.

  Workaround: Run normal IP between the Cisco 7500 series router and the Cisco 6500 series switch without the port channel configuration.

- CSCdu02558

  A Cisco AS5800 universal access server that is running Cisco IOS Release 12.1(7) may experience an I/O memory leak and error trace on the trunk card of ISDN E1 trunks. The memory leak and error trace appears after approximately a week of use. This problem affects only the ISDN trunk card. The E1 R2 trunk card is not affected. 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.

- CSCdu17280

  A Meet Me conference call on a Cisco Catalyst 4000 access gateway module that is configured in gateway mode for conferencing and transcoding may fail to receive audio in one direction. There is no workaround.

- CSCdu18367

  A Cisco router that is running Cisco IOS Release 12.2 may encounter packet corruption when routing packets from IP to Multiprotocol Label Switching (MPLS) when packets that are entering a Generic Routing Encapsulation (GRE) tunnel require fragmentation. If this condition occurs, the packets cannot be reassembled at the tunnel tail.

  Workaround: Disable tag switching at the tunnel head.

- CSCdu27780

  When an “NI2 Suspend” message is received by a Cisco AS5300 access gateway for an established egress call on a Cisco SS7 Interconnect for Voice Gateways Solution, the gateway may not send an “H225 Suspend” message over the Voice over IP (VoIP) leg of the call. This situation may occur if the call is set up using the H.323 IP network slow start. The established call is not affected and is torn down properly on receipt of a “Release” or “Disconnect” message. There is no workaround.

- CSCdu27827

  When the cable modem termination system **clear ip route *** privileged EXEC command is entered, the cable interface on the cable modem may flap because of a stuck output. There is no workaround.

- CSCdu30384

  A Cisco router running Cisco IOS Release 12.2 with Resource Reservation Protocol (RSVP) finds that RSVP for call admission control is not working when the message is routed through the Clarent gatekeeper. There is no workaround.

- CSCdu33067

  A Gigabit Ethernet interface may reset when a large number of subinterfaces are added to it using a vendor-specific virtual private network (VPN) configuration product or a script.

  Workaround: Add fewer subinterfaces at each attempt.

- CSCdu38436

  A Cisco 7200 or 7500 router with a PA-A3-8T1IMA port adapter installed and configured for Inverse Multiplexing over ATM (IMA) may experience clocking problems and link instability resulting from the fact that the default transmit clock source changes to internal when a link is added to an IMA group.

  This can be seen by using the **show controller atm X/Y** EXEC command for each T1 interface that is included in the IMA group. If the txtiming field is 0xA, the link is clocking from Line. If the txtiming field is 0xE, the link is clocking from Internal.

  Customers suffering from T1 links that are part of an IMA group flapping periodically may be experiencing this problem. If the link is removed from the IMA group or the workaround is applied and the link still flaps, then the problem is unrelated to this bug.

  Workaround: Shutdown each of the ports in the ima group (shutdown). Remove each of the ATM interfaces from the IMA group (no ima-group 0). Configure the clock source to be line on each (clock source line). Add the links back to the ima group (ima-group 0) No shut the interfaces (no shut). If the router is reloaded the links will return to internal clocking and the workaround will have to be applied again.

- CSCdu40110

  Inter-Switch Link (ISL) switching does not work after Parallel Express Forwarding (PXF) is enabled. There is no workaround.

- CSCdu41874

  IP security (IPSec) bogus packet implementation may not function as expected in Cisco IOS Release 12.1. In Cisco IOS Release 12.0(7)T, bogus packets are used whenever a router needs to reestablish an IPSec tunnel and activate the dialer. There is no workaround.

- CSCdu44335

  The Tag Distribution Protocol (TDP) uses TCP port 711 for communication between TDP peers. This is enabled on a router by default in Cisco IOS Release 12.1. The port becomes active once tag-switching is enabled on a single interface. The TCP port will remain open even after tag-switching is disabled on the router, both at the interface level and the global level.

  Workaround: Reload the router to close the TCP port.

- CSCdu47782

  Creating new channel-groups or subinterfaces on a PA-A3 port adapter may cause the corruption of an existing subinterface on the same controller. When this situation occurs, the corrupted subinterface changes its status to down/down and triggers an “output frozen” condition that results in “cbus complex” restarts on all Versatile Interface Processors (VIPs). Sometimes it is possible to bring the corrupted interface back into service by undoing the channel-group change and clearing the E3 controller. There is no workaround.

- CSCdu51334

  Voice gateways that are running Cisco IOS Release 12.2 T that use the High Density Voice Network Module (NM-HDV) may experience packet-voice digital signal processors (DSPs) that pause indefinitely displaying the following error on the console:

  ```
  %VTSP-3-DSP_TIMEOUT: DSP timeout on event 0x6: DSP ID=0x2: DSP Disc (call mode=0)
  00:32:48:

  %VTSP-3-DSP_TIMEOUT: DSP timeout on event 0x6: DSP ID=0x1: DSP error stats (call
  mode=1652392208), chnl info(1, 9, 0), chnl info(1, 10, 1)
  ```

This condition is triggered when RTP header-compression (cRTP) is configured on a WAN link between the gateways. “connection trunk” is configured for voice services, and fast-switching is enabled on the interface where cRTP is set.

When fast-switched cRTP is configured on a WAN interface, one-way audio occurs shortly after a call is brought up. Calls that are made to the same trunk and other trunks are affected by the one-way audio condition. All the DSPs on the NM-HDV pause with the error message shown above. The trunks may eventually begin to flap.

Workaround: Avoid using fast-switched cRTP on the WAN interfaces. Either discontinue using cRTP or disable fast-switching on the WAN interface using the **no ip route-cache** interface configuration command. Process switched cRTP does not trigger this condition.

- CSCdu52748

  Symptoms The low volume, high priority traffic on a channelized T1/E1 interface experiences very large (up to 80ms) transient delay.

  Conditions he symptom occurs when low priority burst is introduced along with low volume, high priority traffic.

  Workaround There is no workaround.

- CSCdu56052

  The automatic number identification (ANI)/dialed number identification service (DNIS) delimiter feature does not work correctly for outgoing calls. The configured template to process the ANI/DNIS delimiter selects the default template instead of the configured template. There is no workaround.

- CSCdu57102

  A Cisco AS5400 universal access server with multiple Non-Facility Associated Signaling (NFAS) groups may cause a Cisco gateway router to behave in an indeterminate way and to reload if the first controller on an NFAS group happens to be non-primary or secondary controller.

  Workaround: Configure the Cisco gateway router so that the D-channel span of the RLM/NFAS group starts on the lowest numbered controller (2/0) and the subsequent bearer spans are on consecutive controller numbers. Configure the next nfas group on the last 4 controllers.

- CSCdu58862

  A Cisco AS5300 universal access server may fail to respond appropriately when a I-11 signal is transmitted as the first forward signal. There is no workaround.

- CSCdu60197

  When Call Deflection is used with a vendor-specific device, a user error causes a Call Transfer message to be sent to a Cisco AS5300 universal access server. This unexpected event may cause the access server to reload after the call disconnects. There is no workaround.

- CSCdu64551

  A Cisco AS5800 access server running Cisco IOS Release 12.2 may experience memory corruption due to lapb-ta retransmission. There is no workaround.

- CSCdu69988

  Some modems may pause indefinitely in the VDEV state (0x00002000) and stop accepting calls. The modems become locked in the VDEV state (0x00002400) if an attempt is made to clear them. This condition affects only the Cisco AS5300 universal access server. There is no workaround.

- CSCdu70230

  A Cisco AS5400 universal access server that is running Cisco IOS Release 12.2(2)XA and has 16 T1 lines may experience data paths that are not connected correctly for time-division multiplexing (TDM) switched 64K digital data calls. There is no workaround.

- CSCdu70389

  A Cisco 1720 router that is running IP Security (IPSec) of a generic routing encapsulation (GRE) tunnel that is balanced over two serial links may experience low performance.

  Workaround: Use Multilink PPP.

- CSCdu71109

  A Cisco 7100 series router that is using an Integrated Services Adapter (ISA) card to accelerate IP Security (IPSec) packet transformations through any authentication header (AH) protocol (ah-sha-hmac or ah-md5-hmac) may experience an ISA microcode failure that causes the router to unexpectedly reload and display the following message:

  ```
  ROM: Rebooted by watchdog hard reset
  ```

  This message may be accompanied or replaced by an ISA heartbeat failure error message. The ISA microcode failure causes the ISA card to become unstable and exhibit symptoms after the ISA card starts processing IPSec packets. This problem has been observed during the very first load of ISA microcode on Cisco7120 and 7140 routers.

  Workaround: After the router reloads, enter the **microcode reload all** command from the router console to reload the ISA microcode. Entering this command restores the microcode and to the ISA card and the correct microprocessor image. No symptoms will occur after the microcode reload all command has been entered.

- CSCdu71743

  A Cisco 2600 router that is running Cisco IOS Release 12.1(5)T9 may reload with a stack trace that points to the authorization proxy.

  Workaround: Disable the authorization proxy feature if possible.

- CSCdu72571

  A Cisco 7206VXR router with a Network Process Engine (NPE-400) and a Gigabit Ethernet port adapter that is running Cisco IOS Release 12.0(17)S may reload with a bus error at an invalid address after receiving ALIGN-3-TRACE and FX1000-3-TOOBIG messages. There is no workaround.

- CSCdu72587

  Multiprotocol Label Switching (MPLS) and Tag switching do not function properly between Multilink PPP interfaces on Cisco 7500/RSP series routers if distributed Cisco Express Forwarding (dCEF) switching is enabled on interfaces participating in Tag switching.

  Workaround: Do not enable dCEF globally, or disable dCEF on interfaces that are configured for tag switching by entering the **no ip route-cache distributed** interface configuration command.

- CSCdu72637

  Packets that should be permitted by an access list are dropped when IP reverse path forwarding (RPF) is used with an access list. This condition occurs when the **ip verify unicast reverse-path** *access-list* interface configuration command is used with an access list that has the log or log-input option configured. There is no workaround.

- CSCdu73666

  If an outbound access list is applied to an interface that has class-based weighted fair queuing (CBWFQ) configured through a **service-policy ouput** *policy-name* command, outbound traffic is no longer classified into the correct class-based queues. All traffic shows up against the class-default queue. When the access list is removed, CBWFQ again classifies traffic into the correct queues.

  This condition still occurs if the attached policy map does not have CBWFQ but only policing or marking features. Also, this condition occurs when Multiprotocol Label Switching (MPLS) is used along with an access list that has the LOG feature in the outbound direction. The LOG feature in access lists punts packets to process-level switching from Cisco Express Forwarding (CEF) switching, which causes this condition.

  Workaround: Avoid using MPLS switching if it is not needed. Otherwise, avoid using access lists with the LOG feature.

- CSCdu74796

  Multiple entries appear in the OLD-CISCO-CHASSIS-MIB.cardTable after use of the **busyout** command followed by the **no busyout** command in voice-port configuration mode. There is no workaround.

- CSCdu75147

  Symptoms A Cisco gateway may send the Open Settlement Protocol (OSP) OID {0 4 0 1321 1 2} in the ClearToken field of RAS messages to a gatekeeper.

  Conditions This symptom occurs when the **security password** command is configured on the gateway.

  Workaround There is no workaround.

- CSCdu76946

  A Cisco router that is running Cisco IOS Release 12.2(2)T or 12.2(3.1)T may experience multiple reloads that are caused by TFIB problems. The reloads only occur if the router has installed with Dynamic Host Configuration Protocol (DHCP) routes going out on an ATM interface that has Routed Bridge Encapsulation configured. The condition affects only images that contain the fix for CSCds75405.

  Workaround: Configure the **no ip cef table adjacency-prefix override** command. This action disables the fix for CSCds75405.

- CSCdu77394

  When a router initiates the FTP control and data connections, the source address for each connection is different. This condition does not exist if per-destination load balancing is used. Per-destination load balancing, however, causes some destinations to receive more traffic than others, which in turn causes some T1s to drop packets while others are hardly used. The **ip ftp source-interface** *interface* global configuration command affects only the control connection but not the data connection.

  Workaround: Enter the **no ip ftp passive** global configuration command or avoid having FTP servers initiating connections to the routers.

- CSCdu79955

  The permanent virtual connection (PVC)-to-Virtual LAN (VLAN) bindings are not intact after an ATM Module (WS-X516X) with a large number of PVC-to-VLAN bindings is reloaded.

  Workaround: Copy the startup configuration to the running configuration using the **copy startup-config running-config** privileged EXEC command on the ATM module.

- CSCdu80042

  A FlexWAN module (WS-X6182-2PA) on a Cisco 6509 switch that is running Cisco IOS Release 12.1(7s)E may reload because of spurious memory access at the hqf_cwpa_pak_enqueue_local process. There is no workaround.

- CSCdu81250

  Asynchronous modem calls that are sent over channel associated signaling (CAS) trunks are not counted by the Call Tracker. There is no workaround.

- CSCdu81314

  This defect occurs when a Dynamic Host Configuration Protocol (DHCP) relay agent receives a DHCP request from a client on an unnumbered interface numbered to a loopback interface that is configured with two IP addresses. With smart relay enabled, the relay agent sets the gateway address to the secondary IP address of the loopback interface and the client obtains an IP address based on this address. The relay agent adds a host route to the client with the route expiry time set to the lease time. When the same client sends a DHCPREQUEST for RENEW message and when the server replies with a DHCPACK message, the relay does not extend the route expiry time with the new lease time. This behavior causes the relay to automatically delete the route after the initial lease time expires.

  Workaround: Release the address and obtain a new address.

- CSCdu81513

  A Cisco 7200VXR router with either a Network Services Engine (NSE-1) or a Network Process Engine (NPE-400) may experience processor memory parity errors (PMPEs) when the **show tech-support** EXEC command or the **show pci controller** EXEC command is entered.

  Workaround: Avoid using the **show tech-support** EXEC command or the **show pci controller** EXEC command.

- CSCdu82132

  A Cisco 3600 series router that is running Cisco IOS Release 12.2(1a) reloads with a bus error on a call coming from another gateway after it sends “SETUP” messages on the BRI port and receives “SETUP_ACK” and “CALL_PROC/w PI=8” messages. There is no workaround

- CSCdu82259

  Symptoms Interoperability problems with third-party routers.

  Conditions The Cisco AS5300 access server generates a Service ID (SID) packet with payload type 19 for third party routers that, according to the latest Request for Comments (RFCs), expect payload type 13 for SID packets.

  Workaround Interoperability problems do not occur when a call is between two Cisco gateways because the domain specific part (DSP) of the receiving

- CSCdu86853

  A Cisco 7500 series router that is running Cisco IOS Release 12.0 S, 12.1, 12.2, or 12.1 E with a 2-port channelized T3 port adapter (PA-MC-2T3+) may report the an incorrect FREEDM version for the second port. The FREEDM version for the first port is shown correctly, but a version number of zero (0) is shown as the version number for the second port. There is no workaround.

- CSCdu87170

  IP multicast traffic cannot be sent over a Generic Routing Encapsulation (GRE) tunnel if IP Security (IPSec) is configured on the tunnel. Other routing protocols may continue to work normally.

  Workaround: Remove IP Security (IPSec) configuration from the tunnel or send IP multicast traffic over a different unencrypted tunnel.

- CSCdu87212

  A Cisco uBR7200 universal broadband router that is running Cisco IOS Release 12.1(7.5)EC may reload with a bus error if either of the following occurs:

  - Source verification is enabled
  - A large amount of traffic fails the source verification check.

  There is no workaround.

- CSCdu87539

  Only the old method of permanent virtual connection (PVC) configuration is available with half-bridging. The router may fail to detect the loss of a PVC with Operation, Administration, and Maintenance (OAM) loopback cells, resulting in the ATM subinterface remaining up after the PVC is down. The PVC and the ATM subinterface must also be brought down when OAM is interrupted. This condition occurs when half-bridging is used with a Cisco 7500 or a Cisco 12000 Internet router. There is no workaround.

- CSCdu87761

  A gateway Voice over IP (VoIP) dial peer ignores the plus (+) sign prefix in a destination pattern. This behavior causes the destination patterns “1234” and “+1234” to be matched interchangeably. The dial peer logic has to be corrected to accept the plus (+) sign as a valid character. There is no workaround.

- CSCdu88651

  A Cisco AS5800 universal access server may reload unexpectedly because of a memory corruption when it is configured to run the Stack Group Bidding Protocol (SGBP) and may off load Multilink PPP (MLPPP) calls to another server. There is no workaround.

- CSCdu88730

  A Systems Network Architecture switch (SNASwitch) may issue getbuffers for a buffer size that is larger than the one that exists on the router. This condition causes a traceback and a negative sense code to be sent to the remote station. There is no workaround.

- CSCdu89643

  An Advanced Integration Modules-virtual private network (AIM-VPN) crypto accelerator may exhibit a different level of performance when it is handling IP traffic and when it is handling User Datagram Protocol (UDP) traffic. There is no workaround.

- CSCdv00081

  Symptoms In an R2 to H.323 interworking scenario, disconnect cause codes are not passed correctly from the R2 side into the H.323 network.

  Conditions Basic topology:

  phone --- 3640 --- R2 --- 3640-UUT --- voip -->

  Place an R2 call into the Cisco 3640 Unit Under Test (UUT) gateway. The call is connected end to end. Have the calling party release the call by hanging up the phone. The outgoing cause code from the Cisco 3640 UUT into the VoIP network should be 0x10 (normal call clearing). Instead a cause code of 0x00 is passed.

  Workaround There is no workaround.

- CSCdv01173

  The BackPlane Ethernet input queue may become partially or completely filled with interprocess communications (IPC) system messages that are not in the queue in a redundant configuration that is running Cisco IOS Release 12.1(5)DC. All incoming packet traffic and IPC messages are dropped if the Remote File System (RFS) encounters an error.

  Workaround: Disable the disk-mirror or EHSA keepalives in the redundancy or main CPU

- CSCdv03018

  The Toolkit Command Language (TCL) App1 process that is running the clid_authen_collect application may show a 97 percent CPU utilization on calls that use the session initiation protocol (SIP) if the keywords **none**, **h245-signal**, or **h245-alphanumeric** are used in the **dtmf-relay** dial-peer configuration command. Digit collection does not function if the **dtmf-relay** dial-peer configuration command is not supported by SIP. There are modified TCL scripts for clid_authen_collect, clid_authen_col_npw, clid_col_npw_3, and clid_col_npw_npw applications that automatically disconnect the calls if digit collection is not supported. There is no workaround.

- CSCdv04016

  In a Tunnel Endpoint Discovery (TED) environment with 50 crypto peers of Cisco 7200VXR routers with the network processing engine (NPE-300), the routers may experience intermittent software-forced reloads. There is no workaround.

- CSCdv04703

  A Cisco AS5300 router running Cisco IOS Release 12.2 that is routing TCL Interactive Voice Response (IVR) traffic over a period of weeks may generate system logs indicating that a Tool Command Language (TCL) application is leaking memory from RTPSPI event buffers:

  ```
  %SYS-2-MALLOCFAIL: Memory allocation of 23424 bytes failed from 0x60FF9F18, pool
  Processor, alignment 0 -Process= "TCL APP", ipl= 3, pid= 132 -Traceback= 6032F0F4
  60330CA8 60FF9F20 60FFB6D0 60F13600 6118A3AC 611BC3F0 611BF11C 61186CC0 611875F8
  61187890 611BF1F0 60325D04 60325CF0
  %SYS-2-MALLOCFAIL: Memory allocation of 23424 bytes failed from 0x60FF9F18, pool
  Processor, alignment 0
  -Process= "TCL APP", ipl= 3, pid= 132
  -Traceback= 6032F0F4 60330CA8 60FF9F20 60FFB8C4 60F14280 6126D8C4 61276E68 6118A398
  611BC3F0 611BF11C 61186CC0 611875F8 61187890 611BF1F0 60325D04 60325CF0
  %SYS-2-MALLOCFAIL: Memory allocation of 23424 bytes failed from 0x60FF9F18, pool
  Processor, alignment 0
  -Process= "Voice Player", ipl= 3, pid= 105
  -Traceback= 6032F0F4 60330CA8 60FF9F20 60FFB8C4 60F14280 6126D8C4 6126F740 60325D04
  60325CF0
  %SYS-2-MALLOCFAIL: Memory allocation of 23424 bytes failed from 0x60FF9F18, pool
  Processor, alignment 0 -Process= "MGCP Application", ipl= 3, pid= 37 -Traceback=
  6032F0F4 60330CA8 60FF9F20 60FFB220 60F1F1D8 60F1F3EC 61134ADC 6113135C 61136618
  61128CA8 610F5D5C 610F76D8 60325D04 60325CF0
  %SYS-2-MALLOCFAIL: Memory allocation of 23424 bytes failed from 0x60FF9F18, pool
  Processor, alignment 0 -Process= "MGCP Application", ipl= 3, pid= 37
  ```

  Also, when using a show memory summary command, the output under “Processor memory” will show an extraordinarily high amount of used memory for the TCL APP process:

  ```
  Router# show memory sum Head Total(b)

  Used(b) Free(b) Lowest(b) Largest(b) Processor 61DBA700 103045376 102243504 801872
  613384 19680 I/O 40000000 16777216 8762064 8015152 7952324 7952284

  Processor memory

  Alloc PC Size Blocks Bytes What ..... 0x60FF9F18 23424 3543 82991232 TCL APP
  ```

  There is no workaround.

- CSCdv04921

  Incoming ISDN calls may fail with cause code (unallocated/unassigned number) on a Cisco AS5300 access server that is running Cisco IOS Release 12.2(5). This condition occurs when the inbound dial peer is configured for DID but there is no corresponding outbound dial peer which matches the called number. Fax or IVR applications are susceptible to these dial peer configurations.

  Workaround: Add an outbound dial peer which matches the called number or remove DID from the inbound dial peer if that is an option.

- CSCdv04956

  Symptoms A Cisco server that is used as a terminating gateway that is loaded with an ‘is’ or ‘js’ image may experience a memory leak in the CCH.323_CT process under stress and could result in a restart.

  Conditions The leak is present when tunneling H.245 Control Channel messages across the H.225 connection. Tunneling of the H.245 Control Channel is enabled by default, and will occur when the dialpeer is configured for DTMF Relay or Fax Relay.

  Workaround Calls setup using H.323 slowstart procedures will not exhibit the failure. However, this requires the originating gateway to be configured to initiate slowstart. The default configuration is faststart.

- CSCdv05618

  After a policy map is attached on an ISDN PRI interface, a Cisco router reloads when the **no policy-map** *policymap name* command is issued. This condition also happens if the **no service-policy output** *policy-name* or the **no service-policy input** *policy-name* interface command is issued.

  There is no workaround, but users may use the new dialer profile model for dialing solutions as it does not have this problem. It is more flexible and works better with QoS features.

- CSCdv05997

  The ISDN DISCONNECT message is sent with a Progress Indicator (PI). There is no workaround.

- CSCdv06207

  A Cisco 7200 router running Cisco IOS Release 12.2(2) may experience a bus error during configuration of Network-Based Application Recognition and an Access Control List. This occurs when a stateful session closes at exactly the same time that the system tries to timeout the same flow.

  Workaround: Use the **ip nbar resources # # #** command to extend the time until the system will try to timeout an unused flow. For example: use of **ip nbar resources 600 1000 50** commands the system to wait 10 minutes (600 seconds) until it tries to clean up a flow. The longer the delay he less potential there is for a reset packet (RST) or finish (FIN) packet to arrive at the same time.

- CSCdv06330

  In a two router shelf redundancy environment, the OLD-CISCO-CHASSIS-MIB.cardSerial MIB object is reporting an incorrect value of 0. There is no workaround.

- CSCdv06717

  Symptoms Bearer channels, belonging to controllers (T1 or E1) that do not carry the Active D-channel, may be wrongly marked “Out of Service.”

  Conditions Symptom occurs during PSTN Gateway (PGW) switchovers from Active to Standby.

  Workaround There is no workaround.

- CSCdv06837

  Symptoms A service policy which can be accepted in a Cisco 7500 series router may suddenly not be accepted.

  Conditions Symptom occurs when the **max-reserved-bandwidth interface** configuration command is not accepted in a Cisco 7200 series router although it is accepted in a Cisco 7500 series router.

  Workaround There is no workaround.

- CSCdv07928

  Symptoms The ISDN layer2 will not come up after a reload. The following message is seen on the router console during the reload:

  ```
  !!!! s:t:c:ts 1:1:15:16 already configured!!!
  ```

  In addition, the message “tdm voice connect failed” is displayed during boot up or when making calls.

  Conditions The symptom occurs on a Cisco 2600 series router that is running Cisco IOS Release 12.2 with Voice/WAN Interface Cards (VWIC-2MFT-T1-DI or VWIC-2MFT-E1-DI).

  Workaround Power cycle the router or reset time division multiplexing (TDM) switching and reload the high density voice network modules (NM-HDV) firmware.

- CSCdv08066

  Unsolicited debug messages may appear in the system log when certain error conditions occur while Voice over IP (VoIP) is used. There is no workaround.

- CSCdv08627

  A phantom entry may appear for a dial shelf controller on a Cisco AS5800 universal access server in the ENTITY-MIB.physicalTable.

  Workaround: Reload the chassis.

- CSCdv09975

  When the **no shutdown** command is entered after the **shutdown** command is entered on a circuit emulation service (CES) card, a burst of bit errors is noticed on the circuit on some other ports on the same peripheral adapter module (PAM). This condition is observed on the Cisco 8540 multiservice switch router (MSR), the Catalyst LS1010 switch, and the Cisco 7200 series router and can affect both E1 or T1 interfaces. There is no workaround.

- CSCdv10359

  A Cisco 7200VXR router with a PA-VXC/B+ port adapter may not correctly display clock slips when the router is operating in the E1 mode. This condition can affect voice and fax calls that are going through the router. To verify the timing of the router, enter the **show frame-clocks** EXEC command.

  Workaround: Ensure that the **frame-clock-select** controller configuration command is configured so that the E1 controller and the digital signal processors (DSPs) are clocking from the same clock source.

- CSCdv10805

  A gatekeeper may reload if the **show gatekeeper gw-type-prefix** EXEC command is entered on the gatekeeper while there is a large routing table on the gatekeeper. There is no workaround.

- CSCdv11050

  A Cisco 7500 series router that has two different types of port adapters on the same Versatile Interface Processor (VIP) (such as Channelized Tunnel 3 or potent-based interface port adapters) may reload when both of the port adapters are using the Direct Multilink Point-to-Point Protocol (DMLP).

  Workaround: Disable distributed Cisco Express Forwarding (dCEF) on either of the two bundles.

- CSCdv11514

  Phantom objects may be created in the ENTITY-MIB.physicalTable with the type DS1 and the name DS-T1 on a Cisco AS5800 universal access server.

  Workaround: This condition will clear after the access server is reset.

- CSCdv11518

  After the Tag Distribution Protocol (TDP) flaps on the Label Controlled ATM (LC-ATM) interface, it takes a long time for the interface to become TDP ready. Entering the **show tag-switching tdp discovery** command may indicate that TDP is not ready, and TVCs might still be allocated on the interface. This can occur under stressful conditions in which cross-connections fail to be de-allocated on the ATM switching fabric. There is no workaround.

- CSCdv12211

  A Cisco Catalyst 5500 switch that is using an OC-3 ATM LAN Emulation (LANE) module (WS-X5158) and that is running Cisco IOS Release 12.0(16)W5(21) does not allow the default rate queue to be configured if both of the special rate queues have already been configured.

  The following error message is displayed when an attempt is made to add additional permanent virtual connections (PVCs):

  ```
  Not creating vc:xx interface: ATM0 is out of rate queues.
  ```

  There is no workaround.

- CSCdv12414

  A Cisco 3600 series router running Cisco IOS Release 12.2(3) may find that class-based packet marking is not working on specific Asynchronous Transfer Mode (ATM) interfaces in the Cisco Express Forwarding (CEF) switching path. The **show policy-map interface** global configuration command indicates zero packets marked on the specified interfaces. There is no workaround.

- CSCdv12625

  A Cisco AS5800 access server that is running Cisco IOS Release 12.2 may drop Link Access Procedure, Balanced (LAPB) frames larger than 1526 bytes when receiving an X.75/LAPB-TA call.

  Workaround: Configure the maximum X.75/LAPB-TA frame size to 1526 bytes or less on the client ISDN terminal adapter.

- CSCdv13156

  On a Cisco 3640 router that has a configured channel group on a Voice WAN interface card (VWIC) that resides on a High Density Voice Network Module (NM-HDV), fast-switched packets are not compressed when Compression Real-Time Protocol (cRTP) or Client-To-Client Protocol is used with fast switching or Cisco Express Forwarding (CEF) switching on the NM-HDV card. The remote router is configured with a one Port T1 CSU/DSU WAN interface card (WIC-1DSC-T1). Both routers are running Cisco IOS Release 12.2(3).

  Workaround: Disable fast switching using the **no ip route-cache** interface configuration command.

- CSCdv13595

  IP packets cannot be sent between two routers if the packet sizes are 1466 bytes or greater because the packets are fragmented. The default maximum transmission unit (MTU) for Channelized T1 (CT1) is 1500 bytes. Packets will go through without being fragmented if the MTU is set to 1540 bytes. There is no workaround.

- CSCdv13787

  On a Cisco 1750 series router that is running Cisco IOS Release 12.2(0a), calls out of an analog E&M port may intermittently fail, which causes the router to seize the trunk, send digits out, but then drop the call after a second of waiting. There is no workaround.

- CSCdv14277

  Symptoms Memory leak followed by router reload.

  Conditions A Cisco AS5300 access server that is running Cisco IOS Release 12.2(3) with Open Settlements Protocol (OSP) may experience a memory leak caused by the CCH323_CT process that causes the router to reload once memory is depleted.

  Workaround There is no workaround.

- CSCdv14842

  Symptoms A Cisco router may reload upon boot up.

  Conditions Symptom occurs in routers that are running Cisco IOS Release 12.1(10.2) with a Local Area Network Controller Ethernet (LANCE) installed in slot 1 or slot 2.

  Workaround Insert the Ethernet controller in slot 0.

- CSCdv14935

  Under rare circumstances, a Cisco uBR7200 series router that is running the ubr7200-k1ps-m image of Cisco IOS Release 12.0(15)SC may reload when it attempts to process a NULL time event. There is no workaround.

- CSCdv15322

  A Cisco voice gateway may reload when the T8 timer (waiting for Continuity Test [COT] message) expires for a bulk number of calls. When the Cisco SC2200 signaling controller receives Initial Address Messages (IAMs) with a request to do a COT test, it sends a request to the gateway to perform a COT test, but the Cisco SC2200 signaling controller does not receive a COT message from the Ingress side for the calls. This behavior causes the T8 timer to expire on the gateway. This condition occurs only when the **debug cot detail** or the **debug cot api** privileged EXEC commands are enabled and is observed in Cisco AS5300 series gateways that use the Signaling System 7 (SS7) interconnect solution. There is no workaround.

- CSCdv16323

  When a call is made on a voice dial peer without a callingNumber (a calling number with a Null value) and no translation rule is defined, the callingNumber is not translated during a translation. Because of this behavior, the outbound ISDN SETUP message does not include a Calling Party Number information element (IE).

  However, if a translation rule is defined using the **translate-outgoing calling** *translation-tag* global configuration command, the callingNumber is replaced with the “NULL” string value even if the translation rule is not matched. Because the Calling Party Number IE is not NULL, the ISDN stack will include a Calling Party Number IE with a “NULL” digit string.

  Workaround: Define a new “NULL” string under the relevant translation rule using the **rule** *name-tag input-matched-pattern substituted-pattern* translation rule configuration command.

- CSCdv16876

  In a simple hub and spoke topology with generic routing encapsulation (GRE) and IP Security (IPSec) running between two peers, traffic fails to pass between the peers if fast switching is enabled on the tunnel interfaces of the hub router.

  Workaround: Enable process switching to allow the traffic between the two spokes to pass without a problem.

- CSCdv17923

  Symptoms An E1 controller on a PA-VXC-2TE1+, PA-VXB-2TE1+, and PA-MCX-8TE1 may reset itself once every two to three seconds.

  Conditions Symptom occurs in Cisco 7200 series routers that are running Cisco IOS Release 12.2 when their controllers are connected to third-party PBXs. Examples include Digital Private Network Signaling System (DPNSS) and Channel Associated Signaling (CAS).

  Workaround There is no workaround.

- CSCdv18391

  A Cisco 7500 router with an Enhanced ATM port adapter (PA-A3) may issue "invalid memory allocation (MALLOC) at interrupt level" error messages when the **show atm vc** [*vcd* | **interface** *interface-number*] privileged EXEC command is entered. There is no workaround.

- CSCdv18923

  A Cisco 7200 series router running Cisco IOS Release 12.2 configured for Multiprotocol Label Switching (MPLS) over an Inter-Switch Link (ISL) interface that is passing packets larger than 1496 bytes with the do not fragment (DNF) bit set, encounters packets that will not cross the egress provider edge (PE) router to the customer edge (CE) router connected interface without fragmentation. The packet at the egress PE router is seen as having an additional 4 bytes attached to the packet. Changing the maximum transmission unit (MTU), the IP maximum transmission unit (IP MTU), or the tag switching maximum transmission unit (TAG MTU) is not an option.

  Workaround: The only workaround is to unset the DNF bit on the packets.

- CSCdv20100

  A Cisco AS5800 universal access server that is running Cisco IOS Release 12.1(9) with live traffic may experience a buffer (processor memory) leak. The following messages are displayed when this condition occurs:

  ```
  MET-DST: %SYS-2-MALLOCFAIL: Memory allocation of 6000 bytes failed from 0x6046C234,
  pool Processor, alignment 0
  MET-DST: %SYS-2-MALLOCFAIL: Memory allocation of 568 bytes failed from 0x60404F00,
  pool Processor, alignment 0
  MET-DST: %SYS-2-MALLOCFAIL: Memory allocation of 568 bytes failed from 0x60404F00,
  pool Processor, alignment 0
  ```

  There is no workaround.

- CSCdv20153

  A Cisco router running Cisco IOS Release 12.2 as an Asynchronous Transfer Mode (ATM) Label Edge Router (LER) that is configured as a generic routing encapsulation (GRE) Tunnel source may find that it is transmitting GRE packets over the tag control VC (0/32) of an ATM tag sub-interface instead of the Tag Virtual Circuit (TVC) bound to the tunnel destination. If the ATM Label-Switching Routers (LSRs) do not have a route to the tunnel destination, the GRE packets will be dropped. There is no workaround.

- CSCdv20566

  A Q Signaling (QSIG) protocol facility message on an inbound leg that triggers an H.323 facility message on the outbound leg may cause a Cisco gateway to reload when an inbound dial peer is configured using the **application default** command. There is no workaround.

- CSCdv20644

  A Cisco AS5300 voice gateway running Cisco IOS Release 12.2 may reload unexpectedly when performing prompt playout using a Tool Command Language (TCL) Interactive Voice Response (IVR) application. There is no workaround.

- CSCdv21696

  Symptoms Configuring the connection trunk on one side in answer-mode may cause one channel to remain in pending state if there is voice traffic. This problem does not occur if there is no voice traffic. If answer-mode is not configured on either side of the connection trunk, other problems occur.

  Conditions Symptom may occur when there is a connection trunk between the Cisco 7507 PA-VSB-2TE1+ and the Cisco 3640 series router.

  Workaround Separating the timeslots into different ds0-groups enables the connection trunks to come up and operate normally. Both sides master and master/slave configurations work well.

- CSCdv22018

  A Cisco router may reload when ATM permanent virtual connection (PVC) bundles are configured. There is no workaround.

- CSCdv22097

  A bus error might occur on a Cisco 7200 series router that is running Cisco IOS Release 12.2(3.5). This error might cause the router to reload. The following traceback report is displayed when this error occurs:

  ```
  0x613C0A98, address 0xD0D0D21. This bus error yields the following tracebacks:
  613C0A98 613BC7DC 613AE790 60485734 60489558 604A9438 60488EE0 604894CC 600EB648
  601149C8. The debugged traces state the following processes:
  0x613C0A98:crypto_classify_packet(0x613c0830)+0x268
  0x613BC7DC:crypto_map_check_encrypt(0x613bc5b0)+0x22c
  0x613AE790:crypto_check_output(0x613ae764)+0x2c
  0x60485734:ip_feature_fastswitch(0x6048475c)+0xfd8
  0x60489558:ip_fastswitch_tunnel_wrapper(0x604894e8)+0x70
  0x604A9438:gre_ipip_fastsend(0x604a81dc)+0x125c
  0x60488EE0:ip_feature_fastswitch(0x6048475c)+0x4784
  0x604894CC:ip_fastswitch_wrapper(0x60489464)+0x68
  0x600EB648:i82543_rx_interrupt(0x600e9610)+0x2038
  0x601149C8:asio_check_0_tx(0x601149c8)+0x0
  ```

  Workaround: Configure a static crypto map instead of a dynamic crypto map in the router configuration.

- CSCdv22628

  Symptoms Router reloads on bootup during bootup.

  Conditions Symptom occurs on high-end routers such as the Cisco 7200 series, Cisco 7500 series, Cisco 12000 series Internet routers, and Cisco 10000 series edge service routers.

  Workaround There is no workaround.

- CSCdv22719

  Symptoms A Cisco router may reload when the **no crypto engine accelerator** configuration command is used.

Conditions This symptom occurs on a Cisco 2600 or 3600 series router that is running Cisco IOS Release 12.2 with a Virtual Private Network (VPN) accelerator and a data compression advanced integration module (AIM) or a network module (NM) installed.

Workaround There is no workaround.

- CSCdv22915

  When the Intermediate System-to-Intermediate System (IS-IS) routing protocol is used on Cisco 7500 series routers with Ethernet, Fast Ethernet or Gigabit Ethernet, IS-IS adjacency will time out on routers that are running Cisco IOS Releases 12.0(18.3)S, 12.1(9.2), 12.2(2.5), or 12.2(3.3)S.

  Workaround: Upgrade to Cisco IOS Release 12.0(19.1)S, 12.0(19.1)ST, 12.1(10.4), 12.2(5.2)T, 12.2(5.3)S, or 12.2(5.2)PI to solve the problem.

- CSCdv23618

  A Cisco router that is running Cisco IOS Release 12.2(2)XA1 may experience clipping during the first one to two seconds of an interactive voice response (IVR) prompt playback.

  Workaround: Modify the Tool Command Language (TCL) IVR application script to use a timer in order to delay the start of the prompt playout after the correct connect verb is issued.

- CSCdv23890

  Symptoms When using a multiple number of T1 network modules (any of NM-1FE1CT1, NM-1FE2CT1, NM-1FE1CT1-CSU, NM-1FE2CT1-CSU) in a Cisco 3600 series router, some or all of the network modules may be reported as unknown.

  Conditions This can happen only when two or more of the above mentioned T1 network modules are used in the same router.

  Workaround Remove all cards so that only one T1 network module is present in the router.

- CSCdv23922

  When Busyout Monitor is configured under the WAN interface and the WAN link was down and comes back up, Multiple Frame is not established when the **show isdn status** global configuration command is entered. There is no workaround.

- CSCdv25006

  The **tx-ring-limit** *ring-limit* ATM VC configuration command does not work when it is used to configure a multichannel E3 port adapter (PA-MC-E3) for a Cisco 7200 router. There is no workaround.

- CSCdv25151

  When entering an XTagATM interface, the Label Distribution Protocol (LDP) that is running on that interface will be flapped. There is no workaround.

- CSCdv25279

  A Signal IE with “Ring Back On” is added to the “ALERTING” message that is received from ISDN when the message is delivered to H.323. There is no workaround.

- CSCdv25816

  Symptoms Non-recognition of partition.

  Conditions A partitioned device on a Cisco router that is running Cisco IOS Release 12.2(5) may not be recognized after a partition operation.

  Workaround There is no workaround.

- CSCdv26031

  The T3 controller on a 2-port Channelized T3 (CT3) port adapter does not come up, even if locally looped, if it is receiving "Loss of Signal" error messages. There is no workaround.

- CSCdv26990

  The fgd-eana ports may pause indefinitely in the FGD_EANA_WAIT_DNIS_DILED state after the Dialed Number Identification Service (DNIS) state. There is no workaround.

- CSCdv27354

  In a two-stage dialing environment, when a phone user in PSTN is calling to a Cisco 3660 voice gateway that is configured for interactive voice response (IVR), there is no audio playout for that IVR call. If the user enters the required digits (account number, PIN, and destination number) in that condition, the call is established and phone users can talk to each other. There is no workaround.

- CSCdv27837

  Symptoms Remote access (RA) mode certification authority (CA) authentication may fail.

  Conditions The symptom occurs when configuring more than one trusted root certification authority (CA) for Cisco IOS Release 12.2.

  Workaround Configure only one trusted root CA.

- CSCdv28081

  Virtual Profile does not function properly with Multiprotocol Label Switching (MPLS). There is no workaround.

- CSCdv28740

  A Cisco router may lose memory resources when lines are flapping and **tag-switching ip** is enabled. This condition is most severe when there are multiple adjacencies to the same peer. There is no workaround.

- CSCdv28741

  Modem ISDN Channel Aggregation (MICA) technologies firmware that is bundled with Cisco IOS software on a Cisco 3600 router has to be upgraded from version 2.7.2.0 to version 2.7.3.0.

  Refer to the release note for MICA firmware 2.7.3.0 at the following URL:

  http://www.cisco.com/univercd/cc/td/doc/product/access/acs_serv/5300/sw_conf/sw_ports/fwpwrn/mica/mca2730.htm

  Workaround: Download the mica-modem-pw.2.7.3.0.bin portware from the MICA modem portware home page at the following URL:

  http://www.cisco.com/pcgi-bin/tablebuild.pl/mica

  Transfer the bin file into one of the bin cards on the router. The Cisco IOS software will check the version of the bin file against the bundled portware and automatically choose the latest version of the portware.

- CSCdv29315

  If a Traffic Engineering (TE) tunnel is configured between two Provider Edge (PE) routers and Label Distribution Protocol (LDP)/Tag Distribution Protocol (TDP) is configured in the tunnel, Virtual Private Network (VPN) connectivity through the two PE routers will not function. There is no workaround.

- CSCdv29433

  A Cisco 827 router or a Cisco SOHO 77 ADSL router may reload when "setany" commands are used to set the **rtr dhcp** global configuration command. There is no workaround.

- CSCdv29965

  This caveat entry is introduced to correct the defects associated with the set feature on a Cisco 7500 router that is caused by the fix for CSCdv12414. There is no workaround.

- CSCdv30352

  When pause and rerouting is initiated by a third party (non-Cisco) and when an originating gateway receives an empty capability set from a terminating gateway, the originating gateway should enter the transmitter side paused state, stop transmitting on established logical channels, and close all logical channels that it has previously opened. This process allows an originating endpoint to receive announcements (such as preconnect call progress announcements) when the announcing entity does not wish to receive media from the endpoint.

  A Cisco voice gateway closes the media channels in both directions instead of just closing them in one direction. The Cisco voice gateway also opens a bi-directional media stream after exchanging H.245 messages when the terminating endpoint is expecting only a one-way media stream to send media on channel that was previously opened.This condition affects all Cisco devices that support Voice over IP (VoIP) and occurs when the Cisco voice gateway receives an H.323 Empty Capabilities Set message. There is no workaround.

- CSCdv30594

  A Cisco AS5800 universal access gateway router shelf may reload if a DuoDensity Modem Module (DMM) feature board is rebooted using the **hw-module** {**slot** *number* | **subslot** *subslot*/*subcard*} **reset** EXEC command. There is no workaround.

- CSCdv30913

  When the Hot Standby Router Protocol (HSRP) is running on an interface, a router that is actively responding to the shared HSRP address does not put the address into the Simple Network Management Protocol (SNMP) ipAddrTable. There is no workaround.

- CSCdv31702

  A Cisco 7200 router that is running Cisco IOS Release 12.2(5) may reload because of a Bus error when it is running switched voice in the presence of connectionless Q Signaling (QSIG) Protocol. This condition occurs when both switched voice and connectionless QSIG are present. This condition may cause problems with Frame Relay and connectionless QSIG. Since Voice over ATM runs through the same function, it may also be affected if connectionless QSIG is present. This condition does not affect Voice over IP (VoIP).

  Workaround: Use Cisco IOS Release 12.2(5a).

- CSCdv32499

  In an inter-autonomous system (InterAS) setup, the Tag Forwarding Information Base (TFIB) entry for the external Border Gateway Protocol (eBGP) virtual private network version 4 (VPNv4) neighbor on the demilitarized zone (DMZ) link does not get installed in the Multiprotocol Label Switching (MPLS) forwarding table. This condition will cause a loss of connectivity for VPN traffic between the two customer edge (CE) routers. There is no workaround.

- CSCdv32583

  A Cisco Gateway GPRS Support Node (GGSN) may reset the counters shown in the **show gprs charging statistic all** command after sending closed call detail records (CDRs) to the charging gateway. This situation occurred with the c7200-g5js-mz 122-3.6 software image. There is no workaround.

- CSCdv34997

  If a Traffic Engineering (TE) tunnel is configured between two Provider Edge (PE) routers, Virtual Private Network (VPN) connectivity through the two PE routers will not function. All PE to PE traffic should be normally routed through the tunnel.

  Workaround: Run Cisco IOS 12.0(17)ST3 or earlier on the PE router or remove the auto route announce statement of the tunnel interface and configure a static route through the tunnel.

- CSCdv35240

  When a Simple Network Management Protocol (SNMP) set **shutdown** command or **no shutdown** command is sent to the T1 or T3 controller on a Cisco AS5400 universal access server, a blank description command is added to the configuration for the controller that received the set command. The configuration for the controller does not change if the controller already has a description defined. There is no workaround.

- CSCdv35725

  Under some circumstances, dial-in users will not be able to pass IP traffic. The following circumstances have been identified to cause the problem to happen:

  – A Virtual Profile configuration is active for this user. This means that there must either be a unconditional "virtual-profile" configuration, or there must be a "virtual-profile if-needed" configuration and conditions that would trigger virtual profiles to be active must be met (for example, there must be per-user AAA configuration).

    In short, the user must be terminated on a Virtual Access interface because of Virtual Profiles. Sync-PPP users terminated on the serial interface do not experience this condition, and neither do users terminated on a Virtual Access interface for other reasons. Multilink PPP users or V.120/X.75, which also use Virtual Access interfaces, are running fine.

    It appears that analog users do not experience this situation, even if they are terminated on a Virtual Access interface due to Virtual Profile configuration.

  – Packets that are forwarded from a third interface (for example, an Ethernet interface) to the ISDN client are impacted. There is no problem with traffic flowing in the other direction, nor is there a problem with traffic originated by the router itself.

  – Cisco Express Forwarding (CEF) must be configured on the Ethernet interface that is receiving the packet in question. Configuring **no ip cef** globally or **no ip route-cache cef** on the Ethernet interface resolves the problem.

  Traffic that meets the above criteria will be corrupted by the router while being forwarded. There is no workaround.

- CSCdv37118

  A Cisco router that is running Cisco IOS Release 12.2(3) and that is configured with Multiprotocol Label Switching (MPLS), Multilink PPP, and Cisco Express Forwarding (CEF) may record spurious memory accesses and log the following messages:

```
Router# show log

%ALIGN-3-SPURIOUS: Spurious memory access made at 0x60D8382C reading 0x0
%ALIGN-3-TRACE: -Traceback= 60D8382C 603CC6EC 6035DB70 00000000 00000000 00000000
00000000 00000000 %ALIGN-3-TRACE: -Traceback= 60D8382C 603D111C 6035DB70 00000000
00000000 00000000 00000000 00000000

Router# show align

Alignment data for: RSP Software (RSP-JSV-M), Version 12.2(3), RELEASE SOFTWARE (fc1)
Compiled Wed 18-Jul-01 22:17 by pwade

No alignment data has been recorded.

Total Spurious Accesses 42987261, Recorded 39
```

```
Address Count Traceback 0 51527 0x60E6EE50 0x603BB440 0x6035DB70 0 63069 0x60E6F544
0x603BB440 0x6035DB70 0 29961 0x60E6F544 0x603C9A78 0x6035DB70 0 60000 0x60E6F544
0x603C01D0 0x6035DB70 0 62938 0x60E6F544 0x603C4CE4 0x6035DB70 [ etc ... ]
```

The effect on the router is poor performance and high CPU utilization, even when there is little traffic. There is no workaround.

- CSCdv37414

  A Cisco 7200 router that is running Cisco IOS Release 12.2(3) may experience packet loss if Cisco Express Forwarding (CEF) is configured over an Inter-Switch Link (ISL) trunk configured that is configured on a PA-2FE-FX Two-Port Fast Ethernet port adaptor. There is no workaround.

- CSCdv37872

  A Cisco Voice over IP (VoIP) gateway with the interactive voice response (IVR) application configured as the incoming dial peer application may fail to process signal-only calls, trunk connection calls, and continuity test calls (COTs).

  Workaround: Configure the default application on the incoming dial peer.

- CSCdv38016

  A Cisco 3660 router that has both a 2 10/100 Ethernet 2-WAN-card-slot network module (NM-2FE2W) and a High Density Voice Network Module (NM-HDV) that is running Cisco IOS Release 12.2(5.5)T may fail to initialize the digital signal processors (DSPs). Calls without audio are another indication that this condition is occurring. This condition can be verified by choosing the "Query dsp resource and status" (option 1) of the **test dsp** command.

  Workaround: Move the NM-2FE2W module to a higher slot number than the NM-HDV module, or use Cisco IOS Release 12.2(3.4)T instead of Cisco IOS Release 12.2(3.5)T.

- CSCdv39873

  Symptoms n rare cases, using the **debug h225 asn1** privileged EXEC command can cause the gatekeeper to reload.

  Conditions The reload is related to registration request (RRQ) and registration confirmation (RCF) debug output, when a print buffer was overflowed.

  Workaround Do not use the **debug h225 asn1** privileged EXEC command.

- CSCdv40079

  A Cisco router with an Integrated Services Adapter (ISA) card that is running Cisco IOS Release 12.2(3) and sending traffic at a rate that is higher than 60 Mbps may experience an ISA card heartbeat failure. Crypto process switching may switch from hardware-to-software based processing after this failure occurs. The following error message is observed when this condition occurs:

  ```
  00:51:51: IPSECcard: an error coming back 1003 ISA Slot-2 MIPS Internal Error: bits
  0x04000000, code 0x00000000 ISA slot 2: Firmware heartbeat failure detected
  ```

  Workaround: Use Cisco IOS Release 12.1(9)E or an earlier release, configure the router to send traffic at a rate below 60 Mbps, or configure the router to use a software-based crypto process.

- CSCdv40551

  A Cisco Residential Gateway (RGW) gives a 200 response code for a notification request (RQNT) with Session Description Protocol (SDP). There is no workaround.

- CSCdv40707

  The current implementation of Cisco IOS software is not fully compliant with RFC 2547bis. RFC 2547bis describes the procedures that must be implemented to specific extended communities when route attributes are passed from a customer edge (CE) router to a provider edge (PE) router. This

DDTS enforces those procedures. The CE router may suggest a particular route target for each route from the route targets that the PE router is authorized to attach to the route. The PE router would then attach only the suggested route target rather than the full set. This situation gives the CE administrator some dynamic control of the distribution of routes from the CE.

With the current Cisco IOS software, the PE router allows the CE router to attach route targets in an update without verifying that they are a subset of route targets to which the virtual routing and forwarding instance (VRF) attaches. This condition causes the routes to end up in a VRF instance when they are not supposed to.

Workaround: Configure the VRF route map on the PE router to overwrite the extended community attribute to avoid the leakage of routes to other VRFs.

- CSCdv40953

  The encryption process may not work on a Cisco 2600 or 3600 router that is running Cisco IOS Release 12.2 if IP Security (IPSec) and a hardware virtual private network (VPN) card are enabled.

  Workaround: Disable the hardware encryption card.

- CSCdv42884

  Link Access Procedure Balanced (LAPB) retransmissions do not work properly on a Cisco AS5850 universal access server. The fix that is implemented by CSCdu64551 does not address the Cisco AS5850. There is no workaround.

- CSCdv43578

  When a router has the system time set to a time zone other than Greenwich Mean Time (GMT), the date header in Session Initiation Protocol (SIP) messages will show an incorrect time stamp.

  Workaround: To ensure that the correct time stamps are entered into SIP messages, set the system time on the router to the GMT time zone.

- CSCdv43694

  Distributed Multilink PPP (DMLPPP) and Versatile Interface Processor (VIP) local switching may not work properly on a 2-port channelized T3 port adapter. There is no workaround.

- CSCdv45770

  After running for a some short period of time, hairpinned calls and normal voice calls may be dropped on Cisco Voice Gateways. Over time, software resources will be lost and no new calls will be accepted. This condition occurs if the **idsn bchan-negotiate resend-setup** command is configured on Cisco IOS releases containing the fix for CSCdv30465.

  Workaround: Do not enable the **isdn bchan-negotiate resend-setup** command.

- CSCdv46107

  On a PPP over Ethernet (PPPoE) connection, incorrect output packet and byte count information is generated in the RADIUS accounting record from a Cisco uBR7246 universal broadband router.

  Workaround: Enable fast switching or Cisco Express Forwarding (CEF) switching for outbound packets on the PPPoE session.

- CSCdv46280

  A Cisco Catalyst 6000 SP (Supervisor) switch that is running Cisco IOS Release 12.1(7)E may reload with a bus error. After the SP reloads with a bus error, the Route Processor (RP) is automatically reloaded by the SP. There is no workaround.

- CSCdv46312

  A Cisco router may reload when the **no tag-switching ip** interface configuration command is configured on an interface that has the **tag-switching ip** interface configuration command enabled on its subinterfaces. There is no workaround.

- CSCdv46423

  A Cisco 7500 router that is running Cisco IOS Release 12.0(16)ST and that has Multiprotocol Label Switching (MPLS) enabled in a virtual private network (VPN) environment may experience spurious memory access and reload with a bus error. There is no workaround.

- CSCdv46553

  When a policy map that is attached to an interface is removed globally after distributed Cisco Express Forwarding (dCEF) is disabled, the error message "without dCEF enabled, cannot remove service-policy" is displayed. If the policy map is subsequently removed, the router may reload if the **show policy interface** EXEC command is entered.

  Workaround: Enable dCEF and remove the class map and policy map.

- CSCdv48261

  The IOS Firewall Feature set, also known as Cisco Secure Integrated Software, also known as Context Based Access Control (CBAC), and introduced in IOS version 11.2P, has a vulnerability that permits traffic normally expected to be denied by the dynamic access control lists.

  This vulnerability is documented as Cisco Bug ID CSCdv48261.

  No other Cisco product is vulnerable.

  There is no workaround.

  This advisory is available at http://www.cisco.com/warp/public/707/IOS-cbac-dynacl-pub.shtml

- CSCdv48652

  Symptoms With T1 FXO-loopstart emulation, when T1 detects a ringing signal with length less than 125 ms, it responds. Signals with less than 125 ms should be ignored.

  Conditions This symptom occurs on a PBX which may generate false ringing signals with length less than 125 ms. The false ringing signal should be ignored, but Cisco IOS failed to ignore it.

  Workaround There is no workaround.

- CSCdv50118

  The dial peer matching logic does not match the sequence of characters in a destination pattern that has the plus sign (+) for a regular matching expression.

  Workaround: Do not use the plus sign as a regular expression for dial peer matching. For example, if the matching has to be done for 123+4576, configure multiple dial peers with matching patterns such as 1234576 or 1231234576 instead.

- CSCdv51304

  In a DSL setup, the Dynamic Host Configuration Protocol (DHCP) Relay Agent Information feature may fail to remove a previously added "option 82." This condition causes some clients not to accept DHCP responses and does not comply with RFC 3046, which says that the Relay Agent Information option that is echoed by a server *must* be removed by either the relay agent or the trusted downstream network element that added it when the relay agent forwards a server-to-client response back to the client. There is no workaround.

- CSCdv51363

  Systems Network Architecture (SNA) Switching Services (SNASw) physical units (PU) may be stuck in the pending Activate Physical Unit (ACTPU) state. There is no workaround.

- CSCdv51634

  A Cisco router that is running IP Security (IPSec) and configured with dynamic crypto maps may reload under a heavy load. There is no workaround.

- CSCdv53218

  Modems are marked as "BAD" after analog calls are dropped on a Cisco AS5800 universal access server using the **clear spe** EXEC command. There is no workaround.

- CSCdv55001

  A Cisco AS5800 or AS5850 universal access server that is running Cisco IOS Release 12.2(2.3), Release 12.2(XB), or a later release may experience corruption in data received on a modem connection when issuing AT commands or when running an EXEC session. There is no workaround.

- CSCdv55003

  A Cisco 7206 router with a Network Processing Engine (NPE-150) that is running Cisco IOS Release 12.2(5) may reload unexpectedly because of a bus error. This condition is indicated in the command output of the **show version** EXEC command:

  ```
  System returned to ROM by bus error at PC 0x60665188, address 0xDEADC207
  ```

  This condition is most likely to occur if the following items are configured:

  - IP Real-Time Protocol (RTP) with header compression
  - Queueing service policy (configured on the multilink interface)
  - Weighted Random Early Detect (WRED) (configured in the Quality of Service (QoS) service-policy)

  Workaround: Do not configure the items described above.

- CSCdv56165

  A Cisco AS5800 universal access server router shelf may reload unexpectedly when system processing engines (SPEs) that are already marked as BAD are cleared using the **clear spe** [*slot* | *slot*/*spe*] EXEC command. This condition may impact the service of the router shelf. There is no workaround.

- CSCdv57629

  In an inter-autonomous system (InterAS) setup, the TFIB entry for the external Border Gateway Protocol (eBGP) virtual private network version 4 (VPNv4) neighbor on the demilitarized zone (DMZ) link does not get installed in the Multiprotocol Label Switching (MPLS) forwarding table. This condition may cause a loss of connectivity for traffic that is sent between two routers that are connected through the setup. There is no workaround.

- CSCdv62549

  The Multiprotocol Label Switching (MPLS) tags that are associated with a virtual private network (VPN) (vrf x.y.z.w) and a default route (0.0.0.0) are inconsistent between the main Cisco Express Forwarding (CEF) table and the distributed CEF (dCEF) table on the outbound Versatile Interface Processor (VIP) card.

  Workaround: To recover from this condition, enter the **clear ip route vrf** *vrf-name* EXEC command.

- CSCdv62566

  A Cisco uBR7200 universal broadband router that is running Cisco IOS Release 12.1(8)EC, 12.2(3), or 12.2(5) and that has several cable modem cards installed may lock up and prevent console access.

  Workaround: Power-cycle the universal broadband router.

- CSCdv63719

  A NextPort modem card may fail to establish all channel-associated signaling (CAS) calls that are made after the initial call is established. There is no workaround.

- CSCdv64020

  Traffic that is sent across a large number of interfaces that are setup for IP Security (IPSec) protection, but no IPSec tunnels are established, can cause a Cisco router that is running Cisco IOS Release 12.2 to display out of memory errors.

  Workaround: Arrange the network topology so that such traffic patterns do not occur.

- CSCdv69646

  In Cisco IOS Release 12.2, new IP Security (IPSec) tunnels are not established under heavy load conditions with short rekeying timers. There is no workaround.

- CSCdv69882

  When a fax-relay call is connected, a spurious memory access error may occur in the ssaConnect function. There is no workaround.

- CSCdv70284

  A Cisco router that is running Cisco IOS Release 12.2(5.8) or a later release may not be able to download a file using FTP. The vty session may pause indefinitely if an attempt is made to download a file using FTP.

  Workaround: Use the **copy tftp flash** command instead.

- CSCdv71487

  A Cisco router that is configured as an H.323 gatekeeper may reload with a bus exception error message. This condition occurs when a Location Request (LRQ) timeout happens and can affect the 7200-js image of Cisco IOS Release 12.2(5.8) if the router is used as an H.323 gatekeeper. The 7200-js image of Cisco IOS Release 12.2(5.8) works normally if the router is not configured as an H.323 gatekeeper. There is no workaround.

- CSCuk26779

  A router may reload after booting up when Cisco Express Forwarding (CEF) version 6 is enabled. There is no workaround.

- CSCuk27033

  The Hot Standby Router Protocol (HSRP) virtual IP address on a Token Ring interface on a Cisco Catalyst 5000 Route Switch Module (RSM) cannot be pinged. The RSM also fails to respond to Address Resolution Protocol (ARP) requests for the active virtual IP address. This condition is observed on Cisco IOS Release 12.1(5.1) and later releases.

  Workaround: Configure the **standby use-bia** interface configuration command.

- CSCuk27669

  In rare circumstances, entering the **show ip cef** EXEC command may cause a Cisco router to reload if load-shared paths change while the command executes. There is no workaround.

Novell IPX, XNS, and Apollo Domain

- CSCdu79176

  A Cisco router that is running Cisco IOS Release 12.2(3.3)T may reload if the Internetwork Packet Exchange-Enhanced Interior Gateway Routing Protocol (IPX-EIGRP) is configured and unconfigured multiple times. There is no workaround.

TCP/IP Host-Mode Services

- CSCdt90882

  When prompts for Tool Command Language (TCL) and Voice Extensible Markup Language (VXML) applications are loaded using FTP, FTP does not return the proper size of the prompts.

  Workaround: Load the prompts using RAM, TFTP, or HTTP.

- CSCdu18397

  TCP applications such as Data Link Switching Plus (DLSw+) may experiences performance problem due to continuous TCP retransmission caused by round-trip timeout. The round-trip timeout value is not adjusted effectively when the retransmissions happens. There is no workaround.

- CSCdv06334

  A Cisco 3660 router that is running the c3660-is-mz.122-2.T image of Cisco IOS Release 12.2(2)T may perform a large number of alignment corrections that may subsequently cause the router to pause indefinitely. The router must be reloaded to be restored to normal working condition. There is no workaround.

VINES

- CSCdv53120

  The first hop Sequenced Routing Update Protocol (SRTP) router will pass only part of a withdrawn route to its neighbor. Not all routes are withdrawn because not all the updates are received by the neighbor. There is no workaround.

Wide-Area Networking

- CSCdm84365

  The Hot Standby Router Protocol (HSRP) over Bridge Group Virtual Interface (BVI) configuration is not supported if the BVI encompasses LAN emulation interfaces. The configuration is valid and functional only if the BVI encompasses ethernet interfaces. There is no workaround.

- CSCdt15775

  A Cisco 3640 router may run out of I/O memory when running compression over X.25. There is no workaround.

- CSCdt70631

  Symptoms A Cisco 800 series router may disconnect directory assistance service (104) in Japan.

Conditions For Cisco 800 platforms, from Cisco IOS instead of CALL_PROGRESS, an Alert Message must be sent to the call switching mode (CSM) to stop the timer. This problem is seen only for Japanese switch types for CSM calls. The symptoms are not related to the command-line interface (CLI) command. They are related to messages forwarded from Cisco IOS to the CSM application.

Workaround There is no workaround.

- CSCdt92929

  A Cisco router that is acting as an Always On/Direct ISDN (AODI) server may send out a bad frame. Cyclic redundancy check (CRC) is computed correctly, but the inside of the frame is corrupted, causing the remote switch to send a Frame Reject (FRMR) message. There is no workaround.

- CSCdu00134

  For undetermined reasons, a Cisco 7200 series router that is running Cisco IOS Release 12.1 and that has a PA-A3 port adapter that is running Hot Standby Router Protocol (HSRP) and LAN Emulation (LANE) resolves a remote MAC address to a network service access point (NSAP) address with the wrong selector byte through the LAN Emulation Address Resolution Protocol (LE_ARP) process. Pings fail to reach the IP address of the MAC address and DATA DIRECT virtual connections (VCs) for both the correct and the incorrect NSAP address of the same remote LAN Emulation Client (LEC) under a single LANE client on the Cisco 7200 series router.

  Workaround: Enter the **clear lane le-arp name** *elan-name* command.

- CSCdu38878

  Symptoms When an interface is cleared, the Service Profile Identifier (SPID) is reported on the Basic Rate Interface (BRI) network module or WAN interface card as invalid. The SPID that is reported after the interface is cleared is still invalid.

  Conditions The symptom occurs when the **clear interface bri** *number* EXEC command is used to clear the interface.

  Workaround There is no workaround.

- CSCdu40615

  Some clients may fail to successfully complete IP Control Protocol (IPCP) negotiations when thousands of PPP sessions are simultaneously reestablished, as is the case when an interface with many links is recycled. All Layer 2 Tunneling Protocol (L2TP) sessions are established, but some client virtual access interfaces may not get a negotiated IP address. The missing IP address results in lost IP connectivity on that link. There is no workaround.

- CSCdu44402

  When the **shutdown** interface configuration command followed by the **no shutdown** interface configuration command is entered on a T1 controller or a Fast Ethernet interface that is installed on a Cisco gateway that is under a load of voice calls, all calls may begin getting path confirm failures on the T1 controller 0.

  Workaround: Reload the router.

- CSCdu58967

  A Cisco 3640 router that is running Cisco IOS Release 12.2(1) with an ISDN BRI interface does not respond to incoming Q.931 SETUP messages if both B channels are already allocated. The Q.931 document requires that a user to reject such call by sending RELEASE COMPLETE message with cause No. 34 (“no circuit/channel available”) unless it is able to proceed with the call. There is no workaround.

- CSCdu62228

  A memory corruption may occur on a Versatile Interface Processor 2 model 50 (VIP2-50) and a PA-A1-OC3 port adapter when cell mode Multiprotocol Label Switching (MPLS) is performed. This condition occurs when resources are low for the Tag Virtual Circuits (TVCs) on the interface on the VIP. There is no workaround.

- CSCdu63648

  A router that is configured for Voice over IP (VoIP) may fail to properly pass “Caller-ID” information to the end user equipment. There is no workaround.

- CSCdu68154

  A Cisco 7500 router with a route switch processor (RSP) that is running Cisco IOS Release 12.1(8) may experience a reload. This condition occurs if all line cards are reset when an ISDN backup call is received from a remote device.The ISDN packets originating from the remote device are corrupted. The router cannot compensate for the corrupt incoming packets on the B-channel serial interface of the router, and a reload occurs with the following messages:

  ```
  %LINEPROTO-5-UPDOWN: Line protocol on Interface = > Serial6/0/0:24, changed state to
  up
  %ISDN-6-CONNECT: Interface Serial6/0/0:24 is now = > connected to 4036090885 CIHAM_CN4
  %CBUS-4-FIXBADTXVC: Detected and fixed bad tx vc = > encap on Serial6/0/0:24, bad vc
  65283, fixed vc 24 > -Traceback=3D 60394380 6065A8C8 6065B334 601F2558 601F60DC
  6037F864 = > 60382E04 60343968
  %RSP-3-BADBUFHDR: freeing MEMD pak, address 0 > -Traceback=3D 60376948 603807AC
  602E7700 60375140 60394808 6065A8C8
  ```

  then

  ```
  %RSP-2-QAERROR: reused or zero link error, write = > at addr 0180 (QA) >
  log 22018040, data EE100000 00000000
  %QA-3-DIAG: Failed to enqueue buffer header = > 0xEE10
  %QA-3-DIAG: Approximate stack backtrace prior to = > interrupt:
  %QA-3-DIAG:=20 > -Traceback=3D 60381C38 60343968
  %QA-3-DIAG: Buffer 0xEE10 is element 1 on queue = > 0x21
  ```

  There is no workaround.

- CSCdu69323

  A Cisco router that is handling a high always-on dynamic ISDN (AODI) load may reload. There is no workaround.

- CSCdu74918

  When the **shutdown** interface configuration command is entered followed by the **no shutdown command** on a Redundant Link Manager (RLM) Non-Facility Associated Signaling (NFAS) group, all of the DSLs other than the Digital Subscriber Line (DSL) that is configured as “nfas_d primary” may remain OUT_OF_SERVICE on the signaling controller.There is no workaround.

- CSCdu75062

  A Cisco router may set up a tunnel even if bidirectional Challenge Handshake Authentication Protocol (CHAP) authentication is not successful. There is no workaround.

- CSCdv00943

  A PPP over Ethernet (PPPoE) session that is going through a Layer 2 Tunneling Protocol (L2TP) cannot be brought up on a Cisco 7200 L2TP Access Concentrator (LAC) router that is running the c7200-js-mz.122-3.4T image of Cisco IOS Release 12.2(3.4)T. There is no workaround.

- CSCdv03689

  Symptoms Cisco routers may reload.

Conditions Symptom occurs if a point-to-point protocol (PPP) multilink bundle interface goes down while data is flowing through it.

Workaround There is no workaround.

- CSCdv05012

  Symptoms A Cisco router using software compression may encounter the following error:

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

  Conditions Symptom occurs if a compression is configured using a virtual template and the configuration for the virtual template is removed with the **no interface virtual template** command.

  Workaround There is no workaround, but the condition is encountered only when the virtual template configuration is deleted. The problem will not be encountered if the virtual template information is modified without deleting the virtual template.

- CSCdv06104

  The router may reload when the PPP Multilink protocol is used with Cisco Express Forwarding (CEF).

  Workaround: Disable CEF.

- CSCdv06508

  A router may reload after an ISDN connection is established. There is no workaround.

- CSCdv09382

  Symptoms A memory leak may occur in the ISDN process for the image:c5300-is-mz.122-3.5 of Cisco IOS Release 12.2(3.5).

  Conditions This condition occurred when an overnight stress test was performed with mixed mode Signaling System 7 (SS7) data calls and voice calls.

  Workaround There is no workaround.

- CSCdv13762

  When running Protocol Translation from X.25 to PPP, TCP, or LAT the wrong hostname will appear in the output of **show x25 vc** command and the output of **debug aaa accounting** command. This condition was first introduced in Cisco IOS Release 12.1(5.6) and 12.2(0.1). There is no workaround.

- CSCdv14228

  When a controller for a “nfas_d primary” interface is shut down when Redundant Link Manager (RLM) is configured on a Non-Facility Associated Signaling (NFAS) group, there is an incorrect indication that the Layer 2 protocol for the NFAS group has failed. No calls can be made into or out of the NFAS group even though Layer 2 is still active. There is no workaround.

- CSCdv14997

  A Cisco 3660 router that is running Cisco IOS Release 12.2(1a) may experience a memory leak with the Integrated Local Management Interface (ILMI) response. There is no workaround.

- CSCdv16842

  Symptoms A router may reload when it is performing heavy IP Control Protocol (IPCP) address negotiations such as those that occur when an ATM or Frame Relay interface with several hundred links are brought up simultaneously.

  Conditions This symptom is only seen when several hundred IPCP sessions are renegotiated without a recycle of Link Control Protocol (LCP).

  Workaround There is no workaround.

- CSCdv19697

  A Cisco 1700 router may experience a memory leak during a stress test if the BRI interface is configured as Network side. There is no workaround.

- CSCdv21737

  Only six or less Redundant Link Manager (RLM) groups may be configured. There is no workaround.

- CSCdv24572

  A Cisco router may lose memory when the **pri-group** [**timeslots** *range*] and the **no pri-group** controller configuration commands are configured on a T1 or E1 controller. There is no workaround.

- CSCdv25237

  Symptoms A Cisco router may fail to dial after Stack Group Bidding Protocol (SGBP) bid is won.

  Conditions Symptom occurs in a large scale dial out (LSDO) configuration.

  Workaround There is no workaround.

- CSCdv25288

  A memory alignment error may occur on an ISDN PRI when a forced disconnection is performed on an ISDN call. There is no workaround.

- CSCdv27419

  The shutdown command is not displayed in the command output of the **show running configuration** EXEC command after a **shutdown** interface configuration command is issued on a Non-Facility Associated Signaling (NFAS) T3 serial interface. The interface cannot be restored when a **no shutdown** interface configuration command is issued. This condition affects only NFAS T3 serial interfaces.

  Workaround: Shutdown the controllers instead of the D channel.

- CSCdv27982

  A Cisco AS5800 universal access server that is running Cisco IOS Release 12.1(5)XM5 may become confused and report that all B channels are unavailable after voice and modem calls are run repeatedly.

  Workaround: Reload the access server when this condition occurs.

- CSCdv30465

  In a configuration with a Cisco AS5300 Voice Gateway configured as an egress point and Cisco SC2200 Signaling Controller configured as an ingress point in a Signaling System 7 (SS7) Interconnect for Voice Gateway solution, the Cisco AS 5300 Voice Gateway may fail to propagate an alert if the **isdn negotiate-bchan resend-setup** command is enabled on the Cisco AS5300 Voice Gateway and the Cisco AS5300 Voice Gateway sends a setup message to the SC2200 Signaling Controller. The SC2200 Signaling Controller will eventually release the channel with a requested circuit/channel not available message (cause value 44). The Cisco AS5300 will send another setup message to the Cisco SC2200 Signaling Controller on the same channel with a new call reference value. If the Cisco AS5300 Voice Gateway receives an alerting message from the Cisco SC2200 Signaling Controller, the Cisco AS5300 Voice Gateway will not propagate the alerting message back across the H.323 cloud. The failure to propagate the alerting message may cause the Cisco SC2200 Signaling Controller to disconnect the call with a error-handling (recovery) procedure initiated by the expired timer (cause value 102). The timer on the on the Cisco SC2200 Signaling Controller will wait for 10 seconds to receive a progress, alert, or connect message for a call before the call is disconnected. There is no workaround.

- CSCdv36038

  In Cisco IOS Release 12.2 T, Cisco Express Forwarding (CEF) may not function properly with PPP over L2TP in dial-out environments. There is no workaround.

- CSCdv39663

  Symptoms The Cisco 804 router loses ISDN connectivity intermittently. The call drops, and the router needs to be either reloaded, power cycled or disconnected from the ISDN cable for a minute to get ISDN connectivity back up.

  Conditions The problem is observed when two Cisco 804 routers were connected to each other using point-to-point protocol (PPP) multilink.

  Workaround There is no workaround.

- CSCdv39711

  A Cisco router that is running Cisco IOS Release 12.2(2) may experience outbound modem call failures. This condition affects outbound modem calls in Non-Facility Associated Signaling (NFAS) setup and does not occur if the NFAS setup uses a standard PRI (non-NFAS) in which each DSL (span) uses its own D channel. There is no workaround.

- CSCdv39804

  A Cisco router that is running Cisco IOS Release 12.2(3) may experience a bus error and display the following error message:

  ```
  %ALIGN-1-FATAL: Illegal access to a low address, addr=0x1A8, pc=xxxxxxxx,
  ra=xxxxxxxx, sp=xxxxxxxx
  ```

  There is no workaround.

- CSCdv42338

  The Integrated Local Management Interface (ILMI) does not come up if a virtual connection (VC) is configured while the interface is in the shutdown state. The ILMI VC fails to respond when the **shutdown** interface configuration command followed by the **no shutdown** interface configuration command is entered on the interface. An "ILMI VC not properly configured" message is displayed on the console after the **debug atm ilmi interface** command is entered.

  Workaround: Configure the ILMI VC with old mode commands when the interface is not in the shutdown mode.

- CSCdv42995

  Symptoms Callback calls are not made when user profiles are obtained from authentication, authorization, and accounting (AAA) and a callback server may reload when the **clear interface dialer** EXEC command is entered.

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

  Workaround There is no workaround.

- CSCdv45322

  After a call is placed through a BRI interface on a Cisco 3600 router that is running Cisco IOS Release 12.1(10), 12.2(5), 12.2(5.3)T, or 12.2(4)T, no more calls can be placed until the **clear interface** *type card/subcard/port* privileged EXEC command is entered on the interface. This defect affects basic-net3 on all platforms. There is no workaround.

- CSCdv46203

  When a Virtual Private Dialup Network (VPDN) call is disconnected from a client, VPDN sessions are left connected indefinitely between a Layer 2 Tunneling Protocol (L2TP) Access Concentrator (LAC) and an L2TP Network Server (LNS).

Workaround: Manually clear the sessions from the LAC or LNS using the **clear vpdn tunnel** EXEC command.

- CSCdv47047

  A Cisco router may reload if the Point-to-Point Tunneling Protocol (PPTP) Access Concentrator (PAC) is configured to perform compulsory tunneling. Currently, compulsory tunneling is not supported by Cisco. There is no workaround.

- CSCdv48687

  A Cisco 800 router may reload because of spurious memory access. There is no workaround.

- CSCdv48897

  A Cisco router may reload if a virtual access interface goes down while the output of the **show dialer interface** EXEC command is viewed. There is no workaround.

- CSCdv50861

  When an attempt is made to connect to a Cisco router using a 40-bit or 128-bit Microsoft Point-to-Point Encryption (MPPE) protocol, the connection fails with an error, indicating that the remote computer does not support the required encryption type. There is no workaround.

- CSCdv63243

  The Cisco 3600-js-mz image of Cisco IOS Release 12.2(5.8) may reload when global switch commands are configured. There is no workaround.

Resolved Caveats—Cisco IOS Release 12.2(5d)

Cisco IOS Release 12.2(5d) is a rebuild of Cisco IOS Release 12.2(5). All caveats listed in this section are resolved in Cisco IOS Release 12.2(5d) 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(5c)

Cisco IOS Release 12.2(5c) is a rebuild release for Cisco IOS Release 12.2(5). The caveats in this section are resolved in Cisco IOS Release 12.2(5c) but may be open in previous Cisco IOS releases.

- CSCdv64020

  Traffic that is sent across a large number of interfaces that are set up for IP Security (IPSec) protection but on which no IPSec tunnels are established, can cause a Cisco router that is running Cisco IOS Release 12.2 to display out of memory errors.

  Workaround: Arrange the network topology so that such traffic patterns do not occur.

Resolved Caveats—Cisco IOS Release 12.2(5a)

Cisco IOS Release 12.2(5a) is a rebuild release for Cisco IOS Release 12.2(5). The caveats in this section are resolved in Cisco IOS Release 12.2(5a) but may be open in previous Cisco IOS releases.

- CSCdu00328

  A Cisco 7500 series router may stop receiving packets on certain interfaces when you reload a Cisco 6500 series switch that is connected through a port channel. This situation does not occur if you remove the port channel.

  Workaround: Run normal IP between the Cisco 7500 series router and the Cisco 6500 series switch without the port channel configuration.

- CSCdu17280

  A Meet Me conference call on a Cisco Catalyst 4000 access gateway module that is configured in gateway mode for conferencing and transcoding may fail to receive audio in one direction. There is no workaround.

- CSCdv30465

  In a configuration that has a Cisco AS5300 Voice Gateway configured as an egress point and that has Cisco SC2200 Signaling Controller configured as an ingress point in a Signaling System 7 (SS7) Interconnect for Voice Gateway solution, the Cisco AS5300 Voice Gateway may fail to propagate an alert if the **isdn negotiate-bchan resend-setup** command is enabled on the Cisco AS5300 Voice Gateway and if the Cisco AS5300 Voice Gateway sends a “setup” message to the SC2200 Signaling Controller. The SC2200 Signaling Controller will eventually release the channel with a “requested circuit/channel not available” message (cause value 44). The Cisco AS5300 will send another “setup” message to the Cisco SC2200 Signaling Controller on the same channel with a new call reference value. If the Cisco AS5300 Voice Gateway receives an “alerting” message from the Cisco SC2200 Signaling Controller, the Cisco AS5300 Voice Gateway will not propagate the

"alerting" message back across the H.323 cloud. The failure to propagate the "alerting" message may cause the Cisco SC2200 Signaling Controller to disconnect the call with an error-handling (recovery) procedure initiated by the expired timer (cause value 102). The timer on the Cisco SC2200 Signaling Controller will wait for 10 seconds to receive a "progress", "alert", or "connect" message for a call before the call is disconnected. There is no workaround.

Resolved Caveats—Cisco IOS Release 12.2(5)

This section describes possibly unexpected behavior by Cisco IOS Release 12.2(5). All the caveats listed in this section are resolved in Cisco IOS Release 12.2(5). This section describes severity 1 and 2 caveats and select severity 3 caveats.

Access Server

- CSCdv01978

  A Cisco AS5800 access server that is running Cisco IOS Release 12.1(05)XM with a Cisco System Processing Engine (SPE) Recovery configured for MICA technology modems may experience modem lockage and stop accepting calls. The **show csm modem** privileged EXEC command shows the following output:

  ```
  vdev status(0x00000500): VDEV_STATUS_BUSY.VDEV_STATUS_HASLOCK.
  ```

  There is no workaround.

Basic System Services

- CSCds73120

  On rare occasions, channel-associated signalling (CAS) bit changes to a specific time slot on the digital voice port may not be transmitted at the moment they were intended. The proper CAS bits are transmitted when the CAS bit changes occur on another time slot. No workaround is necessary because the situation is self-correcting.

- CSCdt27851

  Reverse Telnet through a Cisco 2600 series router that is using Kerberos authentication fails. This situation does not occur if you use other authentication methods.

  Workaround: Use a Kerberos client that sends the username in a Telnet suboption before the credential is sent.

- CSCdu20127

  Connection trunks that are configured between Cisco MC3810 routers may fail to establish themselves. This condition occurs if the **busyout monitor** voice-port configuration command is configured on the voice ports when one or both of the routers are reloaded. The voice ports remain in the "S_TRUNK_PENDING" VPM state.

  Workaround:

  (1) Unconfigure the **busyout monitor** voice-port configuration command on all the voice ports.

(2) Enter the **shut** command followed by the **no shut** command on the voice ports that are installed on both routers to force the trunks to establish themselves. If the voice ports are digital, apply the **shut** command followed by the **no shut** command to both Digital Voice Modules (DVMs) (also known as "controller T1 1") instead of the voice ports.

(3) After the routers are reloaded, force all the voice ports into a "S_TRUNK_BUSYOUT" VPM state by administratively shutting down the interfaces that are being monitored on both routers. If the monitored interfaces are the WAN interfaces connecting the routers, it is sufficient to shut down one side of the link and to wait for line protocol to go down on both sides. After the voice ports are busied out, bring up the monitored interfaces again, and the connection trunks will establish themselves.

- CSCdu56864

  On some platforms, a router may reload after the **show tcp status** EXEC command is entered. There is no workaround.

- CSCdu60467

  A Cisco 7200 router with fast ethernet ports implemented using a vendor-specific ethernet controller (seen through show controller) and configured for ethernet trunking will forward received frames with a destination MAC address other than that of the router. In most network topologies, this will have little effect other than a slightly increased traffic load. However, in some specific topologies with multiple routers suffering this problem, a feedback loop can be created that will cause high traffic loads and extreme levels of router CPU utilization. The problem has only been seen on 12.2 IOS.

  Workaround: Use ethernet interfaces that are based on a different ethernet controller, or disable trunking.

- CSCdu87408

  A Cisco 2600 or 3600 series router that is running Cisco IOS Release 12.2(3) with Class-Based Weighted Fair Queueing (CBWFQ) configured over a Dialer Profile interface bound to ISDN PRI or BRI ports may reload with a bus error or segmentation violation (SegV) exception when the dialer interface disconnects.

  Workaround: Disable fair queueing on the member interfaces used by the DPI. For example, on a router, if Dialer1 uses dialer pool 1 and interfaces BRI 1/0 and BRI 1/1 are members of this pool, modify the configuration for BRI 1/0 and BRI 1/1 by entering the **no fair-queue** interface configuration command to disable fair-queueing on them. Similarly, disable fair-queueing on PRI interfaces as well.

- CSCdu87634

  A Cisco router that is running Cisco IOS Release 12.2(2)XA with network access servers (NASs) may not try the second server in the list if the first server is not responding. There is no workaround.

- CSCdv02498

  A Cisco 7200 router that is running Cisco IOS Release 12.2.(3.5) may reload when adding Class-Based Weighted Fair Queueing (CBWFQ) to an output policy after an earlier attempt failed because of applying service policy at an input interface. There is no workaround.

- CSCdv02994

  A Cisco 7200 series router running Cisco IOS Release 12.2(3.5) with any Quality of Service (QoS) feature configured on the input interface will cause police on a non-ATM output interface to fail. There is no workaround.

- CSCdv15024

  Symptoms The unspecified bit rate (UBR) switched virtual circuits (SVRs) call reserved bandwidth equal to the peak cell rate (PCR).

  Conditions Symptoms appear in Cisco IOS Release 12.2(2)T and earlier releases.

  Workaround There is no workaround.

DECnet

- CSCdt93828

  The floating static route should be installed for the up rather than the down interface in a dial-backup environment in which DECnet routing is used with multiple floating static routes that are configured to reflect multiple dial-on-demand routing (DDR) interfaces. There is no workaround.

EXEC and Configuration Parser

- CSCdu56787

  Symptoms A Cisco router may experience a hung EXEC process that may cause a high CPU load when it is left idle for a prolonged period of time.

  Conditions This symptom occurs under rare conditions. Attempts to clear the line will not remove the active Telnet sessions.

  Workaround Reload the router.

IBM Connectivity

- CSCds17994

  A Cisco 7200 series router displays duplicate ring violation messages when the **debug source event** command is turned on, even though there is no duplicate ring at all. There is no workaround.

- CSCdt67073

  A Cisco router that has the data-link switching plus (DLSw+) Ethernet redundancy feature configured may reload if the Ethernet redundancy commands are removed from an Ethernet interface during normal operation using the **no dlsw local-peer** global configuration command. This situation occurs only when there are multiple circuits that are between the same pair of MAC addresses but that are up and running on different service access points (SAPs).

  Workaround: Enter the **dlsw disable** global configuration command before making any DLSw configuration changes on the Ethernet interface, such as removing the DLSw local peer. Bring down the DLSw circuits before changing the configuration. Shut down the local interface over which your DLSw circuits are running and wait for the circuits to go down before changing the configuration.

- CSCdt67148

  On a Cisco 7200 series router, if incoming packets over a FDDI interface include a Routing Information Field (RIF), fast switching causes switched packets to be corrupted.

  Workaround: Disable fast switching by entering the **no ip route-cache** interface configuration command.

- CSCdu34139

  Bridging does not work from an Inter-Switch Link (ISL) sub-interface to a Data-Link Switching (DLSw) Fast Sequenced Transport (FST). After the DLSw cache is build (sabme-ua), the subsequent frames are inserted into the ISL link as plain Ethernet frames without ISL encapsulation. This causes the DLSw circuit to break. This feature does not work in any prior Cisco IOS Release.

  Workaround: Use DLSw, TCP, or set up a bridge from the main Fast Ethernet interface.

- CSCdu43189

  A Cisco router that is configured for Data-Link Switching (DLSw) Ethernet Redundancy support may reload if connection to an upstream device is lost. Examples of an upstream device would include a router implementing SNA Switching Services (SNASw), or a router with a connection to a mainframe via a Channel Interface Processor (CIP) or a Channel Port Adaptor (CPA).

  Workaround: Use transparent bridging instead of Ethernet Redundancy to allow Ethernet-attached end stations to access DLSw+.

- CSCdu51476

  Data-Link Switching (DLSw) Ethernet Redundancy may not work on the FastEthernet ports. This condition occurs either on a C7200-I/O-2GE/E or a C7200-I/O-2FE/E input/output controller that is installed on a Cisco 7200 series router.

  Workaround: Use DLSw with transparent bridging.

  Alternate workaround: Use a separate FastEthernet port adapter instead of the integrated FastEthernet/gigabit ethernet ports on the I/O module.

- CSCdu65099

  A vendor-specific controller may not be connected to a Systems Network Architecture (SNA) switch. This condition occurs because the vendor-specific controller sends an IEEE exchange information ID (XID) to sap 0x00 as explorer frames (in place of test polls). When SNA Switching Services (SNASw) is configured on a physical Token Ring interface or a virtual Token Ring interface, there is no response to the IEEE XID. There is no workaround.

- CSCdu71380

  A Cisco router that is running Cisco IOS Release 12.1(03a)T01 with a DLSw+ Ethernet Redundancy (DLSW-ER) circuit may pause indefinitely in the COLLECTING state when displayed with the **show dlsw transparent cache** privileged EXEC command. The result is that the DLSw circuit is not established. The DLSw reachability is correct, but the exchange of identification (XID) is not forwarded.

  Workaround: Reload both of the DLSW-ER routers. Do not use the **shut** command in DSP configuration mode followed by the **no shut** command on one of the DLSW-ER interfaces in an attempt to clear the problem because this action causes the other DLSW-ER router to reload.

Interfaces and Bridging

- CSCdp88674

  ATM subinterfaces might appear as INACTIVE when you use the **show atm vc** privileged EXEC command. This symptom occurs when you add new subinterfaces to the router. Using the **shut** and the **no shut** commands on the subinterface do not correct the problem.

  Workaround: Use the **shut** command followed by the **no shut** command on the main interface in order to bring the state to ACTIVE.

- CSCds27794

  A Cisco router that is running Cisco IOS Release 12.1(02.06)E with distributed Cisco Express Forwarding (dCEF) enabled drops packets rather than punting them when using distributed switching to or from a Token Ring interface.

  Workaround: Disable distributed CEF switching on Token Ring interfaces.

- CSCds65930

  Symptoms Bridge protocol data units (BPDUs) of the spanning tree are not passed over an ISDN line.

  Conditions This symptom is observed on a Cisco 2600 series router.

  Workaround There is no workaround.

- CSCds71828

  Symptoms The **debug token ring** EXEC command gives the following extra output when applying the access-list 1100 filter:

  ```
  riflen 10, rd_offset 6, llc_offset 24 *Nov
  14 11:48:35: riflen 10, rd_offset 6,
  llc_offset 24 riflen 12, rd_offset 2,
  llc_offset 26 riflen 8, rd_offset 3,
  llc_offset 22 riflen 8, rd_offset 260419,
  llc_offset 22 riflen 8, rd_offset -148349,
  llc_offset 22 riflen 8, rd_offset
  -1097469, llc_offset 22
  ```

  Conditions The symptom occurs when this output is printed for all packets and should only be output for access list checks matching the Media Access Control (MAC) addresses specified in the access-list.

  Workaround There is no workaround.

- CSCdt05584

  The **decnet host** global configuration command does not function with IP distributed Cisco Express Forwarding (dCEF) enabled. All other DECnet functions work properly.

  Workaround: Upgrade to Cisco IOS Release 12.2(5).

- CSCdt59038

  When Multilink Protocol (MLP) over ATM is used, a data transfer with a large packet size does not work, and active voice call quality may degrade to an unacceptable level.

  Workaround: Use a packet size smaller than the per vc tx_ring_limit.

- CSCdu43315

  In a configuration with multiple T1 through T3 interfaces, it may not be possible to query for Simple Network Management Protocol (SNMP) statistics because the snmpwalk and snmpget functions do not display data for some interfaces. There is no workaround.

- CSCdu53910

  After the line protocol for the ATM-Circuit Emulation Services (CES) is enabled, the line protocol may become disabled and remain disabled. There is no workaround.

- CSCdu75801

  Symptoms A Cisco router may reload when a channel group is first configured, then unconfigured, and reconfigured again.

  Conditions This symptom is observed on a Cisco 7500 series router that is running Cisco IOS Release 12.2(03.02)T with channelized port adapters(CT3/Ce3/Ct1/CE1).

  Workaround There is no workaround.

- CSCdu80623

  A Cisco router running Cisco IOS Release 12.2(03.03)T (rsp-pv-mz.122-3.3.T image) with the **tag-switching ip** interface configuration command enabled on a channelized CT3 Port Adapter with a Versatile Interface Processor (VIP) and Multiprotocol Label Switching (MPLS) enabled may display a DMA-1-DRQ_EMPTY_PAK message. There is no workaround.

IP Routing Protocols

- CSCdp05523

  If the address range defined in a Network Address Translation (NAT) pool is large, CPU utilization may rise to 100 percent.

  Workaround: Reduce the TCP translation timeout to clear the earlier entries.

- CSCdr11869

  Static outside Network Address Translation (NAT) may not work with Cisco Express Forwarding (CEF) if CEF was active before NAT. There is no workaround.

- CSCds41275

  The Open Shortest Path First (OSPF) router process may cause CPU utilization to increase to 99 percent utilization and cause low memory problems after a router is upgraded to Cisco IOS Release 12.0(13)S.

  Workaround: Remove and reconfigure the router OSPF.

- CSCds67028

  A Cisco 7200 series router may reload with a bus error in ipigrp2_ager while running Enhanced Interior Gateway Routing Protocol (EIGRP). There is no workaround.

- CSCdt19638

  A Cisco router may not propagate an updated Border Gateway Protocol (BGP) best path to other BGP peer routers. This condition occurs under rare circumstances.

  Workaround: Enter the **clear ip bgp * out** EXEC command to update BGP peer routers with the current best path attributes.

- CSCdu01537

  Under certain circumstances in a redundant topology, traffic loss can occur for up to 60 seconds after the designated router (DR) has rebooted. There is no workaround.

- CSCdu32820

  A router with a configuration containing IP static routes with an administrative distance of 115 may reload when the Intermediate System-to-Intermediate System (IS-IS) Protocol Partial SPF is run. This problem occurs regardless of whether the static route is redistributed into IS-IS. This behavior

has been observed on Cisco 2500 series and 3600 series routers that are running Cisco IOS Release 12.0(10)S, 12.0(7)T, 12.1(5), or 12.1(8). An error message similar to the following may be observed in the log as a result of the reload:

```
%CLNS-1-LINKERR: ISIS: LSP prev doesn.t point at head in 0x1C524E, lsp_next 0x0,
lsp_prev 0x0, index 0, ver 0, head 0x155AAC -Traceback= 37C5006 37C52E4 37C55FC
37A1A00 37A1C5A 37A2750 37C2428 37C2FF2 37B7B6A 37B82C8
```

An IP static route with an administrative distance of 114 or 116 does not cause a reload.

Workaround: Use an administrative distance other than that of 115 since 115 conflicts with IS-IS.

- CSCdu46694

  A Cisco 7500 router that is running Cisco IOS Release 12.1(8) may experience some packet loss between hosts after Cisco Express Forwarding (CEF) is enabled. There is no workaround.

- CSCdu47997

  A Cisco 12000 series Internet Router that is running Cisco IOS Release 12.0(14)ST may experience a Border Gateway Protocol (BGP) filter list that may fail to deny all the prefixes that are received from a peer that has a matching as-path attribute on the regular expression. This condition only occurs only when as-path filter lists and route-maps are used for inbound filtering for the same BGP peer.

  Workaround: Do not configure an as-path access list to be applied to the BGP neighbor using the **neighbor** {*ip-address* | *peer-group-name*} **filter-list** *access-list-number* {**in** | **out**} command.

- CSCdu58623

  Symptoms The Border Gateway Protocol (BGP) update may be processed and propagated without resetting the BGP peer.

  Conditions This symptom occurs when a Cisco router receives AS-PATH attributes with confederation information from an external Border Gateway Protocol (eBGP) neighbor that is not a Cisco router.

  Workaround Configure an AS-PATH filter "(*)" with the eBGP neighbor.

- CSCdu61858

  In a Multiprotocol Label Switching (MPLS) virtual private network (VPN) environment, a provider edge (PE) router that is running Open Shortest Path First (OSPF) should consider only Type-3 link state advertisements (LSAs) that are coming from the backbone area (area 0). In some situations a PE router may mistakenly consider Type-3 LSA that are coming from a nonbackbone area and install the prefix advertised by the Type-3 LSA in the VPN routing/forwarding instance (VRF) routing table.

  Workaround: Force the full shortest path first (SPF) algorithm by entering the **clear ip ospf** {**process**} EXEC command.

- CSCdu62451

  Symptoms A Cisco router may experience %SYS-2-BADSHARE errors and tracebacks messages while Network Address Translation (NAT) translates Internet Locator Service (ILS) packets.

  Conditions This symptom occurs on a Cisco router that is running Cisco IOS Release 12.2 with NAT configured.

  Workaround There is no workaround.

- CSCdu66094

  When a static auto-rendezvous point (RP) configuration (all interface sparse-mode) is used and the RP-announce is sourced from a physical interface, the router may not register to the mapping agent. This may result in the RP not being advertised.

Workaround: Use a Loopback interface as the rp-announce source.

- CSCdu69313

  Symptoms A Cisco router may reload.

  Conditions This symptom occurs when a Cisco router that is running Network Address Translation (NAT) with watchdog timeout indicates the number of NAT translations are high and translations are timing out.

  Workaround Configure a large timeout value.

- CSCdu70301

  Symptoms Cisco routers that are using Network Address Translation (NAT) in certain configurations may generate Internet Control Message Protocol (ICMP) “type 3 code 4” messages containing untranslated IP addresses in the header of the original IP packet.

  Conditions This symptom is observed on Cisco routers that are running Cisco IOS Releases 12.1, 12.1 T, 12.2, and 12.2 T configured with NAT.

  Workaround Add NAT commands (identify translations if no translation is needed) to force NAT to translate the header of the ICMP packet.

- CSCdu73495

  A Cisco router that is running Cisco IOS Release 12.1 may sometimes experience Enhanced Interior Gateway Routing Protocol (EIGRP) routes that cannot be seen even when the message digest algorithm 5 (MD5) is authenticated on all routers. This problem is intermittent and may occur when authentication is turned off and subsequently turned back on again. Sometimes, this problem occurs just after authentication is enabled.

  Workaround: This problem is intermittent and may be resolved by disabling and reenabling authentication a second time. This problem also may be resolved automatically after a few minutes.

- CSCdu79625

  Cisco routers running Enhanced Interior Gateway Routing Protocol (EIGRP) may point to each other for certain IP prefixes under rare circumstances, causing a routing loop. There is no workaround.

- CSCdu81936

  If a Cisco router receives an Address Resolution Protocol (ARP) packet that has the routers own interface address but with a different Media Access Control (MAC) address, the ARP packet can overwrite the routers own MAC address in the ARP table, causing that interface to stop sending and receiving traffic. This attack is successful only against interfaces on the Ethernet segment that is local to the attacking host.

  Workaround: Hard code the interface ARP table entry by using the **arp** *ip-address hardware-address type* [**alias**] global configuration command. This entry will remain in the ARP table until the **no arp** *ip-address hardware-address type* [**alias**] global configuration command is issued.

  Refer to the advisory at the following URL:

  http://www.cisco.com/warp/public/707/IOS-arp-overwrite-vuln-pub.shtml

Note Note: This caveat does not apply to switches that are running Cisco CatOS software, only to switches running Cisco IOS software.

- CSCdu83660

  Symptoms Race condition may cause a reload.

Conditions This symptom may occur by a code change in CSCds41275.

Workaround Replace the original code.

- CSCdu84602

  A Cisco 1700 series router running Cisco IOS Release 12.2 with a Cisco CallManager hardware conference device connected to two IP phones on the outside interface may experience a one way audio problem during a conference using Network Address Translation (NAT) with overload.

  Workaround: Use NAT only without overload.

- CSCdv04214

  A Cisco router that is running Cisco IOS Release 12.2 may reload when attempting to generate an Open Shortest Path First (OSPF) summary or external link-state advertisements (LSAs) under depleted memory conditions. There is no workaround.

- CSCdv05881

  A Cisco 7200 series router that is running Cisco IOS Release 12.2(3) may reload with a red-zone violation error when multiple configuration lines of IP Network Address Translation (IP NAT) pool addresses are specified. There is no workaround.

- CSCdv13170

  Symptoms When multicast packets are fast switched, spurious access messages will appear and cause a high CPU load.

  Conditions Fast switching of multicast packets is enabled.

  Workaround There is no workaround.

- CSCdv18044

  Symptoms A memory leak of approximately 1KB occurs for individual Multicast Source Discovery Protocol (MSDP) connection retry intervals. The default is 60 seconds.

  Conditions Symptom appears on a Cisco router that is running Cisco IOS Release 12.1(8a)E03 when an MSDP peer with a higher IP address fails.

  Workaround Use the MSDP configuration command, **ip msdp shutdown** *{peer-address|peer-name}*, to shut down the session to the unreachable peer.

- CSCdv22980

  Symptoms A Cisco router may reload with illegal access to low address.

  Conditions A Cisco router configured with Network Address Translation (NAT) may reload with illegal access to a low address. This condition is caused by the attempt to allocate memory in the interrupt path.

  Workaround Disable Cisco Express Forwarding (CEF) switching and Fastswitching.

ISO CLNS

- CSCdu42374

  Symptoms A Cisco router may reload.

  Conditions A Cisco router may reload if the Multiprotocol Label Switching (MPLS) traffic engineering (TE) tunnel has a very large topology, for example, too many downstream nodes behind the tail-end tunnel.

Workaround Configure the **mpls traffic-eng max-child 0** command under the **router isis** command to disable the autoroute optimization.

Miscellaneous

- CSCdp09904

  When matching proxy identities, IP Security (IPSec) matches the local and remote identities as given in the access control list (ACL) and reverses the remote and local identities. This condition can cause failures because reversing the proxy identities may cause the identities to match a higher priority crypto map that has an ACL entry that covers the reversed identities.

  Workaround: Find the peer listed in the lower priority crypto map entry. Add that peer again to the higher priority crypto map entry.

- CSCdr63534

  When the maximum transmission unit (MTU) size on an asynchronous interface is changed, large packets do not get forwarded even though they are correctly negotiated by point-to-point protocol (PPP).

  Workaround: Enter the **shut** command followed by the **no shut** command on the interface or enter the **clear interface** EXEC command to force the interface to recognize the new MTU setting.

- CSCds12178

  A Cisco Lightstream 1010, Catalyst 8540, or Catalyst 8510 switch that is operating Multiprotocol Label Switching (MPLS) on ATM interfaces may exhibit label virtual circuit (LVC) resource exhaustion on all interfaces when LVC allocation is performed with label-controlled ATM (LC-ATM). LVC allocation will fail when the end of the Virtual Connection Identifier (VCI) range is reached and if the start or end VCI value is not divisible by 32. This occurs because of an error in how the resource management routines handle label allocation.

  Workaround: Define a VCI range using the start and end values that are divisible by 32.

- CSCds38408

  Routed bridge encapsulation (RBE) does not pad frames from less than 64 bytes Ethernet size to exactly 64 bytes Ethernet size if the router fast-switches the packet. But if the remote site does not pad the frame, the frame is dropped on the Ethernet as a runt.

  Workaround: Turn off fast switching on the ATM interface.

- 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.

- CSCds84896

  If two routers are linked by multiple links and if you use the **no tag-switching ip** interface configuration command on some of the interfaces, while the **tag-switching ip** interface configuration command is still configured on the other links, then tagged packets continue to be forwarded through the untagged interfaces.

  Workaround: Enter the **no tag-switching ip** interface configuration command followed by the **tag-switching ip** interface configuration command on all the interfaces.

- CSCds86023

  A PA-E3 controller installed on a Cisco 7206VRX router that is running Cisco IOS Release 12.0(13)S, 12.0(14)S, or 12.1(5) may reset itself frequently. One carrier transition is registered for each interface reset. The output of the **show controllers** privileged EXEC command shows that the tx_fullring value increases in proportion to the interface resets. Under this condition, a memory leak in the I/O-2 pool reloads the router. There is no workaround.

- CSCdt18150

  A Cisco 7500 series router that is equipped with Versatile Interface Processor (VIP) modules capable of distributed switching and configured with label-controlled ATM interfaces in multi-virtual circuit mode stops forwarding traffic to the multi-VC destinations after toggling distributed Cisco Express Forwarding (dCEF) off and on with the **no ip cef**, **ip cef distributed** command sequence.

  Workaround: Use CEF instead of dCEF.

  Alternate workaround: Clear the IP routing table using the **clear ip route** EXEC command.

- CSCdt33317

  On a Cisco 7500/RSP series router, packets that are received on a Spatial Reuse Protocol (SRP) interface and switched on the Route Switch Processor (RSP) will fail to get Cisco Express Forwarding (CEF) or fast switched going into a tunnel interface and get dropped. This situation only occurs on the Cisco 7500/RSP routers with SRP interfaces.

  Workaround: Disable CEF and fast switching on the tunnel interface.

- CSCdt51547

  With certain ATM subinterfaces, the **ip verify unicast reverse-path** interface configuration command may incorrectly drop a fraction of incoming traffic. There is no workaround.

- CSCdt60299

  A Cisco router that is running Cisco IOS Release 12.1(5)T1 or 12.2(1a) may reload with the following conditions when traffic shaping is configured:

  – The following conditions are found in logs and/or reload information:

```
%SYS-3-OVERRUN: Block overrun at 63CFDB50 (red zone 00000120)
-Traceback= 60337258 6033A0C0 6033B190 6033B3D8 6032AFE4 6032AFD0
%SYS-6-MTRACE: mallocfree: addr, pc 63BCC844,60343A48 63BCC844,3000001E
6388EAA8,60343A48 6388EAA8,3000002A 63B2BFFC,60344000 63B2BFFC,30000050
63B2BFFC,603444C8 6388EAA8,60343B80
%SYS-6-MTRACE: mallocfree: addr, pc 63BCC844,60343B80 63C5FA98,6085DB28
63C5FA98,608569FC 63C5FA98,3000001E 63C5FA98,6085DB28 63C5FA98,608569FC
63C5FA98,3000001E 63C5FA98,6085DB28
%SYS-6-BLKINFO: Corrupted redzone blk 63CFDB50, words 14, alloc 604CC338, InUse,
dealloc 0, rfcnt 1
-Traceback= 60334EC4 6033726C 6033A0C0 6033B190 6033B3D8 6032AFE4 6032AFD0
%SYS-6-MEMDUMP: 0x63CFDB50: 0xAB1234CD 0x21 0x63D8C71C 0x61B888F8
%SYS-6-MEMDUMP: 0x63CFDB60: 0x604CC338 0x63CFDB94 0x63CFDAC8 0x8000000E
%SYS-6-MEMDUMP: 0x63CFDB70: 0x1 0x602B1614 0x0 0x0
```

  – The following conditions are found by using the **show version** EXEC command following the reload:

```
System returned to ROM by error - a Software forced crash, PC 0x<hexvalue> at <time
date>
```

  There is no workaround.

- CSCdt66581

  The Gigabit Ethernet (GE) line card or Fast Ethernet 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.

- CSCdt71082

  A Cisco 7200 series router that is using any DS3 port adapter configured with two or more DS3 interfaces may experience line flaps at high rates of traffic. The router logs the following message:

  ```
  MUESLIX-1-HALT: Mx serial: Serial6/0 TPU halted: cause 0x3 status 0x00371A00
  ```

  There is no workaround.

- CSCdt78894

  If a Cisco AS5400 universal access server that is running Cisco IOS Release 12.2 experiences a reload, the stack trace will be lost if another reload related to exception handling occurs. There is no workaround.

- CSCdt85206

  A Cisco 7200 Internet router that is running Cisco IOS Release 12.1 with a multichannel DS1/PRI port adapter (PA-MC-4T1) may experience calls that pause indefinitely. The calls that are dropped will not get reestablished. There is no workaround.

- CSCdt88628

  Due to a defect in modem management, a modem may become wedged in the management state and cannot be recovered by reinitialization (including downloading a new copy of portware). Once modem recovery is configured, modem recovery should occur automatically and should not require additional operator intervention.

  Workaround: Issue the **clear modem all** EXEC command to clear the modem.

- CSCdt89644

  A Cisco 3600 series router that is running Cisco IOS Release 12.1 T and 12.2 T may experience an Internetwork Packet Exchange (IPX) ping failure for both Generator and Reflector with the Routing Information Field (RIF) not updated in the IPX network.

  Workaround: Send the IPX packet to the unit under test (UUT) to update RIF and ping.

- CSCdt94696

  A Cisco 7200 series router that is running Cisco IOS Release 12.1(3a)T8 with an E1 interface that is configured for E1 channel associated signaling (CAS) (specifically R2 signaling) may fail to detect a G.704 CAS multiframe alignment error, thereby failing the G.704 standard for CAS signaling. There is no workaround.

- CSCdu00255

  When an FTP client PC receives a file from an FTP Server, a Cisco 3640 router with a compression network module (NM-COMPR) (HW revision 2.0) and an 4-port ISDN BRI network module (NM-4B-S/T) pauses indefinitely. Other modules (for example, a 1-Port ISDN-BRI WAN interface card [WIC 1B S/T]) work correctly. Software Compress also works correctly.

  Workaround: Use a Cisco IOS release prior to Cisco IOS Release 12.1(4).

- CSCdu05173

  A Cisco 7500 series router may use invalid Cisco Express Forwarding (CEF) entries on Versatile Interface Processors (VIPs) to switch traffic when distributed Cisco Express Forwarding (dCEF) is disabled. The CEF entry on the Route Switch Processor (RSP) is valid while the entry on the VIP is invalid.

  Workaround: Reboot the VIP and use the **clear cef line** *slot* command to clear the lines for each VIP until all the VIPs become visibly synchronized in the output when the **show cef linecard** command is entered.

- CSCdu06930

  A Cisco 7500 series router that is running Cisco IOS Release 12.0(16)S with distributed Multilink PPP (MLPPP) enabled may experience bounced traffic if the amount of traffic that is sent through the multilink interface is double the capacity of the interface. There is no workaround.

- CSCdu17981

  A Cisco 5000 series router that is running Cisco IOS Release 12.2 may experience a ring number and VLAN mismatch. A ring that does not exist in a network or has been previously configured under a different VLAN may appear under a given VLAN.

  In the following command output from the **show source** EXEC command, ring number 525 appears to be configured under VLAN 207 although ring number 525 has been previously configured to be under another VLAN.

  ```
  bn: 15 rn: 525 local ma: 0000.0000.0000 Vlan207 fwd: 0
  ```

  In the following command output, ring number 4095 appears to be associated with VLAN 109 although ring number 4095 has not been previously configured.

  ```
  bn: 15 rn: 4095 local ma: 0000.0000.0000 Vlan109 fwd: 0
  ```

  Workaround: Remove and reconfigure the VLAN configuration.

- CSCdu19272

  A Cisco 7206VXR router that is running Cisco IOS Release 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.
  ```

  There is no workaround.

- CSCdu19311

  A Cisco 2621 router with a Dual-Port Fast Ethernet Port Adapter, a High Density Voice Network Module, and a 2-Port RJ-48 multiflex Trunk - E1 multiflex voice/WAN interface card may reload in about 10 to 20 seconds after the router accepts a call that is placed to the fax extension. This symptom does not occur if the calls to the fax extension are not answered. 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.

- CSCdu21674

  A Cisco 7500 series router that has Multicast Distributed Fast Switching (MDFS) enabled may stop processing multicast packets if MDFS is disabled globally using the **ip multicast-routing** global configuration command (without the distributed keyword) without first disabling MDFS on the input interface using the **ip mroute-cache** interface configuration command (without the distributed keyword).

  Workaround: To avoid this problem, first disable MDFS on the input interface with the **ip mroute-cache** interface configuration command and then disable MDFS globally with the **ip multicast-routing** global configuration command.

  Reenable MDFS using the **ip multicast-routing** [**distributed**] global configuration command.

  Alternate workaround: Disable MDFS on the versatile interface processor (VIP) using the **ip mroute-cache** interface configuration command. MDFS can then be disabled globally on the router. If this does not work, reload the router and set the MDFS status as desired.

- CSCdu21792

  When adaptive pacing is used on a System Network Architecture (SNA) session, a branch network node (BrNN) may send an isolated pacing message (IPM) with a next-window size that is too large for the available memory on the router. This condition may result in SYS-2-MALLOCFAIL messages and the loss of logical unit-logical unit (LU-LU) sessions. 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.

- CSCdu24409

  When the compress-config service is enabled on a router while there is a configuration file that is greater than the size of the NVRAM, the following error message is displayed when the

  copy rcp://username@servername/config.name startup-config command is entered:

  ```
  Accessing rcp://username@servername/config.name...! %Error copying
  rcp://username@servername/config.name (Not enough space on device)
  ```

  There is no workaround.

- CSCdu26813

  A Cisco 2600 Advanced Integration Module (AIM)-virtual private networking (VPN)/Base Performance (BP) advanced interface module on a Cisco 2600 router may fail to decrypt inbound traffic if Cisco Express Forwarding (CEF) is used with hardware encryption in the tunnel mode. Pings to the crypto peer may fail. A “zero” number of packets are encrypted or decrypted when the **show crypto engine accelerator statistics** EXEC command is entered.

  Workaround: Disable CEF and use fast switching instead.

- CSCdu27865

  A Cisco 4500 series router may experience memory problems and reload under conditions where there are large numbers of IPSec tunnels configured and heavy traffic conditions. There is no workaround.

- CSCdu29524

  Real-Time Transport Protocol (RTP) header compression may corrupt connection trunk signalling under certain circumstances.

  Workaround: Disable compression Real-Time Protocol (cRTP).

- CSCdu30070

  IP Security (IPSec) traffic that is sent over a digital subscriber line (DSL) connection that uses the Asymmetric Digital Subscriber Line (ADSL) WAN Interface Card (WIC) and the Hardware Encryption accelerator module for a Cisco 1700, a Cisco 2600, or a Cisco 3600 series router fails when a dialer interface configuration is used. The input queue of the dialer interface wedges and all traffic is dropped.

  Workaround: Configure a virtual template instead of a dialer interface to pass encrypted traffic.

- CSCdu30194

  Flapping an ATM subinterface on a Cisco 7500 series router that is running Cisco IOS Release 12.2(2)T or 12.2(2)T1 may result in a Virtual Interface Processor (VIP) reload when all of the following conditions are true:

  - There are two Multiprotocol Label Switching (MPLS) enabled ATM subinterfaces (each on a different physical interface).
  - The Multi-VC feature is configured.
  - The output service policy is attached.
  - Traffic headed for a certain destination that uses either of the ATM subinterfaces as an outgoing interface.

  There is no workaround.

- CSCdu32267

  There is a mismatch in the **rsvp received** label and the label that is installed in the Tag Forwarding Information Base (TFIB).

  Workaround: Enter the **no mpls ip** global configuration command followed by the **mpls ip** global configuration command.

- CSCdu34038

  Fancy queueing cannot be configured on X.25 encapsulated serial interfaces. This problem affects all platforms. There is no workaround.

- CSCdu35229

  Hyper Text Transfer Protocol (HTTP) over Secure Socket Layer (HTTPS) on port 443 is not timing out of the command output of the **show ip inspect sessions detail** EXEC command after the FINs are exchanged. There is no workaround.

- CSCdu36171

  A configuration with multiple interfaces assigned to the same rlm-group is not supported on a Cisco router that is running Cisco IOS Releases 12.2(3), 12.2(2)XA, or 12.1(5)XM4. If this unsupported configuration is used, when the first rlm-group is removed and then a second rlm-group is removed, the gateway router reloads. This situation is seen only when multiple interfaces are assigned to the same unsupported rlm-group configuration.

  Workaround: Do not run the router with this unsupported configuration. If it is accidentally configured, remove the first rlm-group, write the configuration, reboot, and then remove the other rlm-group.

- CSCdu36716

  For virtual access interface on a Cisco 7500 router that has distributed Cisco Express Forwarding (dCEF) switching enabled, the packets that are destined to go out from the virtual access interface gets dropped at the ingress interface of the Versatile Interface Processor (VIP).

Workaround: Disable dCEF switching on all VIP interfaces using the **no ip route-cache distributed** command.

- CSCdu37163

  On a Cisco router, when Internet key exchange (IKE) keepalives are not used, the IPSec Security Associations (SAs) are being deleted when the IKE SA gets deleted. This is a change in our behavior, and would cause backward compatibility issues with older versions, by resulting in IPSec SAs which will be up on one side (using an older version), and one side not having the IPSec SAs. There is no workaround.

- CSCdu40761

  Spurious access is observed on a Cisco 7500 series router when a serial link is added to the multilink bundle while distributed Multilink PPP (dMLP) is enabled. There is no workaround.

- CSCdu40777

  A fxo-m1 card may not allow outbound calls to be made. The port goes offhook and then back onhook. This condition occurs when 8 or 11 digits are sent at the same time. Outbound calls can be made, and a dial tone will be generated if only a single digit is sent.

  Workaround: Use the fxo card instead of the fxo-m1 card.

- CSCdu41673

  The input and output rate statistics on an ATM subinterface on a Cisco 7500 router are not correctly reported. There is no workaround.

- CSCdu44294

  A Cisco 7500 series router running Cisco IOS Release 12.2 with Operations, Administration, and Maintenance (OAM) functionality enabled on a ATM switch using multiple routed protocols over permanent virtual circuits (PVCs) may experience spurious memory access. There is no workaround.

- CSCdu44831

  Symptoms During Service Processing Element (SPE) firmware download, if other SPEs on that line card have active calls, the SPEs on that line card may become stuck in boot mode, or the line card may reload.

  Conditions This symptom is observed on a Cisco AS5850 Universal Gateway.

  Workaround There is no workaround.

- CSCdu47052

  A Cisco 3660 router that is running Cisco IOS Release 12.2(0.5g) or 12.2(1) with a NM-1HSSI module may experience very intermittent bursts of carrier transitions that may bring down the line protocol.

  Workaround: Reload the router.

- CSCdu47187

  A Systems Network Architecture (SNA) switch may fail to release the buffers when memory is low. There is no workaround.

- CSCdu47419

  When a file with a size between *number* and *number-1* clusters is copied to an ATA disk that has a free space of *number* clusters, a truncated file may be created with a “Bad DFS cluster data passed” message. Each cluster is 4k in size. There is no workaround.

- CSCdu47982

  Symptoms When a call is made between two phones that are connected via a Voice over Frame Relay (VoFR) link, the progress indicator (PI) value of the incoming alerting message on the VoFR call leg is overwritten to a value of 8, causing the originating router to cut through the voice path in a forward direction awaiting ringback in-band regardless of whether ringback is actually sent. The PI value should not be overwritten but should be forwarded as is, over the VoFR link.

  Conditions These symptoms are observed on Cisco 3600 and Cisco 2600 series routers that are configured with VoFR and are running Cisco IOS Release 12.2(1). This condition occurs when the terminating phone is connected to a PBX that is in turn connected to a Cisco 3600 series router over an E1 line. If the PBX fails to return a ringback, even when a ringback is requested in the outgoing setup, no ringback is heard.

  Workaround There is no workaround.

- CSCdu48065

  The caret character (^) is not accepted in the **destination-pattern** command or the incoming **called-number** command in the dial-peer configuration mode. This is a change from previous versions. There is no workaround.

- CSCdu48296

  Symptoms On Media Gateway Control Protocol (MGCP) controlled calls, echo cancellation is set to “OFF” by default. An echo is heard on the voice path.

  Conditions This symptom is observed on Cisco IOS Releases 12.1(5)T, 12.2, and 12.2 T.

  Workaround There is no workaround.

- CSCdu48362

  Symptoms A router shelf may reload.

  Conditions This symptom is observed at WATCHDOG TIMER RESET when the **pri-group timeslots 1-24** command is removed from the controller configuration.

  Workaround 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.

- CSCdu48930

  A Cisco voice gateway running Cisco IOS Release 12.2(0.5e) may experience memory fragmentation, which could lead to memory allocation failures. The circumstances under which this may happen are unknown. There is no workaround.

- CSCdu49630

  A Cisco router may reload with a bus error when more than one call is received from an Accord Multipoint Conferencing Unit. The following messages will be displayed in the log.

  ```
  %CALL_CONTROL-6-CALL_LOOP: The incoming call has a global identfier already present
  in the list of currently handled calls. It is being refused.
  %SYS-3-MGDTIMER: Timer not a leaf, set_exptime, timer = 62D22480.
  -Process= "CCPROXY_CT", ipl= 0, pid= 90 -Traceback= 605F359C 605F3DE4
  ```

```
605F3EFC 611CF934 611CC6D8 611CD8B0 611D4DE0 611D6730 605DF544 605DF530
%SYS-3-LOGGER_FLUSHED: System was paused for 00:00:00 to ensure console debugging
output.
```

There is no workaround.

- CSCdu49836

  A Cisco 1750 router does not support the ext-signal under the dial peer. There is no workaround.

- CSCdu49898

  A Cisco 7500 router that is running the Enhanced Interior Gateway Routing Protocol (EIGRP) and flow switching may reload at dss_ip_calc_global_cms. There is no workaround.

- CSCdu50752

  Internet Key Exchange (IKE) negotiation that uses authentication by public key encryption (RSA encryption may fail if the public key of the peer is entered with the **named-key** *key-name* [**encryption** | **signature**] public key configuration command.

  Workaround: Supply an address to the **named-key** public key configuration command that corresponds to the IP address of the peer.

- CSCdu52247

  Symptoms Fax calls may fail if the dial peer is configured with the **fax rate 12000** dial-peer configuration mode command.

  Conditions This symptom is observed when using fax relay with Cisco IOS Release 12.2(2)T. Other fax data rates work fine.

  Workaround There is no workaround.

- CSCdu52446

  Symptoms The originating gateway (OGW) reloads because of memory leaking.

  Conditions This symptom happens under two circumstances:

  - OGW with Open Settlement Protocol (OSP) enabled, under heavy load
  - OGW with OSP enabled, call comes in within 5 seconds after gateway (GW) reboots

  Workaround Turn off OSP.

- CSCdu52687

  A Cisco router may reload when the **mpls label protocol ldp** interface configuration command is configured on a subinterface that has the **tag-switching ip** global configuration command and the **mpls label protocol tdp** interface configuration command enabled.

  Workaround: Enter the **no tag-switching ip** global configuration command on the router before changing the tag switching from label distribution protocol (LDP) to tag distribution protocol (TDP) or from TDP to LDP.

- CSCdu53060

  The ATM Permanent Virtual Circuit (PVC) Inverse Address Resolution Protocol (Inverse ARP) may not work as expected. Inverse ARP requests are not replied when the interface is a point-to-point connection.

  Workaround: Use a point-to-multipoint connection if ATM Inverse ARP is used, or use the protocol statement under the PVC configuration mode.

- 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

  A Cisco router may reload when 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). 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.

- CSCdu55874

  When calls that are already established or in the setup stage go through the gateway and you enter the **ds0 busyout 1-24** controller configuration command, the resource monitor sometimes shows the channels that were in use as free when they should be disabled. There is no workaround.

- CSCdu57137

  If the **write erase** command is entered on a Cisco 7200 router 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 ROMMON mode the next time the router is reloaded.

  Workaround: The configuration register needs to be changed to the desired setting to avoid this issue. Enter the **confreg 0x2102** command in ROMMON mode or enter the **config-register 0x2102** command in the global configuration mode.

- CSCdu57580

  A Cisco 2650 router that is running Cisco IOS Release 12.2(2.2) with a 3-DES image may experience a memory leak that is originated by the crypto Internet Key Management Protocol (IKMP) process. There is no workaround.

- CSCdu58607

  On a Cisco 7500 series router that is running Cisco IOS Release 12.0(13)S2 with **no service single-slot-reload-enable** configured and distributed Cisco Express Forwarding (dCEF) enabled, the online insertion and removal (OIR) of a Versatile Interface Processor (VIP) can cause the Multilink interfaces in other slots to go down, and the following error appears on the console:

  ```
  %OIR-6-REMCARD: Card removed from slot 4, interfaces disabled %RSP-3-NOIDB: bad vc 3
  on E1 9/1/0 %RSP-3-NOIDB: bad vc 3 on E1 9/1/1 %RSP-3-NOIDB: bad vc 3 on E1 9/1/2
  %RSP-3-NOIDB: bad vc 3 on E1 9/1/3
  ```

  After the message, the Multilink interface will go down together with the physical interfaces it is using, and the following messages are displayed:

  ```
  %LINK-3-UPDOWN: Interface Multilink4, changed state to down %LINEPROTO-5-UPDOWN: Line
  protocol on Interface Serial9/1/0:0, changed state to down %LINEPROTO-5-UPDOWN: Line
  protocol on Interface Serial9/1/1:0, changed state to down %LINEPROTO-5-UPDOWN: Line
  protocol on Interface Serial9/1/2:0, changed state to down %LINEPROTO-5-UPDOWN: Line
  protocol on Interface Serial9/1/3:0, changed state to down
  ```

After these messages, the router usually recovers, and all interfaces go up again. This situation does not occur when CEF is running instead of dCEF.

Workaround: Disable the keepalives on the member interfaces of the Multilink interface.

- CSCdu58992

  When large frames are sent to a Ethernet, Fast Ethernet, or Gigabit Ethernet interface that uses the i82543 MAC chip, the chip may continue to write descriptors back past the end of the descriptor ring, possibly causing a memory corruption. There is no workaround.

- CSCdu59135

  A Cisco router that is using Open Shortest Path First (OSPF) may experience a memory leak in the small buffers. This problem can only be seen in 12.2(1) or earlier versions. Since 12.2(1.1), the problem only can be seen if the multilink queuing bypass-fifo hidden command is configured. There is no workaround.

- CSCdu59676

  A Cisco AS5300 series access server that is running Cisco IOS Release 12.2(1) disallows use of the **test cch323 ras down** and **test cch323 ras up** commands to reset a Registration, Admission, and Status (RAS) session between the Voice over IP (VoIP) gateway and its gatekeeper without tearing down the active calls. 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, or 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.

- CSCdu59998

  Logical unit (LU) 6.2 sessions with Customer Information Control System (CICS) over an Enterprise Extender (EE) using connection network may come up fine initially but may subsequently be dropped.

  Workaround: Do not use a connection network; instead predefine the EE links.

- CSCdu60320

  When two voice gateways that are configured with slow start for H.232 calls have mismatching codec types with a remote gateway, the remote gateway may reload. There is no workaround.

- CSCdu60369

  The **logging synchronous** line configuration command may cause logging to stop.

  Workaround: Remove this command.

- CSCdu60508

  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). There is no workaround.

- CSCdu60632

  If a virtual trunk for Voice over IP is configured using the **connection trunk** command the router will reload unexpectedly each time it attempts to activate the trunk. If the **connection trunk** command is in the startup config then the router will reload unexpectedly immediately after reloading.

  Workaround: Avoid configuring the **connection trunk** command with the c7200-is-mz.122-2.5 image.

- CSCdu61652

  Automatic Number Identification (ANI) digits are not sent for the outgoing Voice calls over E1 trunks that are confirmed to use R2 signaling. There is no workaround.

- CSCdu61796

  If a spoke router is reloaded in a hub-and-spoke topology with IP Security (IPSec), the spoke router may reload with a SegV exception for a certain configuration. This condition has been observed with the Cisco 827 router.

  Workaround: Remove the configuration for the remote users from the hub router, specifically, the portion that relates to assigning IP addresses from the local address pool.

- 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).

- CSCdu62170

  On a Cisco 6400 node route processor (NRP) that is running Cisco IOS Release 12.1(5)DC1 or earlier, the Node Route Processor Fast Ethernet (NRP FE) port driver may reset when on encountering late collisions and may also lose Open Shortest Path First (OSPF) process and OSPF neighbor relationships. There is no workaround.

- CSCdu62489

  Enabling multicast fast switching may result in spurious accesses that cause high CPU utilization. There is no workaround.

- CSCdu62702

  A Cisco 7100 router that is running Cisco IOS Release 12.2(2.3) may fail after a tunnel that is configured as a crypto interface is removed from a serial interface. There is no workaround.

- CSCdu62998

  A Cisco 3660 router may occasionally reload after the **no frame-relay map-class** command is entered.

  Workaround: For a Frame Relay interface, change the map-class service-policy after shutting down the interface.

- CSCdu63407

  On a Cisco voice gateway, the **show call active voice** EXEC command may take several minutes to display the call leg information when there is a large number of active calls. There is no workaround.

- CSCdu64325

  In a Multiprotocol Label Switching (MPLS)/virtual private network (VPN) inter-autonomous system (InterAS) environment, if a Cisco router is configured as a VPN-IPv4 (vpnv4) Autonomous System Boundary Router (ASBR) and a provider edge (PE) router at the same time and if the VPN routing/forwarding instance (VRF) is removed from the ASBR configuration, tag-switching may fail for all prefixes in the VRF that have the same route distinguisher (RD) as the VRF that was removed. This condition occurs when all the PE routers use the same route distinguished (RD) for a VRF.

  Workaround: Use different RDs.

  Alternate workaround: Clear the Border Gateway Protocol (BGP) sessions after disabling the VRF.

- CSCdu64444

  On a Cisco 7400 series router that is running Cisco IOS Release 12.2(01)DX, Inter-Switch Link (ISL) packets may not be recognized by Cisco Express Forwarding (CEF) switching. This situation occurs only on PA-2FE-TX, PA-2FE-FX, C7200-I/O-2FE/E, C7200-I/O-GE+E, and C7401 native Gigabit Ethernet ports. All ISL packets are process switched, and the Committed Access Rate (CAR) feature does not work.

  Workaround: Use port adaptors other than those specified above.

- CSCdu64798

  A Cisco 7206VXR router that is running Cisco IOS Release 12.2(0.12)T with NPE-300 encounters a memory allocation failure in the IP Input process when trying to allocate abnormally large amounts of memory. A CPUHOG is seen indeterminate way and may cause it to reload.

  ```
  %SYS-2-MALLOCFAIL: Memory allocation of 1658983256 bytes failed from 0x60F075B0, pool
  Processor, alignment 0 -Process= "IP Input", ipl= 0, pid= 38
  -Traceback= 605E4A68 605E66D8 60F075B8 60EFF344 60F00D84 60F01360 60F0169C 60F00C08
  60F01360 60F0182C 60EFCC44 60EFBD1C 60EB20D4 60EB3E58 60E9EF84 60E9F4B0

  %SYS-3-CPUHOG: Task ran for 99392 msec (636/252), process = IP Input, PC = 606DF9E0.
  -Traceback= 606DF9E8 605DB264 605DB250
  ```

  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 releases.

  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.

- CSCdu65048

  After **debug sanity** is enabled on Cisco routers that support particles, the routers may experience a memory leak and reload. The amount of time that it takes for the memory leak to surface and the reload to occur varies. 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 drop-outs. 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.

- 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.

- 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.

- CSCdu69283

  Multiprotocol Label Switching (MPLS) does not function on a Cisco router that is running the Enterprise/FW/IDS Plus IPSec 56 feature set. The 0/32 permanent virtual circuit (PVC) is not established by the router. This situation does not occur with smaller feature sets, such as the Enterprise feature set. 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.

- CSCdu69292

  A Cisco 7206VXR router that is running Cisco IOS Release 12.0(17)ST with a Gigabit Ethernet Port Adapter (PA-GE) may stop forwarding traffic after logging the receipt of giant frames or packets. The interface pauses indefinitely but continues to increment the overrun counter in the **show interface gigabit** command output.

  Workaround: Enter the **shut** command in DSP configuration mode followed by the **no shut** command for the interface.

- CSCdu69500

  A Cisco router or access server that is running Cisco IOS Release 12.1 or 12.2 with Virtual Private Dialup Network (VPDN) configured may reload if the router or access server has low memory.

  Workaround: Ensure that sufficient memory is available on the router or access server.

- CSCdu70532

  Gateway does not ignore CAS signaling that is less than 100ms in duration as per EIA/TIA-464B specification.

- CSCdu71811

  A Cisco AS5400 universal access server that is running Cisco IOS Release 12.2 for incoming E1/R2 calls sends an abnormal clear-forward (AB=10) signal in the seize-acknowledge state. Instead, the Cisco AS5400 should send a congestion signal followed by a clear-backward (AB=11) signal and wait for the remote site to send a clear-forward signal. Switches of certain types take exception to the abnormal signal and block the circuit. There is no workaround.

- CSCdu71991

  Class-based Weighted Fair Queueing (CBWFQ) inside Generic Traffic Shaping (GTS) may fail when a service policy is attached while traffic is running. This failure occurs because spurious accesses can cause the router to pause indefinitely.

  Workaround: Stop traffic, and then attach or remove the service policy.

- CSCdu73738

  On a Cisco router for which flow control is set during a V.120 PPP session, data transfer may fail to continue even when flow control is released. This condition persists until the T203 timer (default value 10 seconds) indeterminate way and may cause it to reload expires and causes a low throughput rate to a user session instead of using the timer T200 (default value 1 second) as per V.120 link layer specifications. This situation affects all Cisco IOS software products that support ISDN or V.120. There is no workaround.

- CSCdu74485

  Symptoms Caller ID information is not collected with T1 CAS FXO GroundStart.

  Conditions This problem has been observed on a Cisco 3600 series router with a T1/E1 NM-HDV packet voice network module. It may occur on the Cisco 2600 series router.

  Workaround There is no workaround.

- CSCdu74951

  A Cisco 7500 series router with a Route Switch Processor 4 (RSP4) may reload with a bus error when issuing through a Telnet connection by using the **no service-policy output** *name* command in subinterface atm configuration mode.

  Workaround: Issue the **no service-policy output** global configuration command from the console port.

- CSCdu75477

  A Cisco router may experience a slow memory leak in the Non-Secure Shell (SSH) of TCPs. There is no workaround.

- CSCdu76221

  A Cisco router may not be able to ping between directly connected Cisco Resource Pool Manager Servers (Cisco RPMS) and there are no entries in the ATM mapping table. One RPM uses the main interface of the second subinterface.

  Workaround: Use the subinterface or configure **static map** manually.

- CSCdu76437

  A Cisco router for which the **shut** global configuration command is used followed by the **no shut** command on a voice port with connection trunk configuration may experience a reload. There is no workaround.

- CSCdu78603

  A Cisco router that is running Cisco IOS Release 12.2(2.1) may reload because of a problem with the QSIG Message Waiting Indicator (MWI) that causes a loop in the Call Distributor Application Programming Interface (CDAPI). The peer side may continue to see the same facility message. There is no workaround.

- CSCdu79417

  On a Cisco router that is running Cisco IOS Release 12.2(03.02)T for which a running configuration is saved, unnecessary exclamation point (!!!) characters may appear in the configuration output. There is no workaround.

- CSCdu79506

  Symptoms Not able to process piggyback message when running MGCP/NCS 1.0.

  Conditions This symptom is observed when the Call Agent uses the “carriage return, line-feed” character sequence (CRLF) to terminate message lines.

  Workaround There is no workaround.

- CSCdu79582

  A Cisco AS5300 access server (all Voice platforms) running Cisco IOS Release 12.2(02)XA (and all releases which support translation-rule) may find that Session Initiation Protocol (SIP) calls to a Madge switch are failing on the Terminating Gateway. This occurs when the Calling/Called Party Number Octet 3 values (Type of Number and Numbering Plan) are set to UNKNOWN (because the SIP protocol cannot transport these attributes), which causes the Madge switch to reject the call. There is no workaround on the Cisco Gateway. Therefore there is no workaround for private branch exchanges (PBXs) that cannot accept Unknown Numbering Plan in the Calling Party information element (IE) and/or Called Party IEs in the SETUP message.

- CSCdu80702

  Symptoms All incoming tagged packets on an ATM tagswitching subinterface may be process switched.

  Conditions This symptom is observed on a Cisco 7200 series router.

  Workaround There is no workaround.

- CSCdu81007

  The Cisco Express Forwarding (CEF) table is not updated properly when the IP address of an interface changes. The new IP address is added to the CEF table but the old one is not removed. If subinterfaces are used, the old ones remain in the CEF table even after the subinterfaces are removed.

  Workaround: The IP address is correctly deleted from the CEF tables when you shut the subinterface before changing the address.

- CSCdu81435

  A Cisco 7200 series router that is running Cisco IOS Release 12.2 may reload when the **crypto** command is used in global configuration mode. There is no workaround except not to use this command.

- CSCdu81518

  On a Cisco router that is running Cisco IOS Release 12.2 the interface for which the **ip address dhcp** command is being run takes too long to transition to the “up” state, so the Dynamic Host Configuration Protocol (DHCP) client code gives up and no address is assigned. This condition is specific to ATM interfaces and Bridge Group Virtual Interfaces (BVIs) with associated ATM interfaces.

  Workaround: Reissue the **ip address dhcp** command on the interface once the interface has successfully transitioned to the “up” state.

- CSCdu81625

  A Cisco 2600 series router running Cisco IOS Release 12.2(3.4)T using Voice/WAN interface cards (VWICs)–VWIC-2MFT-G703 or VWIC-1MFT-G703 only–in unframed E1 mode may experience large numbers of line errors. There is no workaround.

- CSCdu82070

  When a Cisco 7200 series router that is running Cisco IOS Release 12.1(05)T09, 12.2 12.2 T, or 12.0 S is configured with TAG-ATM and TAG-non-ATM interfaces, the flapping "tag ip" at the global level may cause an inconsistent local tag in the tailend VC and forwarding table, resulting in packets being forwarded to the wrong destination.

  Workaround: After entering the **no tag ip** RTR configuration command at the global level, wait for about 3 minutes to allow the tailend VC to be torn down, and then enter the **tag ip** command.

- CSCdu82789

  A Cisco IOS Mobile IP Home Agent that is running Cisco IOS Release 12.1(9.2) may reload when buffered packets are freed in the Mobile IP standby code path. This code path is used when the primary Home Agent (HA) does not receive binding update acknowledgements from the standby HA.

  If a binding update is sent to the standby router, and if an acknowledgement is not received, the binding update is queued for retransmission. If the primary HA has not received an acknowledgement after three retransmissions, there will be one last attempt before the buffer is cleared. A reload may occur if this sequence of events occurs repeatedly over a short period of time.

  The loss of communication with the standby HA or sustained high CPU utilization on the standby HA can cause this condition to occur. A high CPU utilization condition can trigger this situation by affecting the Binding Update Acknowledgements. The acknowledgements are delayed because the CPU is too busy to dedicate time to send them. Many factors can affect a router CPU and result in a sustained high CPU condition. While this condition may not be favorable under certain circumstances, high CPU utilization can be a normal and acceptable condition.

  Workaround: A patch can be applied to prevent the buffer from being released twice. The patch will be available first in the Cisco IOS Release 12.1(10.1) interim release. This fix will be integrated into the Cisco IOS Release 12.1(11) maintenance release.

- CSCdu83068

  On a Cisco AS5400 access server that is running Cisco IOS Release 12.2, the dial modifiers "X", "W" and "," do not work for outgoing calls. Dial modifiers are used only for multiple stage dialing. There is no workaround.

- CSCdu84031

  A Cisco 7500 series router that is hosting an ATM-PA-A1 port adapter in a Versatile Interface Processor (VIP) may begin losing its rx-side buffers when a high volume of traffic is sent through the router. The high volume of traffic may also increase the "rx-freeze" counter in the command log of the **show controller vip** *slot* **tech-support** EXEC command. There is no workaround.

- CSCdu85978

  A Cisco 7500 router may reload when Link Fragmentation and Interleaving (LFI) is configured. There is no workaround.

- CSCdu86320

  A Cisco 7200 series router that is running Cisco IOS Release 12.1(9) may experience a flapping line protocol on a full-duplex Fast Ethernet interface when Hot Standby Router Protocol (HSRP) is configured with nondefault timer values and the Ethernet cable is removed.

  Workaround: Ensure the HSRP hello and hold times are at least 3 and 10 seconds respectively, or configure the burned in address.

- CSCdu87662

  A Cisco AS5400 access server undergoes a software-forced reload when stress tested in a mixed call environment. The probable cause is the calligrapher process which is eating into the CPU resource. There is no workaround.

- CSCdu87914

  A Cisco 1750 router that is running Cisco IOS Release 12.2 encounters calls that end with a one-way audio problem. When a customer calls either from the public switched telephone network (PSTN) side or from a Cisco 1750 router side, the call establishment goes fine and then conversation occurs for a while (more than one minute). Then both sides hear a "click," after which the PSTN side cannot hear anything, although the Cisco 1750 side can still hear the PSTN side. There is no workaround.

- CSCdu87975

  A Cisco AS5400 access server that is running Cisco IOS Release 12.2(02)XA and using a Cisco SS7 Interconnect for Voice Gateways solution may experience a bus error reload at the function rlm_reopen_links after initially adding Non-Facility Associated Signaling (NFAS) interfaces and performing a **shut** command in DSP configuration mode on the Redundant Link Manager (RLM) group. There is no workaround.

- CSCdu88786

  A Cisco AS5800 access server that is running Cisco IOS Release 12.1(05)XM4 and that is configured to make outgoing Voice over IP (VoIP) calls with E1/R2 signaling may occasionally generate the following TIMEOUT message, although calls will still go through:

  ```
  %VTSP-3-DSP_TIMEOUT: DSP timeout on event 0x59: DSP ID=0x30103: DSP Disc (call mode=0)
  ```

  There is no workaround. This condition does not exist on other platforms, on a Cisco AS5800 that is running another type of line signaling, or on a Cisco AS5800 configured for taking incoming VoIP calls over E1/R2 signaling.

- CSCdv00152

  A Cisco 2600 or 3600 series router that is running Cisco IOS Release 12.2(3) does not support the **compand-type a-law** command in voice-port configuration mode on the Command Line Interface (CLI) for a Basic Rate Interface (BRI) port. Therefore, it is not possible to configure the Cisco 2600 or 3600 series router to work with Integrated Services Digital Network (ISDN) BRI port with a-law. There is no workaround.

- CSCdv00770

  A foreign agent router may reload after the **show ip mobile visitor** *address* EXEC command is entered if the address argument is not a designated visiting node on the router.

  Workaround: Enter the **show ip mobile visitor** EXEC command without the address argument on the foreign agent router. This command entry may cause a substantially long list of mobile node visitors to be displayed.

- CSCdv00963

  When configuring more than one trusted root certification authority (CA) for Cisco IOS Release 12.2, RA mode CA authentication may fail.

  Workaround: Configure only one trusted root CA.

- CSCdv01853

  A Cisco router that is running Cisco IOS Release 12.2(3.5) may experience a software-forced reload at ip_arp_refresh_adj after the **no shutdown** command is entered on a multipoint subinterface in LAN Emulation (LANE) testing. There is no workaround.

- CSCdv03724

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

- CSCdv04770

  On a Cisco 3600 series router that is running Cisco IOS Release 12.2(1a) may find that a voice port may not come back to its normal functional state after the **shut** command in DSP configuration mode is used followed by the **no shut** command when there is an outgoing call terminated on the port during the shutdown period. There is no workaround.

- CSCdv04956

  A Cisco server that is used as a Terminating gateway that is loaded with an “is” or “js” image may experience memory leak in the CCH323_CT process under stress, which forces a reload. The leak is attributed to H.245 tunneling configurations. When tunneling is enabled, the leak occurs. Tunneling of the H.245 channel usually occurs when a dial peer is configured for DTMF Relay. There is no workaround.

- CSCdv05733

  When a Cisco gateway router receives a facility message that has a “null” ISDN callref, it sometimes assigns that call a CCAPI callID that is currently in use. By doing this, it is interfering with current calls. Therefore, when the gateway router disconnects the leg associated with that facility message, it also drops the leg of the previous call that is running at that time because they share the same callID. There is no workaround.

- CSCdv06717

  Upon Switch Over in a Cisco SC2200 Signaling Controller, a Cisco AS5300 access server that is running Cisco IOS Release 12.2 may lose some of its T1 Controllers. In this situation, bearer channels on non-primary/secondary T1/E1 controllers will be lost or will be out of service. There is no workaround.

- CSCdv06837

  The **max-reserved-bandwidth** interface configuration command is not accepted in a Cisco 7200 series router although it is accepted in a Cisco 7500 series router. This inconsistency causes a service policy which can be accepted in a Cisco 7500 to suddenly not to be accepted. There is no workaround.

- CSCdv07928

  A Cisco 2600 series router that is running Cisco IOS Release 12.2 with Voice/WAN Interface Cards (VWIC-2MFT-T1-DI or VWIC-2MFT-E1-DI) may find that the Integrated Services Digital Network (ISDN) layer2 will not come up after a reload. The following message is seen on the router console during the reload:

  ```
  !!!! s:t:c:ts 1:1:15:16 already configured!!!
  ```

  In addition, the message “tdm voice connect failed” is displayed during boot up or when making calls.

  Workaround: Power cycle the router or reset time division multiplexing (TDM) switching and reload the High Density Voice Network Modules (HDV) firmware.

- CSCdv14277

  A Cisco AS5300 access server that is running Cisco IOS Release 12.2(3) with Open Settlements Protocol (OSP) may experience a memory leak caused by the CCH323_CT process that causes the router to reload once memory is depleted. There is no workaround.

- CSCdv14842

  Symptoms A router may reload upon boot up.

  Conditions Symptom occurs in a Cisco 4500 router that is running Cisco IOS Release 12.1(10.2) with a LAN Controller Ethernet (LANCE) installed in slot 1 or slot 2.

  Workaround Insert the Ethernet controller in slot 0.

- CSCdv17923

  Symptoms An E1 controller on a PA-VXC-2TE1+, PA-VXB-2TE1+, and PA-MCX-8TE1 may reset itself once every two to three seconds.

  Conditions Symptom occurs in Cisco 7200 series routers that are running Cisco IOS Release 12.2 when their controllers are connected to third-party PBXs.

  Workaround There is no workaround.

- CSCdv22719

  A Cisco 2600 or 3600 series router that is running Cisco IOS Release 12.2 with a Virtual Private Network (VPN) accelerator and a data compression advanced integration module (AIM) or a network module (NM) installed may reload when the **no crypto engine accelerator** configuration command is used. There is no workaround.

- CSCdv23890

  Symptoms When using a multiple number of T1 network modules (any of NM-1FE1CT1, NM-1FE2CT1, NM-1FE1CT1-CSU, NM-1FE2CT1-CSU) in a Cisco 3600 router, some or all of the network modules may be reported as unknown.

  Conditions This condition may happen only when two or more of the above mentioned T1 network modules are used in the same router.

  Workaround Remove all cards so that only one T1 network module is present in the router.

- CSCdv25816

  Symptoms Non-recognition of a partitioned device.

  Conditions TA partitioned device on a Cisco router that is running Cisco IOS Release 12.2(5) may not be recognized after a partition operation.

  Workaround There is no workaround.

- CSCdv27837

  When configuring more than one Trusted Root Certification Authority (CA) for Cisco IOS Release 12.2, Remote Access (RA) mode CA authentication may fail.

  Workaround: Configure only one trusted root CA.

- CSCuk25747

  A small memory leak of 144 to 288 bytes may occur each time a Hot Standby Router Protocol (HSRP) group becomes active.

  Workaround: Configure the **standby use-bia** interface configuration command.

Novell IPX, XNS, and Apollo Domain

- CSCdt43958

  Internetwork Packet Exchange (IPX) Enhanced Interior Gateway Routing Protocol (EIGRP) may experience a memory leak related to IPX routing instability. There is no workaround.

TCP/IP Host-Mode Services

- CSCdp39987

  A Cisco AS5300 universal access server that is running Cisco IOS Release 11.3 T or 11.3(10.06) AA may experience a software-forced reload with an error at PC 0x60201340. There is no workaround.

Wide-Area Networking

- CSCdk88854

  On a Cisco 7200 and 3600 series router, bridging over Frame Relay on a BRI interface will fail when static mapping is configured for the permanent virtual circuit (PVC).

  Workaround: Use routing instead of bridging, or use a point-to-point subinterface.

- CSCdp86381

  Systems which use Virtual Private Dialup Network (VPDN) to tunnel PPP sessions may experience buffer memory leaks on the home gateway router when those PPP interfaces have also negotiated the use of PPP multilink.

  In Cisco IOS releases prior to 12.2(1.1), this problem is only visible when multilink bundles which include VPDN tunneled PPP links are configured to use non-first-in, first-out (FIFO) queuing modes. As fancy queuing is not presently supported in conjunction with any form of VPDN session, correcting the bundle configuration to use FIFO queuing suffices to avoid the problem. Starting with Cisco IOS Release 12.2(1.1), the problem may also be seen even in cases where FIFO queuing is in effect.

  Workaround: Disable IP fastswitching (including CEF) on the interfaces which are carrying the VPDN tunnelled traffic between the network access server (NAS) and the home gateway (HGW).

- CSCdr87252

  A Cisco router may reload when the **traffic-shape** EXEC command is configured with X.25 or Link Access Procedure, Balanced (LAPB) encapsulation. Generic traffic shaping is not supported with X.25 or LAPB encapsulation. X.25 or LAPB can be used without generic traffic shaping.

  Workaround: Do not configure the **traffic shape** command with these protocols.

- CSCds40925

  On a Cisco LS1010 or 8500 series ATM switch, when you use the **show atm interface** [traffic] EXEC command on an ATM subinterface, the total number of cells that has passed is shown as zero (transmit as well as receive). The traffic rate on the subinterface is shown incorrectly.

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

- CSCds81335

  On a Cisco AS5300 access server that is running Cisco IOS Release 12.1(03a)XI03 a Called Party subaddress is not properly sent from the originating gateway to the terminating gateway. For example:

  On originating gateway: Called Party SubAddr i = 0xA021, ‘4’

  On terminating gateway: Called Party SubAddr i = 0xA1, ‘P4’

  There is no workaround.

- CSCds85331

  A Cisco 7500 series router that is running Cisco IOS Release 12.0(13.5)S with a Versatile Interface Processor (VIP) may reload at fec_get_hwidb when distributed Cisco Express Forwarding (dCEF) and forward error correction (FEC) are configured. There is no workaround.

- CSCdt07395

  Symptoms A router may reload.

  Conditions This symptom is observed on a Cisco router when it tries to bring up the dialer to make a X.25 pad call on the dialer interface.

  Workaround There is no workaround.

- CSCdt10355

  Symptoms A Cisco router may reload.

  Conditions This condition occurs when the primary rate interface (PRI) configuration is removed when there is ongoing call traffic.

  Workaround Avoid removing the PRI configuration when there is ongoing call traffic.

  Alternate Workaround Enter the **shut** command before removing PRI configuration to avoid this problem.

- CSCdt70631

  A Cisco 800 router may disconnect directory assistance service (104) in Japan. There is no workaround.

- CSCdt82308

  Symptoms A router may restart by bus error in outputq_dequeue_eval.

  Conditions This symptom occurs on a Cisco 2500 series router that is running Cisco IOS Release 12.1(7).

  Workaround There is no workaround.

- CSCdt88551

  When an IP digital subscriber line (DSL) switch is used as a Layer 2 Tunneling Protocol (L2TP) network server (LNS), the IP DSL switch may pause indefinitely or reboot if the ping sweep (from 64 to 1500) is generated from the customer premises equipment (CPE). There is no workaround.

- CSCdu01392

  Symptoms A Cisco router may reload with a bus error that points to a “poisoned” address of 0xD0D0D29.

  Conditions This condition is seen on a Cisco 3620 router that is running Cisco IOS Release 12.1(7).

  Workaround There is no workaround.

- CSCdu06849

  The **clear interface Serial0:23** EXEC command does not clear modem calls.

  Workaround: Clear the modem calls by entering the **clear line** *line number* privileged EXEC command.

- CSCdu15752

  Symptoms Spurious memory accesses may occur when locally generated voice packets are fast switched to Multilink bundles.

  Conditions These symptoms are observed on particle-based platforms, such as the Cisco 2600, 3600, and 7200 series of routers,

  Workaround There is no workaround.

- CSCdu16158

  After the introduction of CSCds32293 (integrated into Cisco IOS Release 12.1(5.3)T and 12.1(5.1)), virtual profiles identify interesting traffic using the dialer group inherited from the physical interface or legacy dialer interface. If no dialer group is defined on the physical or legacy dialer interface, no traffic is deemed interesting and the connection is dropped after the idle timeout (also inherited from the physical or dialer interface).

  Workaround: Add the dialer group to the parent interface so that interesting traffic is defined. This workaround will not work if dialer and virtual profiles are used on the same physical interface because the **dialer-group** interface configuration command and the **dialer pool-member** interface configuration command are mutually exclusive. If your setup involves the same dialer and virtual profiles on the same interface, use the alternate workaround instead.

  Alternate Workaround: Add a **ppp-timeout retry** *seconds* interface configuration command to the cloned virtual template for the virtual profile because the PPP timeout supersedes the default idle timeout.

- CSCdu25422

  A Cisco 2620 router running Cisco IOS Release 12.1(05)T07 with a Basic Rate Interface (BRI) to the public switched telephone network (PSTN) as a gateway for the Cisco Call Manager may experience disconnecting calls when using the European Telecommunications Standards Institute (ETSI) Supplementary Service. There is no workaround.

- CSCdu32204

  On a Cisco AS5800 access server that is running Cisco IOS Release 12.1(5)T8, PPP callback may not work for multilink calls. When PPP callback is done and AAA provides the callback dial string and then PPP multilink is used, callback is performed only for the first link in the multilink bundle. Additional links do not trigger callback. There is no workaround.

- CSCdu33245

  A Cisco router may reload when the **shut** command followed by the **no shut** command is entered on the controller. There is no workaround.

- CSCdu34184

  A Cisco router that is running Cisco IOS Release 12.2 with Frame Relay traffic shaping (FRTS) may reload when FRTS is deconfigured and reconfigured, and with increased traffic going through the permanent virtual circuit (PVC) that enables FRTS.

  Workaround: Either shut down the interface after deconfiguring FRTS or wait approximately 5 to 10 minutes before reconfiguring FRTS.

- CSCdu34195

  When dialer maps are used, entering the show caller full, the **show dialer** interface, and the **show source ip** EXEC commands will show the IP address that brought the line up. However, when **dialer aaa** is used, these commands will show only a generic hexadecimal number representing the dialer session rather than the source IP address that brought up the session. This condition makes it impossible to identify the source station that brought up the dialer session. There is no workaround.

- CSCdu37471

  Symptoms A Resource Availability Indication (RAI) may fail to be sent.

  Conditions This symptom occurs when the signaling channel on a Cisco SC2200 signaling controller is disabled.

  Workaround There is no workaround.

- 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.

- CSCdu42219

  Incoming calls may fail to connect and may be released. The system does not put B-channels on the first E1/T1 in service. Incoming calls are failing with channel unavailable. If the channels are “busyout” and “unbusy,” the service is disabled and reenabled and calls can be properly accepted. There is no workaround.

- CSCdu45569

  A Cisco 7513 router experienced a dialup failure using pri-group on a Multi-Channel E3 Port Adapter (PA-MC-E3) after a software upgrade of Cisco IOS Release 11.1(30)CC to 12.0(16)S1, following which all dial-ins and dial-outs failed with error messages at call-setup. There were no changes to the configuration. There is no workaround.

- CSCdu50419

  A Cisco router that is connected to a vendor-specific switch may experience no ringback with outside calls. After the CALL PROCEEDING message is received, a PROGRESS message such as an ALERTING message is received. There is no workaround.

- CSCdu51248

  In systems which use Multilink PPP’s bandwidth-on-demand features, multilink will not attempt to connect additional channels to bundles in response to heavy traffic loads.

  Workaround: Enter the **debug ppp multilink events** EXEC command to cause Multilink to request additional channels.

- CSCdu51346

  Symptoms May return to ROM with a bus error in Compression Control Protocol (CCP) processes.

  Conditions This symptom is observed on a Cisco AS5400 universal gateway.

  Workaround Disable compression.

- CSCdu51548

  Symptoms A Cisco 3620 router may reload in the “ipcp_add_ip_route” routine when performing asynchronous functionality (terminal server) tests.

  Conditions In this situation, the lines have been cleared for dial-on-demand routing (DDR), and the reload occurs while pings are being sent to Cisco 2600 series router through a modem.

Workaround There is no workaround.

- CSCdu59931

  Voice calls may be dropped when dial traps are enabled.

  Workaround: Disable the dial traps.

- CSCdu60028

  Symptoms When a router is short of memory, it may reload in cca_complete_setup.

  Conditions :This symptom may be observed on any Cisco router that is running Cisco IOS Release 12.1, 12.2, or 12.2 T, but only when another problem has caused a shortage of memory.

  Workaround There is no workaround.

- CSCdu60798

  Symptoms A Cisco AS5300 universal access server may reload.

  Conditions This symptom is observed on a Cisco AS5300 universal access server that is running Cisco IOS Release 12.1(5)T8 when Layer 2 Tunneling Protocol (L2TP) is enabled. The occurrence of this condition can be minimized by reducing the response time of the Authentication, Authorization, and Accounting (AAA) server.

  Workaround There is no workaround.

- CSCdu62721

  Incoming calls may fail to connect and may be released. The system does not put B channels on the first E1/T1 in service. Incoming calls are failing with channel unavailable. If the channels are “busyout” and “unbusy” the service is restored and calls can be properly accepted. This is observed on Cisco 5300 and 5800 universal access servers. There is no workaround.

- CSCdu68575

  Symptoms A Cisco 7500 series router may, upon reboot, have the VIP2-40 unexpectedly reload with an arithmetic exception or sig-5 error.

  Conditions This symptom was observed on a Cisco 7500 series router that is upgrading from Cisco IOS Release 12.0(12) to Cisco IOS Release 12.1(8.1b). This problem occurred on two separate routers. Both routers were Cisco 7513 routers with RSP4s and VIP2-40 with 8-port serial cards.

  Workaround There is no workaround.

- CSCdu72708

  Symptoms The **ip address negotiated** interface configuration command must be applied to the configuration of an interface before any other PPP commands.

  Conditions This symptom is observed when the on-demand address pool (ODAP) on-board Dynamic Host Configuration Protocol (DHCP) server is used.

  Workaround There is no workaround.

- CSCdu87877

  A Cisco AS5400 access server that is running Cisco IOS Release 12.2 may experience a reload during controller shut when the Non-Facility Associated Signaling (NFAS) backup D channel is configured before the primary D channel. There is no workaround.

- CSCdu88095

  On a Cisco AS5400 access server gateway in the Cisco SS7 Interconnect for Voice Gateways solution that is running Cisco IOS Releases 12.2(2)T, 12.1(5)XM, or 12.2(2)XA, the associated B channels do not come into service after configuring the Non-Facility Associated Signaling (NFAS) under the T1 controllers. If all the NFAS members are removed and then reconfigured and the **isdn rlm-group** command is applied, the B channels do not come into service.

  Workaround: There are two ways to workaround this problem before removing the NFAS members and adding them back in.

  1. Shutdown the D channel (rlm or int ser6/0:23); remove the pri-group; configure pri-group; and configure **isdn rlm-group 0**.

  2. Enter the **no isdn rlm-group 0** command first, and then remove all the NFAS members; **configure nfas** again, and then enter the **configure rlm-group** command.

- CSCdv01870

  A router may reload when a permanent virtual connection (PVC) is removed while a large amount of traffic is going through a PVC that has the **frame-relay adaptive-shaping interface-congestion** map-class configuration command configured. There is no workaround.

- CSCdv03689

  If a Point to Point Protocol (PPP) Multilink bundle interface goes down while data is flowing through it, a Cisco router may reload. There is no workaround.

- CSCdv16842

  Symptoms A router may reload when it is performing heavy IP Control Protocol (IPCP) address negotiations such as those that occur when an ATM or Frame Relay interface with several hundred links are brought up simultaneously.

  Conditions This symptom is only seen when several hundred IPCP sessions are renegotiated without a recycle of Link Control Protocol (LCP).

  Workaround There is no workaround.