Doc. No. 78-2406-04

Release Notes for Cisco 750 Series and Cisco 760 Series Routers Software Release 3.2(4)

This release note describes the features and caveats for Cisco 750 series and Cisco 760 series software for Software Release 3.2(4) and earlier. For complete software documentation for Software Release 3.2(4), refer to one of the following:

- *Cisco 750 Series and Cisco 760 Series Command Reference* publication
- *CiscoPro CPA750 Series and CiscoPro CPA760 Series Command Reference* publication

Caution The Cisco 750 series and Cisco 760 series routers each use a unique version of the software that is *not* interchangeable, so make sure you load the correct version shipped with the product.

System Support

Software Release 3.2(4) supports the following router platforms:

- Cisco 750 series
  - CISCO751, CISCO752, and CISCO753
  - CiscoPro CPA0751, CPA0752, and CPA0753
- Cisco 760 series
  - CISCO761, CISCO762, CISCO765 and CISO766
  - CiscoPro CPA0765 and CPA0766

Caution If you are using a Cisco 750 series router and upgrading to Software Release 3.2(4) from Software Release 3.2(1), you must load 3.2(4) using the console download. Do not perform the **software load (SWL)** using TFTP. This will damage the Cisco 750 router and require replacement. See page 9 [CSCdi60045].

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Note For the Cisco 700 series routers for Software Release 3.2(4), the ClickStart EZSetup option is available on the World Wide Web URL http://www.cisco.com.

Software Release 3.2(4) Enhancements

Software Release 3.2(4) contains the following software enhancements to Software Release 3.1:

- Support for Routing Information Protocol (RIP) version 2
- Support for compression over Point-to-Point Protocol (PPP)
- Support for snapshot routing updates for Internet Protocol (IP) and Internetwork Packet Exchange (IPX)
- Ability to rename profiles
- Support for Cisco 760 series routers
- Support for dual telephone interfaces and some supplementary services for the Cisco 760 series routers
- Additional generic filtering statistics
- Support for setting the length of the inactivity timer for remote login or Telnet or for disabling the timer
- ClickStart EZSetup router configuration option, available on the World Wide Web URL http://oracular.

Upgrading to Software Release 3.2(4)

You should install additional DRAM in existing Cisco 760 series and CiscoPro CPA760 series routers if you want to migrate to future software releases. Software releases later than Software Release 3.2(4) will require 1.5 MB of DRAM.

Note Cisco router models 761, 762, 765, and 766 (shipped after August 15, 1996) contain 1.5 MB of DRAM, so you do not need to add DRAM to these router models to install future Cisco 700 series software releases. Cisco router models 765-US, 765-CA, 765-CE, 765-NL, 765-UK,766-US, and 766-CA (shipped before August 15, 1996) contain 1 MB of DRAM. You must add at least an additional 0.5 MB of DRAM to these models to run future Cisco 700 series software releases.

Note CiscoPro router models CPA0761, CPA0762, CPA0765, and CPA0766 (shipped after September 1996) contain 1.5 MB of DRAM, so you do not need to add DRAM to these router models to install future CiscoPro CPA700 series software releases. CiscoPro router models CPA0765-US, CPA0765-CA, CPA0765-CE, CPA0765-NL, CPA0765-UK, CPA0766-US, and CPA0766-CA (shipped before September 1996) contain 1 MB of DRAM. You must add at least an additional 0.5 MB of DRAM to these models to run future CiscoPro CPA700 series software releases.

If you are running CiscoPro CPA700 series Software Release 3.2(4) or greater, use the **show memory** command to find the total memory installed in your CiscoPro CPA700 series router. The following shows a typical **show memory** command output:

```
NVStore Used:796, Remaining 1230 (Deleted 18 + Unused 1212), Total 2026
RamStore Used: 0, Remaining 10000, Total 10000
RAM Size = 0xf80000
```

Table 1 lists the RAM size values reported by the **show memory** command and their corresponding RAM size in Megabytes.

Table 1 Show Memory Command RAM Sizes

RAM Size (hexadecimal)	Model	Memory on Board
0xf800	CPA750 Series	1-MB
0x10000	CPA760 Series	1-MB
0x18000	CPA760 Series	1.5-MB
0x20000	CPA760 Series	2-MB

Complete the following tasks to upgrade to Software Release 3.2(4) from Software Release 3.1 and later:

- Use the **upload** command to save the present configuration settings in the Cisco 750 series and Cisco 760 series router to a file before you install the new software. (See the **upload** command in the *Cisco 750 Series and Cisco 760 Series Command Reference* or the *CiscoPro CPA750 Series and CiscoPro CPA760 Series Command Reference* publication for instructions.)
- Use the **software load** command to load the new software into the Cisco 750 series and Cisco 760 series router. (See the **software load** command in the *Cisco 750 Series and Cisco 760 Series Command Reference* or the *CiscoPro CPA750 Series and CiscoPro CPA760 Series Command Reference* publication for instructions.)

Note If you are upgrading from Software Release 3.2(1) to Software Release 3.2(4), see page 9 [CSCdi60045].

Saving and Restoring Configuration

The following steps provide an example of setting the data rate using Terminal for Windows, a popular terminal emulation software program:

Step 1 When the terminal emulation program is running, enter the following command, but do not press Return after you enter it:

UPL

Step 2 From the **Transfer** menu, select **Receive Text File**.

Step 3 In the Receive Text dialog box, specify a filename and select the directory to which you want to save the file.

Step 4 Click **OK**.

Step 5 When you return to the terminal emulation program, press Return.

All parameters will be saved to the directory specified in Step 3.

Step 6 Click **Stop**.

Loading New Software

The following steps provide an example of loading new software:

Step 1 Read and follow the **software load** command instructions in the *Cisco 750 Series and Cisco 760 Series Command Reference or the CiscoPro CPA750 Series and CiscoPro CPA760 Series Command Reference* publication.

After the new software is loaded, you can load the saved configuration to the router.

Step 2 From the terminal emulation program, go to the **Setting** menu and select **Text Transfer**.

The Text Transfer dialog box appears.

Step 3 Set flow control to Line at a Time and set Delay Between Lines to 0.5 to 1 second.

The value you enter (in seconds) will be used when you download software.

Step 4 Click **OK.**

Step 5 From the **Transfer** menu, select **Send Text File**.

Step 6 Select the file that you saved in Step 3 in the "Saving and Restoring Configuration" section.

Step 7 Click **OK**.

The parameters are transferred to your router.

Step 8 If any errors occur during this transfer process, enter the **set default** command, increase the delay between lines, and repeat the loading new software procedure beginning with Step 1.

Configuring the Router Using ClickStart EZSetup

ClickStart EZSetup allows you to configure the Cisco 700 series software using a web browser, such as Netscape Navigator.

Note Before configuring your Cisco 700 routers software, be sure you have properly connected the router to your PC or Macintosh computer. Refer to the *Cisco 700 Series Installation and Configuration Guide* or *CiscoPro 700 Series Installation and Configuration Guide* for installation procedures.

Before you configure the Cisco 700 router, you need the following information:

- From your ISDN provider, telephone company, or your network administrator, get the following configuration information:
  - ISDN switch type (in North America, this is typically 5ESS, DMS-100, or NI-1
  - ISDN Service Profile Identifiers (SPIDs)
  - ISDN Local Directory Numbers (LDNs)
- From your internet service provider, get the following information:
  - IP address for your PC or Macintosh computer
  - IP subnet mask for your PC or Macintosh computer
  - IP address of your Domain Name System (DNS) server

To use ClickStart to configure the router software, take the following steps:

Step 1 Go to the Cisco Connection Documentation, Enterprise Series or CiscoPro Solutions home page. Use the CD-ROM shipped with your order or use URL http://www.cisco.com.

Step 2 Click **ClickStart Router Configuration and Monitoring**

Cisco ClickStart page is displayed. Each of the links described below are listed on the ClickStart page. Click each link to proceed with ClickStart EZSetup.

The following links are provided:

- Understand How ClickStart Works—includes an overview of ClickStart.
- Order ISDN Service—describes how you order your ISDN service
- Verify the TCP/IP configuration on your Windows 3.11, Windows 95, or Macintosh PC, or prepare to configure from a UNIX workstation—describes the procedure for configuring the TCP/IP configuration.
- Set Up the Router—provides router installation procedures.
- Configure the Router—provides router configuration procedures.
- Test Your Router's Configuration—provides procedures to test the configuration of your router.

You can also use ClickStart to monitor any router running Cisco IOS Release 11.0(6) or later. Cisco Connection Documentation provides detailed information about how ClickStart works.

Software Release Modifications from 3.1(2) to 3.2 (4)

This section describes Software Release 3.2(4) corrections to Software Release 3.1(2). Each software correction includes the Cisco DDTS tracking number.

1. When a call was rejected by the Cisco 753 router (with the switch type set to 5ESS) because the receiver was off the hook or another call was in progress, a busy message was not returned to the switch in response to the setup. Software Release 3.2(4) now sends the correct release-complete message to the switch. [CSCdi52902]
2. In releases earlier than 3.2(4), if the receiver was left off the hook on a telephone connected to a Cisco 753 router after the switch disconnected the call, the Cisco 753 router would not reject incoming calls. Software Release 3.2(4) now rejects these calls by sending a release-complete message to the switch. [CSCdi52753]

3. The router would make a callback and connect the Integrated Services Digital Network (ISDN) call, but not succeed in opening the connection (as indicated by the lack of an Add Channel To Connection **log calls** command message). When this occurred, the speed of the call in **show status** was listed as auto, but data was actually being transmitted at 56 kbps. If the router receiving the callback answered at 64 kbps, no data was transmitted. Software Release 3.2(4) now lists the speed as 56 kbps or 64 kbps. [CSCdi52434]
4. The full product name did not display in the version string. Software Release 3.2(4) now includes the full product name in the version string. [CSCdi52333]
5. The command line interface would accept the command **set ppp authen outgoing** as a valid command when it was invalid. (You needed to specify NONE, CHAP, PAP, or a combination of the three). Software Release 3.2(4) corrects this problem. [CSCdi52226]
6. If the LAN profile had an IP address and the Internal and WAN profiles did not, Subnetwork Access Protocol (SNMP) trap messages were not sent out. Software Release 3.2(4) now includes the SNMP trap messages for the LAN profile. [CSCdi52083]
7. Occasionally, the cause value was taken from the wrong part of an ISDN message resulting in an incorrect cause value reported by the **log calls** command. Software Release 3.2(4) corrects this problem. [CSCdi51934]
8. When making outgoing calls with encapsulation set to PPP, the **show connections** command did not display the connected telephone numbers. Software Release 3.2(4) corrects this problem. [CSCdi51800]
9. If the **set ppp neg** count was 0 and multidestination is set to OFF, a link was opened without negotiating PPP. Software Release 3.2(4) corrects this problem. [CSCdi50938]
10. Only the IP address of the Internal profile was returned to the ipAddrTable. If the IP address of the Internal profile was not sent, an incorrect IP address was returned. Software Release 3.2(4) corrects this problem. [CSCdi50923]
11. Information in the **show status** command did not align under the headings. Software Release 3.2(4) corrects this problem. [CSCdi50805]
12. AppleTalk file transfers would stop when large files were being transferred. Software Release 3.2(4) corrects this problem. [CSCdi50432]
13. If a configuration request was received by PPP in the open state, an internal memory buffer was lost. PPP negotiation failed on the new call, and a **show status** would indicate link 0 and connection 0. Software Release 3.2(4) corrects this problem. [CSCdi50398]
14. If the PS-1 detect option was set to on, and the line was pulled out and reinserted after one second, the ISDN line would not activate. Software Release 3.2(4) corrects this problem. [CSCdi50299]
15. In the **set ip route** command, if the destination was entered without specifying the number of network bits in the address, a default of 32 (host route) was used. Software Release 3.2(4) now uses the default value corresponding with the class (A, B, or C). [CSCdi50288]
16. Callbacks failed if there were two different ringback numbers. When using the Combinet Packet Protocol (CPP), there was no callback initiated for the second channel. With PPP, callback was continuously initiating a callback to the second channel, but using the ringback number for the first channel (which was then rejected because the first channel was already in use or busy). Software Release 3.2(4) corrects this problem. [CSCdi50252]
17. The **set ipx route destination** command was not included in the help text. Software Release 3.2(4) now includes this command in its help text. [CSCdi50248]

18 When the IP RIP version was changed from BOTH to VER1, outgoing RIP packets were dropped because they were being sent to 0.0.0.0. Software Release 3.2(4) now uses the proper subnet broadcast address. [CSCdi50240]

19 When 65,535 packets were sent to a router running Cisco Internetwork Operating System (Cisco IOS) software from a Cisco 750, the router running Cisco IOS software stopped accepting data from the Cisco 750. Software Release 3.2(4) corrects this problem. [CSCdi50238]

20 If IP address 0.0.0.0 was used during IP unnumbered negotiation, this caused a problem with routers running Cisco IOS software and IP unnumbered negotiation. Software Release 3.2(4) corrects this problem. [CSCdi50220]

21 Multilink failures did not generate error messages. Software Release 3.2(4) now generates multilink failure messages. [CSCdi50182]

22 Static IPX routes and services were not sent to ConnectPro by the router software. Software Release 3.2(4) now sends static IPX routes and services. [CSCdi50086]

23 Normally, the **show ip route** command displays the IP routing table, and indicates in the Source column whether the route was received through RIP in a static route or was a direct route to a connected network. In Software Release 3.1(4.2), direct routes were displayed as RIP. Software Release 3.2(4) now displays the routes correctly. [CSCdi49836]

24 The Cisco 750 router sent a protocol rejection for spanning-tree updates. The PPP specification states that if a device is not participating in a spanning tree, it should silently discard spanning-tree updates received, but not send a protocol-reject message. Software Release 3.2(4) now silently discards received spanning-tree updates and does not send a protocol-reject message. [CSCdi49716]

25 The **reset packets** command for a WAN connection did not clear the count of corrupted packets. Software Release 3.2(4) now clears the count of corrupted packets. [CSCdi49425]

26 When a **set defaults** command was issued with a PPP connection in a call-connected state (active), the system paused indefinitely in the middle of setting the defaults. Software Release 3.2(4) corrects this problem. [CSCdi49238]

27 When using CHAP authentication, if a second CHAP-SUCC packet was received, the system might pause indefinitely. Software Release 3.2(4) corrects this problem. [CSCdi49129]

28 Occasionally, when entering the **upload** command in a Telnet session, the session might pause indefinitely. Software Release 3.2(4) corrects this problem. [CSCdi49015]

29 When a link was already connected to a profile and a **call** command was issued (expecting the first link number from the profile instead of the second link number), the call might fail if the remote system had different numbers for the two channels. Software Release 3.2(4) corrects this problem. [CSCdi48641]

30 For CPP calls using callback, the profile ID was incorrectly set. Software Release 3.2(4) correctly sets the profile ID. [CSCdi48557]

31 Depending on the options negotiated by the remote Telnet client, passwords might echo when the router was managed remotely through a Telnet session. Software Release 3.2(4) corrects this problem. [CSCdi48384]

32 When using the **upload** command over a Telnet session or remote login, the output was corrupted. Software Release 3.2(4) provides increased buffering to correct this problem. [CSCdi48363]

33 If a **set profile id** command was entered in a user profile that was already active, a further deactivation and reactivation of the profile or a reboot was required for the profile ID change to take effect. Software Release 3.2(4) corrects this problem. [CSCdi48360]

34 Packets from a Cisco 750 series router over an unnumbered interface were sent with a source address of 0.0.0.0. (This would include ping packets, SNMP, ping responses, and Telnet). Software Release 3.2(4) corrects this problem. [CSCdi48126]

35 The **set profile id 000000000000** command, which was output generated by the **upload** command for profiles that did not have a profile ID set, was rejected as being a duplicate Ethernet address. Software Release 3.2(4) corrects this problem. [CSCdi47926]

36 During a PPP callback, while there were many other calling and callback activities occurring, the system would display an incorrectly formatted telephone number in the call connect log message and then crash. Software Release 3.2(4) corrects this problem. [CSCdi47833]

37 The **upload** command would upload the IP static routes before the IP addresses of the router. This would cause an error message when you tried to reload the static routes on the router. Software Release 3.2(4) corrects this problem. [CSCdi46828]

38 The **logout** command did not properly terminate a remote Telnet session. Software Release 3.2(4) corrects this problem. [CSCdi46825]

39 The number of interfaces returned by SNMP did not reflect the number of user profiles configured on the router. Software Release 3.2(4) corrects this problem. [CSCdi46822]

40 Occasionally, there was incorrect routing information, such as next-hop address, subnet mask, and routing protocol, returned by SNMP. Software Release 3.2(4) corrects this problem. [CSCdi46797]

41 When a default route (destination 0.0.0.0/0) was on an unnumbered interface (IP address 0.0.0.0), the route was not included in the **upload** command output and was listed in the debug output as direct (a route that exists because of an interface), rather than static. Software Release 3.2(4) corrects this problem. [CSCdi44160]

42 If a large number of profiles were configured on the router and SNMP linkup traps were enabled, on startup, the large number of SNMP traps required by the SNMP trap host could prevent all the user profiles from being activated. Software Release 3.2(4) corrects this problem. [CSCdi43939]

43 SNMP trap messages were not queued; any SNMP traps following the first three were dropped. Software Release 3.2(4) corrects this problem. [CSCdi43936]

44 If SNMP traps were turned on without a valid IP address being set, the IP stack could run out of memory, halting the IP routing and TCP/IP functions in the router. Software Release 3.2(4) corrects this problem. [CSCdi43933]

45 Filter patterns ignored anything after the first byte of insignificant characters. Software Release 3.2(4) corrects this problem. [CSCdi43929]

46 Pattern names could not include numeric characters. Software Release 3.2(4) accepts numeric characters in pattern names. [CSCdi43928]

47 The **show ip filter** display was occasionally incomplete. Software Release 3.2(4) corrects this problem. [CSCdi43850]

48 The **set ip netmask** and **set subnet** commands would accept illegal values for the mask (such as 255.255.255.255 and 0.0.0.1). Software Release 3.2(4) corrects this problem. [CSCdi43420]

Software Release Modifications from 3.1(5) to 3.2(4)

This section describes Software Release 3.2(4) corrections to Software Release 3.1(5). Each software correction includes the Cisco DDTS tracking number.

1. During a sequence of PPP callbacks of rejected calls and overlapping calls, the channel light lost synchronization with the actual call state. When a call was in the connected state, the channel LED was off or blinking. Software Release 3.2(4) corrects this problem. [CSCdi54376]
2. If the connection number reached more than 254 (if the SNMP index value was 255), the unit failed to send the index value. The table was not getting updated if the index value was greater than 255. Software Release 3.2(4) corrects this problem. [CSCdi53858]
3. PPP callback entered into a loop (each router continuously makes callbacks) when both routers had PPP reply and request set to ON. Software Release 3.2(4) corrects this problem. [CSCdi50218]
4. If a call was made to a destination that had two different telephone numbers, and the first link was disconnected by entering a **disconnect** command, the next **call** command would use the telephone number of the second link. This call would subsequently be rejected because the telephone number was already in use by the second link. (This problem did not occur if calls were set to demand.) Software Release 3.2(4) corrects this problem. [CSCdi52212]
5. PPP callback failed to connect consistently and might take several retries before connection. This was caused by delays in the network clearing calls end to end. You could resolve this problem by setting PPP callback request to Always. Software Release 3.2(4) corrects this problem. [CSCdi53068]
6. If PPP attempted to make two callbacks simultaneously using authentication information to retrieve the numbers, the second call might fail if the link two number was different from the link one number. This happened when the original call was made using the **call** command to make two simultaneous calls. (To avoid this problem you could allow the first link to call back prior to making the second channel call. Alternatively, you could clear the Called Number field in the router making the callback and set the ringback number on the router making the original call.) Software Release 3.2(4) corrects this problem. [CSCdi51953]
7. When IP routing was enabled on a WAN connection with demand routing enabled, no calls were made after the unit was rebooted. Demand RIP should send a RIP request to the connection, which would bring up the line. Software Release 3.2(4) will bring up the line. [CSCdi57288]
8. If a connection was enabled to demand RIP for IPX with a network number of 0, it would not demand a call when it was rebooted. If the IPX network number was non-zero, it would demand the call. Software Release 3.2(4) will demand the call whether or not the network number is 0. [CSCdi57261]
9. When an IPX RIP and Service Access Point (SAP) was notified through an interface set to one type of update (periodic, snapshot, or demand), it would not be updated by receiving input from an interface set to a different type of update. If a service was notified that server XYZ could be reached on the LAN interface with 4 hops through a periodic SAP, and later the router learned through demand SAP over the WAN interface that XYZ could be reached over the WAN interface with 3 hops, the table would not be updated. Software Release 3.2(4) corrects this problem. [CSCdi56701]
10. The router might pause indefinitely if an improperly formatted MacSupport option was received from the peer during PPP Link Control Protocol (LCP) negotiation. Software Release 3.2(4) corrects this problem. [CSCdi56939]
11. Under certain circumstances, this message: IPX RIP Not Sent to Virtual Conn 32767 would be displayed on the console when routing IPX. This message normally indicates an inability to send a RIP packet because there are more connections than available channels, but 32767 is a pseudo-connection used internally by the router, so this message should never be displayed. Software Release 3.2(4) no longer displays this message. [CSCdi56456]

12 With certain network topologies that include redundant paths or loops, Cisco 750 series products would generate erroneous service updates for which the hop counts oscillate between the values for the two paths. This might result in a SAP "storm." The problem was that the SAP code was accepting higher cost services and changing the hop count of existing services. Software Release 3.2(4) will only update the hop count if it is less than what is already in the table. [CSCdi56452]

13 During Ethernet encapsulated IP routing, the IP packet which brought up the first ISDN link of a connection would be lost under certain circumstances. Software Release 3.2(4) corrects this problem. [CSCdi55929]

14 Demand calling stopped working if a PPP connection failed at the LCP negotiation phase. Software Release 3.2(4) corrects this problem. [CSCdi55804]

15 When an ISDN call was made and completed to a PBX, and additional digits were dialed, the call disconnected. Software Release 3.2(4) corrects this problem. [CSCdi55798]

16 IPX routing failed under certain circumstances. Software Release 3.2(4) corrects this problem. [CSCdi55748]

17 Demand calling ceased to function properly for connections numbered 17, 34, 51, etc. Broadcast packets to these connections would not bring up the ISDN lines. Software Release 3.2(4) corrects this problem. [CSCdi55389]

18 If the system name was a full 20 characters, it was handled incorrectly with somewhat unpredictable results. Software Release 3.2(4) corrects this problem. [CSCdi57715]

19 Maximum-length host passwords were handled incorrectly with somewhat unpredictable results. Software Release 3.2(4) corrects this problem. [CSCdi57430]

20 If a router was making a PPP callback that took longer than eight seconds to complete, a retry would be initiated. This results in simultaneous outgoing PPP callbacks to the same host when only one call should be made at a time. This was especially apparent in configurations making calls over slower 56-k trunks or international calls. Software Release 3.2(4) corrects this problem. [CSCdi55082]

21 With PPP callback set to "always" there are cases where PPP callbacks might cause demand calling to stop working. Typically this will happen if a router makes a call with PPP CALLBACK REQ ALW and the called router fails to callback. Software Release 3.2(4) corrects this problem. [CSCdi55045]

22 When a Cisco 750 series router running Software Release 3.1(5) was set for PPP callbacks and for demand calling, the demand calls could interfere during a callback. Software release 3.2(4) corrects this problem by making sure that the demand calling is coordinated with PPP callbacks. Now demand calls are prevented while a callback is outstanding. There will be a wait up to 64 seconds for the callback before allowing any further demand calls. [CSCdi53068]

Software Release Modifications from 3.2(1) to 3.2(4)

This section describes Software Release 3.2(4) corrections to Software Release 3.2(1). Each software correction includes the Cisco DDTS tracking number

1 When you enter the **software load (SWL)** command, and answer "y" to the confirmation prompt, the flash erasure cycle begins. An error message appears, stating there was an error erasing the flash. The flash is erased and broken.The router will continue to operate normally until it is power-cycled or rebooted. If you try to load the software through the serial port, it will download but will never finish burning the image into flash. The ready LED will blink continually or all LEDs will be off. The unit will not boot. Software Release 3.2(4) corrects this problem. [CSCdi60045]

2 If an unnumbered interface is used, the UDP processing would drop the packet when it sees the IP address for the interface is zero. Software Release 3.2(4) corrects this problem. [CSCdi59626]

3 When an incoming voice call arrives, with no daughter card present for net3 (does not apply to DMS or 5ESS) and whether or not directory numbers are set, the call is rejected with cause, receiver busy. The basic telephone service interface is not initialized in the case of no daughter card present. Software Release 3.2(4) corrects this problem. [CSCdi58949]

4 IP default static route will disappear if destination is 0.0.0.0 and if RIP RX is ON. Software Release 3.2(4) corrects this problem. [CSCdi58855]

5 System parameter can only be modified at system level TEST. When RESET PAC ALL command is issued at a user profile level, this message is displayed: “System Parameter can only be modified at system level TEST.” The word TEST does not belong in this message. Software Release 3.2(4) corrects this problem. [CSCdi58581]

6 Set ipx spoofing value information in the manual is different from the actual value allowed. The manual indicates a range of 1 to 32,000, but it is possible to configure a value up to 65,535. Software Release 3.2(4) corrects this problem. [CSCdi58346]

7 When using a Cisco 753 router, there is a line integrity error on the second channel with Ascend’s MAX router. When a second link was brought up with an Ascend MAX router, it was disconnected immediately followed by the line integrity violation log error. Software Release 3.2(4) corrects this problem. [CSCdi57710]

8 If the first entry of the End Point Discriminator (EPD) list is unlinked with valid entries in the next field, some elements are lost. This is dynamically allocated memory resulting in memory leakage. This may also prevent subsequent links from the lost entries from bundling properly with the existing links. Software Release 3.2(4) corrects this problem. [CSCdi57697]

9 There is a spelling error in the PPP diagnostic display: “CompresstionTypeSTACLZS.” Software Release 3.2(4) corrects this problem. [CSCdi57422]

10 The Cisco 751 router hangs after long hours of stress when connected to a Cisco 900 router running PPP routing. Software Release 3.2(4) corrects this problem. [CSCdi56453]

11 When the SNMP contact name and the SNMP location name are set as a string with spaces, they are not getting uploaded as strings. Software Release 3.2(4) corrects this problem. [CSCdi56038]

Software Release 3.2(4) Caveats

This section describes suggestions for optimum use of Cisco 750 and Cisco 760 Software Release 3.2(4). When possible, each software caveat includes the Cisco DDTS tracking number.

1 The LAN LED on Cisco 750 series routers will turn off if the routers do not receive any packets. The timeout period for Cisco 750 series routers is 1 to 2 minutes. This also sets the compressed chip on the Cisco 750 series routers (does not apply to the Cisco 760 series routers), so the next packet received from the WAN might fail to decompress correctly. This occurs only during periods of prolonged LAN inactivity.

2 When using TACACS with the Cisco Connection Manager product, you must enter the password within 2 minutes to prevent a line integrity violation from occurring.

3 If Cisco Connection Manager registers the router while a Cisco ConnectPro session is running, you should reboot the router to log in to Cisco ConnectPro again.

4. For PPP, the Cisco 750 series routers require that positive identification be obtained before adding the second link to a multilink connection. This can be EPD or Authentication. When a channel is connected, all other calls must have EPD or Authentication. This applies to incoming and outgoing calls. Note that routers running Cisco IOS software do not support EPD and must be authenticated. A log message indicates when a link has been rejected due to this requirement. [CSCdi53111]
5. Netware 4.x servers in the same domain over the ISDN WAN link will keep the B channel up continuously because of NDS traffic. Attempting to filter out the NDS traffic will result in loss of communication between the remote server and the services from the domain. [CSCdi44240]
6. If a router has an IPX routing connection, and encapsulation is changed from PPP to CPP (or from CPP to PPP), IPX routing might cease. To clear this problem, deactivate the connected profiles on both the local and remote routers, and then reactivate the profile. [CSCdi51147]
7. In some cases, a dual-tone multifrequency (DTMF) command will indicate success on the telephone LED of Cisco 750 series routers, even when the command has failed. [CSCdi43944]
8. When a call is made to a Connection Manager controlled router, and the Connection Manager is using a Security Dynamics authentication server, there is a problem with the way timeouts are handled. After the local router asks for a username, it waits two minutes before timing out and disconnecting the call. If another call is placed immediately after this, it will fail, and the message "Invalid Packet" will appear. [CSCdi54358]
9. When you download configuration information using the console port, you must slow down the download process to avoid an overrun of configuration information. (A one-second delay is recommended.) Failure to include an appropriate delay might result in the user interface pausing indefinitely, perhaps requiring manual power-cycling of the router to recover. [CSCdi49689]
10. Software Release 3.1(5) does not support the checksum verification option offered with NetWare 4.x. If you are using NetWare 4.x, configure NetWare to ignore the checksum verification option. [CSCdi43901]
11. A problem exists when you make two data calls and one voice call. When you make a data call to another unit from one of the channels, and another unit makes a voice call to the other free channel of the called unit, if you do not answer the voice call, the message "Call Requested; Voice call routed to Phonex" will appear. The voice call will be dropped. [CSCdi55816]
12. The **upload** command is not sending SNMP contact names and SNMP location names correctly. [CSCdi56038]
13. If your LAN frame type is set to a value other than 802.3, you might experience intermittent failures logging from your remote client workstation to the main LAN. This is sometimes manifested because of a delay in sending the RIP updates, even when your RIP update mode is set to demand. This is more noticeable if you have a multinetwork environment (for example, 802.3, 802.2, Ethernet_II, and SNAP) on the same segment where the RIP and SAP routes can easily exceed the 400-entry design limitation. [CSCdi54882]
14. A release message is not displayed when a call on hold is disconnected. This problem is only pertinent to international switch types, particularly INS, NET3, and 1TR6. [CSCdi56513]
15. When parameters are set to initiate demand calls to multidestination, the system eventually fails to connect to the two different destinations. After several connections and disconnections due to set timeout values, both outgoing calls are initiated toward a single destination. [CSCdi56557]
16. A password cannot be recovered. In the event of a system password being lost or forgotten, call the Technical Assistance Center (TAC) for a replacement password.
17. The **set phone** command field Data Over Voice (DOV) Calls, which applies to U.S.-Switch types only, is not getting blocked in international code.

18 After upgrading to Software Release 3.2(4) from Software Release 3.1(2), you must use the **set rip receive** command to turn RIP on. The 3.1 setting of ON will be interpreted as OFF by the 3.2(4) software.

Note British Telecom's Auxiliary working service does not allow the Cisco 765 product to discriminate called numbers to route calls to the second basic telephone service port. To enable this functionality, it is necessary to have the line configured for Multiple Subscriber Numbers (MSN).

Documentation Corrections and Modifications to the Product Documentation

This section describes corrections and modifications to the *Cisco 750 Series and Cisco 760 Series Command Reference* or *CiscoPro CPA750 Series and CiscoPro CPA760 Series Command Reference* publication for Software Release 3.2(4).

In Japan, when using an analog telephone connected to the Cisco 760 series routers, press the # key at the end of the digits dialed. A call will then be made with the accumulated digits. See the **98# command if the # key is part of the dial string.

If you are using a Cisco 753 router and you are using the **set type** command, you must enter **set type 1 demand**.

The example for the **set dtmf ip netmask** command should be 255.255.255.0.

The number field description in the **set directory number** command in the ISDN chapter should be as follows:

— The directory number assigned by the telephone company. Can consist of 2 to 20 digits. For Cisco 750 series routers, a maximum of two directory numbers will be allowed.

Table 1 lists the LAN and WAN port connections for the Cisco 761 and Cisco 762 models included in this software release.

Table 2 Cisco 760 Series LAN and WAN Ports

Models	Ports
761	1 RJ-45 S/T
	1 AUI
	1 10BaseT Ethernet
762	1 RJ-45 S/T
	1 RJ-45 U
	1 AUI
	1 10BaseT Ethernet

The commands described below have been added to this software release.

set internaltones

Use the **set internaltones** command to select the tone provided by the switch or the tone generated by the unit locally. This command applies only to (Europe ISDN) Net3 and 1TR6 switches.

SEt **INT**ernaltones **N**one | **DI**altone | **A**ll

Syntax Description

None	All tones will be provided by the switch.
Dialtone	Dialtone will be generated locally. All other tones will be provided by the switch.
All	All tones will be provided locally.

Default

None

Command Mode

System level

set dtmf disable dial terminator

In Japan, the # key is used to indicate the end of dialing. If the caller needs to send a # in the dialing string for a specific call, use the set dtmf disable dial terminator command.

******98 #

Syntax Description

***** Represents the * key on the telephone keypad.

Represents the # key on the telephone keypad.

Default

None

Command Mode

Telephone keypad

Usage Guidelines

This command is used to disable the # key as the indicator of the end of a dialing string for a particular call. The command must be entered before a telephone number is dialed. If six seconds have elapsed after the last keypad digit was dialed, the call will be made with the accumulated digits. When the call is completed, the # key will be automatically enabled to indicate the end of dialing.

set logout

To set the inactivity timer for remote logins, use the **set logout** command.

Set LOGout <minutes>

Syntax Description

minutes After the specified number of minutes of inactivity on a remote login, Telnet, or a ConnectPro session, the remote user will be logged out. To disable the auto logout feature, use a logout value of 0.

Default

Five minutes

Command Mode

System level

Usage Guideline

This command sets the inactivity timer for remote logins.

Example

Enter the following command to disable the remote inactivity timer session:

```
Set logout 0
```

show ethernet

To generate a performance report of the Ethernet interface, use the **show ethernet** command. The report provides information on different kinds of errors and interface traffic. The data in this report has accumulated since the router was last powered up.

SHow **ET**her

Syntax Description

This command has no arguments or keywords.

Default

None

Command Mode

System level or profile level

show type

To display filter types, use the **show type** command. Ethernet packets contain a two-byte type field that describes the protocol type of the packet.

SHow **TY**pe

Syntax Description

This command has no arguments or keywords.

Default

None

Command Mode

System level

set bridge

To determine what to do with packets that cannot be routed, use the **set bridge** command.

SEt **BR**idge **ON | OFf**

Syntax Description

on Packet will be bridged based on Media Access Control (MAC) address and any other filters currently active.

off Drop packets.

Default

On

Command Mode

System level

Obtaining Service and Support

For service and support for a product purchased from a CiscoPro reseller, contact the reseller. Releasers offer a wide variety of Cisco service and support programs, which are described in the section “Service and Support” in the information packet that shipped with your chassis.

Note If you purchased your product from a CiscoPro reseller, you can access Cisco Connection Online (CCO) as a guest. CCO is Cisco Systems’ primary, real-time support channel.Your reseller offers programs that include direct access to CCO’s services.

For service and support for a product purchased directly from Cisco, use CCO.

Cisco Connection Online

CCO is Cisco Systems’ primary, real-time support channel. SMARTnet customers and partners can self-register on CCO to obtain additional content and services.

Note If you purchased your product from a CiscoPro reseller, you can access CCO as a guest. Your reseller offers programs that include direct access to CCO’s services.

Available 24 hours a day, 7 days a week, CCO provides a wealth of standard and value-added services to Cisco’s customers and business partners. CCO services include product information, software updates, release notes, technical tips, the Bug Navigator, configuration notes, brochures, descriptions of service offerings, and download access to public and authorized files.

CCO serves a wide variety of users through two interfaces that are updated and enhanced simultaneously—a character-based version and a multimedia version that resides on the World Wide Web (WWW). The character-based CCO supports Zmodem, Kermit, Xmodem, FTP, and Internet e-mail, and is excellent for quick access to information over lower bandwidths. The WWW version of CCO provides richly formatted documents with photographs, figures, graphics, and video, as well as hyperlinks to related information.

You can access CCO in the following ways:

- WWW: http://www.cisco.com.
- WWW: http://wow-europe.cisco.com.
- WWW: http://www-china.cisco.com.
- Telnet: cco.cisco.com.
- Modem: From North America, 408 526-8070; from Europe, 33 1 64 46 40 82. Use the following terminal settings: VT100 emulation; databits: 8; parity: none; stop bits: 1; and baud rates up to 14.4 kbps.

For a copy of CCO's Frequently Asked Questions (FAQ), contact cco-help@cisco.com. For additional information, contact cco-team@cisco.com.

Note If you need technical assistance with a Cisco product that is under warranty or covered by a Cisco maintenance contract, contact Cisco's Technical Assistance Center (TAC) at 800 553-2447, 408 526-7209, or `tac@cisco.com`.

Please use CCO to obtain general information about Cisco Systems, Cisco products, or upgrades. If CCO is not accessible, contact 800 553-6387, 408 526-7208, or cs-rep@cisco.com.

This document is to be used in conjunction with the *Cisco 750 Series and Cisco 760 Series Command Reference* or *CiscoPro CPA750 Series and CiscoPro CPA760 Series Command Reference* publication.