



Release Notes for the Cisco 1700 Series Routers for Cisco IOS Release 12.1(3)XP

March 14, 2002

These release notes for the Cisco 1700 series describe the enhancements provided in Cisco IOS Release 12.1(3)XP4. These release notes are updated as needed.

For a list of the software caveats that apply to Cisco IOS Release 12.1(3)XP4, see the “Caveats” section on page 12 and *Caveats for Cisco IOS Release 12.1 T*. The caveats document is updated for every maintenance release and is located on Cisco Connection Online (Cisco.com) and the Documentation CD-ROM.

Use these release notes with *Cross-Platform Release Notes for Cisco IOS Release 12.1* located on Cisco.com and the Documentation CD-ROM.

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System Requirements

This section describes the system requirements for Release 12.1(3)XP4 and includes the following sections:

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Memory Requirements

Table 1 Memory Requirements for the Cisco 1700 Series

Feature Sets	Image Name	Software Image	Recommended Flash Memory	Recommended DRAM Memory	Runs from
IP Feature Sets	IP	c1700-y-mz	4 MB	24 MB	RAM
	IP ADSL	c1700-y7-mz	8 MB	32 MB	RAM
	IP Plus ADSL	c1700-sy7-mz	8 MB	32 MB	RAM
	IP/Voice Plus ADSL	c1700-sv3y7-mz	8 MB	48 MB	RAM
	IP Plus IPsec 56 (DES) ADSL	c1700-sy756i-mz	8 MB	48 MB	RAM
	IP/Voice Plus IPsec 56 (DES) ADSL	c1700-sv3y756i-mz	16 MB	48 MB	RAM
	IP/FW/IDS	c1700-o3y-mz	8 MB	24 MB	RAM
	IP/FW/Voice Plus IPsec 56 (DES) ADSL	c1700-o3sv3y7-mz	8 MB	48 MB	RAM
	IP/FW Plus IP Sec 56 (DES) ADSL	c1700-o3sy756i-mz	8 MB	48 MB	RAM
	IP/Voice/FW/IDS Plus IPsec 56 ADSL	c1700-o3sv3y756i-mz	16 MB	48 MB	RAM
	IP/IPX	c1700-ny-mz	8 MB	32 MB	RAM
	IP/IPX/FW/IDS Plus ADSL	c1700-no3sy7-mz	8 MB	48 MB	RAM
	IP/IPX/Voice/FW/IDS Plus ADSL	c1700-no3sv3y7-mz	8 MB	48 MB	RAM
	IP Plus IPsec 3DES ADSL	c1700-k2sy7-mz	8 MB	48 MB	RAM
	IP/Voice Plus IPsec 3DES ADSL	c1700-k2sv3y7-mz	16 MB	48 MB	RAM
	IP/FW Plus IPsec 3DES ADSL	c1700-k2o3sy7-mz	8 MB	48 MB	RAM
	IP/FW/Voice Plus IPsec 3DES ADSL	c1700-k2o3sv3y7-mz	16 MB	48 MB	RAM
	IP/IPX/AT/IBM	c1700-bnr2y-mz	8 MB	32 MB	RAM
	IP/IPX/AT/IBM Plus ADSL	c1700-bnr2sy7-mz	8 MB	48 MB	RAM
	IP/IPX/AT/IBM/FW Plus IPsec 56 (DES) ADSL	c1700-bno3r2sy756i-mz	16 MB	48 MB	RAM

Table 1 Memory Requirements for the Cisco 1700 Series (continued)

Feature Sets	Image Name	Software Image	Recommended Flash Memory	Recommended DRAM Memory	Runs from
IP Feature Sets	IP/IPX/AT/IBM/FW/Voice Plus IPSec 56 (DES) ADSL	c1700-bno3r2sv3y756i-mz	16 MB	48 MB	RAM
	IP/IPX/AT IBM/FW Plus IPSec 3DES ADSL	c1700-bk2no3r2sy7-mz	16 MB	48 MB	RAM
	IP/IPX/AT/IBM/FW/Voice Plus IPSec 3DES ADSL	c1700-bk2no3r2sv3y7-mz	16 MB	48 MB	RAM

Hardware Supported

Cisco IOS Release 12.1(3)XP4 supports the Cisco 1700 series routers:

- Cisco 1720—Runs data images only.
- Cisco 1750—Runs data and data-plus-voice images.

For detailed descriptions of the new hardware features, see the documents listed in the “Platform-Specific Documents” section on page 16.

Cisco 1720

The 1720 router provides Internet and intranet access, and includes the following:

- Support for virtual private networking
- Modular architecture
- Network device integration

The Cisco 1720 router has the following hardware components:

- One autosensing 10/100 Fast Ethernet port
- Two WAN interface card slots
- One auxiliary (AUX) port (up to 115.2 kbps asynchronous serial)
- One console port
- RISC Processor for high performance encryption
- One internal expansion slot for support of hardware-assisted services such as encryption (up to T1/E1) and, in the future, compression
- DRAM memory: 16 MB default, expandable to 48 MB
- Flash memory: 4 MB default, expandable to 16 MB
- Desktop form factor

The Cisco 1720 router supports any combination of one or two of the following WAN interface cards, which are shared with the Cisco 1600, 2600, and 3600 routers:

- WIC-1T: One port high speed serial (sync/async)
- WIC-2T: Two port high speed serial (sync/async)
- WIC-2A/S: Two port low speed serial (sync/async) (up to 128 kbps)

- WIC-1B-S/T: One port ISDN BRI S/T
- WIC-1B-U: One port ISDN BRI U
- WIC-1DSU-56K4: One port integrated 56/64 kbps 4-wire DSU/CSU
- WIC-1DSU-T1: One port integrated T1 / Fractional T1 DSU/CSU
- WIC-1ADSL: One-port asymmetric digital subscriber line (supported on the Cisco 1700, 2600, and 3600 series routers only)

Cisco 1750

The voice-and-data capable Cisco 1750 router provides global Internet and company intranet access, and includes the following:

- Voice-over-IP (VoIP) voice-and-data functionality; the router can carry voice traffic (for example, telephone calls and faxes) over an IP network
- Support for virtual private networking
- Modular architecture
- Network device integration

The Cisco 1750 router has the following hardware components:

- One autosensing 10/100 Fast Ethernet port, which operates in full- or half-duplex mode (with manual override available)
- One Voice interface card slot—Supports a single voice interface card with two ports per card
- Two WAN interface card slots for either WAN interface cards (WICs) or voice interface cards (VICs)
- Synchronous serial interfaces on serial WAN interface cards
- Asynchronous serial interfaces on serial WAN interface cards
- ISDN WAN interface cards—ISDN dialup and ISDN leased line (IDSL) at 144 kbps; encapsulation over ISDN leased line: Frame Relay and PPP
- One auxiliary (AUX) port (up to 115.2 kbps asynchronous serial)
- One console port
- One internal expansion slot—Supports hardware-assisted services such as encryption (up to T1/E1) and, in the future, compression
- RISC Processor—Motorola MPC860T PowerQUICC at 48 MHz
- One security slot that supports Kensington or similar lockdown equipment
- DRAM memory: 16 MB default, expandable to 48 MB
- Flash memory: 4 MB default, expandable to 16 MB
- Desktop form factor

The Cisco 1750 router also supports any combination of one or two of the following WAN interface cards, which are shared with the Cisco 1600, 1720, 2600, and 3600 routers:

- WIC-1T: One port high speed serial (sync/async)(T1/E1)
- WIC-2T: Two port high speed serial (sync/async) (T1/E1)
- WIC-2A/S: Two port low speed serial (sync/async) (up to 128 kbps)
- WIC-1B-S/T: One port ISDN BRI S/T

- WIC-1B-U: One port ISDN BRI U with integrated NT1
- WIC-1DSU-56K4: One port integrated 56/64 kbps 4-wire DSU/CSU
- WIC-1DSU-T1: One port integrated T1 / Fractional T1 DSU/CSU
- WIC-1ADSL: One-port asymmetric digital subscriber line (supported on the Cisco 1700, 2600, and 3600 series routers only)

The Cisco 1750 router supports any combination of one or two of the following voice interface cards, which are shared with the Cisco 2600 and 3600 routers:

- VIC-2FXS: Two port Foreign Exchange Station (FXS) voice/fax interface card for voice/fax network module
- VIC-2FXO: Two port Foreign Exchange Office (FXO) voice/fax interface card for voice/fax network module
- VIC-2FXO-EU: Two port FXO voice/fax interface card for Europe
- VIC-2E/M: Two port Ear & Mouth (E&M) voice/fax interface card for voice/fax network module

Determining Your Software Release

To determine the version of Cisco IOS software running on your Cisco 1700 series, log in to the platform and enter the **show version** EXEC command:

```
router> show version
Cisco Internetwork Operating System Software
IOS(tm) Software (c1700-y-mz), Version 12.1(3)XP4, RELEASE SOFTWARE
```

Upgrading to a New Software Release

For general information about upgrading to a new software release, see *Software Installation and Upgrade Procedures* located at: http://www.cisco.com/warp/public/130/upgrade_index.shtml.

Feature Set Tables

The Cisco IOS software is packaged in feature sets consisting of software images—depending on the platform. Each feature set contains a specific set of Cisco IOS features. Release 12.1(3)XP4 supports the same feature sets as Releases 12.1 and 12.1 T, but Release 12.1(3)XP4 can include new features supported by the Cisco 1700 series routers.



Caution

Cisco IOS images with strong encryption (including, but not limited to 168-bit (3DES) data encryption feature sets) are subject to United States government export controls and have limited distribution. Strong encryption images to be installed outside the United States are likely to require an export license. Customer orders may be denied or subject to delay due to United States government regulations. When applicable, the purchaser/user must obtain local import and use authorizations for all encryption strengths. Please contact your sales representative or distributor for more information, or send an e-mail to export@cisco.com.

Table 2 through Table 5 list the features and feature sets supported by the Cisco 1700 series routers in Cisco IOS Release 12.1(3)XP4. The tables use the following conventions:

- Yes—The feature is supported in the software image.
- No—The feature is not supported in the software image.

**Note**

These tables might not be cumulative or list all the features in each image. You can find the most current Cisco IOS documentation on Cisco.com. These electronic documents may contain updates and modifications made after the hardcopy documents were printed.

Table 2 Feature List by Feature Set for the Cisco 1700 Series Routers, Part 1 of 4

Features	In	Feature Sets					
		IP	IP/ADSL	IP/Plus/ ADSL	IP/Voice/ Plus/ ADSL	IP/Plus/ IPSec 56 (DES)/ ADSL	IP/Voice/Plus/ IPSec 56 (DES)/ ADSL
IP Multicast							
Bidirectional PIM	(2T)	No	No	Yes	Yes	Yes	Yes
IP Routing Protocols							
OSPF Flooding Reduction	(2T)	Yes	Yes	Yes	Yes	Yes	Yes
Multimedia and Quality of Service							
H.323 V2 Enhancements	(3T)	No	No	No	Yes	No	Yes
Quality of Service Voice Enhancements	(3T)	No	No	No	Yes	No	Yes
Multiservice Applications							
Voice over Frame Relay (Cisco 1750 only)	(2T)	No	No	No	Yes	No	Yes
Security							
Secure Shell Version 1 Integrated Client	(3T)	No	No	No	No	Yes	Yes
SSH Version 1 Server Support		Yes	Yes	Yes	Yes	Yes	Yes
Virtual Private Network (VPN) Module for the Cisco 1700 Series	(2T)	No	No	No	No	Yes	Yes
WAN							
Frame Relay Switching Enhancements: Shaping and Policing	(2T)	Yes	Yes	Yes	Yes	Yes	Yes

Table 3 Feature List by Feature Set for the Cisco 1700 Series Routers, Part 2 of 4

Features	Feature Sets					
	IP/FW/IDS	IP/FW/Voice/ Plus/IPSec 56 (DES)/ADSL	IP/FW/Plus/ IP Sec 56 (DES)/ADSL	IP/Voice/FW/ IDS/Plus/ IPSec 56/ ADSL	IP/IPX	IP/IPX/FW/IDS/ Plus/ADSL
IP Multicast						
Bidirectional PIM	No	Yes	Yes	Yes	No	Yes
IP Routing Protocols						
OSPF Flooding Reduction	Yes	Yes	Yes	Yes	Yes	Yes
Multimedia and Quality of Service						
H.323 V2 Enhancements	No	Yes	No	Yes	No	No
Quality of Service Voice Enhancements	No	Yes	No	Yes	No	No
Multiservice Applications						
Voice over Frame Relay (Cisco 1750 only)	No	Yes	No	Yes	No	No
Security						
Secure Shell Version 1 Integrated Client	No	Yes	Yes	Yes	No	No
SSH Version 1 Server Support	Yes	Yes	Yes	Yes	Yes	Yes
Virtual Private Network (VPN) Module for the Cisco 1700 Series	No	Yes	Yes	Yes	No	No
WAN						
Frame Relay Switching Enhancements: Shaping and Policing	Yes	Yes	Yes	Yes	Yes	Yes

Table 4 Feature List by Feature Set for the Cisco 1700 Series Routers, Part 3 of 4

Features	Feature Sets					
	IP/IPX/ Voice/FW/ IDS/Plus/ ADSL	IP/Plus/ IPSec 3DES/ ADSL	IP/Voice/Plus/ IPSec 3DES/ ADSL	IP/FW/Plus/ IPSec 3DES/ ADSL	IP/FW/ Voice/Plus/ IPSec 3DES/ ADSL	IP/IPX/AT/ IBM
IP Multicast						
Bidirectional PIM	Yes	Yes	Yes	No	Yes	No
IP Routing Protocols						
OSPF Flooding Reduction	Yes	Yes	Yes	Yes	Yes	Yes

Table 4 Feature List by Feature Set for the Cisco 1700 Series Routers, Part 3 of 4 (continued)

Features	Feature Sets					
	IP/IPX/ Voice/FW/ IDS/Plus/ ADSL	IP/Plus/ IPSec 3DES/ ADSL	IP/Voice/Plus/ IPSec 3DES/ ADSL	IP/FW/Plus/ IPSec 3DES/ ADSL	IP/FW/ Voice/Plus/ IPSec 3DES/ ADSL	IP/IPX/AT/ IBM
Multimedia and Quality of Service						
H.323 V2 Enhancements	Yes	No	Yes	No	Yes	No
Quality of Service Voice Enhancements	Yes	No	Yes	Yes	Yes	No
Multiservice Applications				Yes	Yes	
Voice over Frame Relay (Cisco 1750 only)	Yes	No	Yes	Yes	Yes	No
Security						
Secure Shell Version 1 Integrated Client	No	Yes	Yes	Yes	Yes	No
SSH Version 1 Server Support	Yes	Yes	Yes	Yes	Yes	Yes
Virtual Private Network (VPN) Module for the Cisco 1700 Series	No	Yes	Yes	Yes	Yes	No
WAN						
Frame Relay Switching Enhancements: Shaping and Policing	Yes	Yes	Yes	Yes	Yes	Yes

Table 5 Feature List by Feature Set for the Cisco 1700 Series Routers, Part 4 of 4

Features	Feature Sets				
	IP/IPX/AT/ IBM/Plus/ ADSL	IP/IPX/AT/ IBM/FW/Plus/ IPSec 56 (DES)/ ADSL	IP/IPX/AT/ IBM/FW/ Voice/Plus/ IPSec 56 (DES)/ ADSL	IP/IPX/AT/ IBM/FW/Plus/ IPSec 3DES/ ADSL	IP/IPX/AT/ IBM/FW/ Voice/Plus/ IPSec 3DES/ ADSL
IP Multicast					
Bidirectional PIM	Yes	Yes	Yes	Yes	Yes
IP Routing Protocols					
OSPF Flooding Reduction	Yes	Yes	Yes	Yes	Yes
Multimedia and Quality of Service					
H.323 V2 Enhancements	No	No	Yes	No	Yes
Quality of Service Voice Enhancements	No	No	Yes	No	Yes

Table 5 Feature List by Feature Set for the Cisco 1700 Series Routers, Part 4 of 4 (continued)

Features	Feature Sets				
	IP/IPX/AT/ IBM/Plus/ ADSL	IP/IPX/AT/ IBM/FW/Plus/ IPSec 56 (DES)/ ADSL	IP/IPX/AT/ IBM/FW/ Voice/Plus/ IPSec 56 (DES)/ ADSL	IP/IPX/AT/ IBM/FW/Plus/ IPSec 3DES/ ADSL	IP/IPX/AT/ IBM/FW/ Voice/Plus/ IPSec 3DES/ ADSL
Multiservice Applications					
Voice over Frame Relay (Cisco 1750 only)	No	No	No	No	No
Security					
Secure Shell Version 1 Integrated Client	No	Yes	Yes	Yes	Yes
SSH Version 1 Server Support	Yes	Yes	Yes	Yes	Yes
Virtual Private Network (VPN) Module for the Cisco 1700 Series	No	Yes	Yes	Yes	Yes
WAN					
Frame Relay Switching Enhancements: Shaping and Policing	Yes	Yes	Yes	Yes	Yes

New and Changed Information

The following sections list the new hardware and software features supported by the Cisco 1700 series for Release 12.1(3)XP4.

New Hardware Features in Release 12.1(3)XP

The following new hardware feature is supported by the Cisco 1700 series for Cisco IOS Release 12.1(3)XP:

1-Port ADSL WAN Interface Card

The ADSL WAN interface card is a 1-port WAN interface card (WIC) for the Cisco 1700 series of modular access routers. The card provides asymmetric digital subscriber line (ADSL) high-speed digital data transfer between a single customer premises equipment (CPE) subscriber and the central office.

The ADSL WIC is compatible with the Alcatel Digital Subscriber Loop Access Multiplexer (DSLAM), the Cisco 6260 DSLAM with Flexi-line cards and the Cisco 6130 DSLAM with Flexi-line cards. It supports Asynchronous Transfer Mode (ATM) Adaptation Layer (AAL)5 (AAL5) and various classes of Quality of Service (QoS) for both voice and data service.

**Note**

ADSL is a last-mile access technology, which has an asymmetrical data rate running over a single copper wire pair.

New Software Features in Release 12.1(3)XP

The following new software features are supported by the Cisco 1700 series for Cisco IOS Release 12.1(3)XP:

PPPoE

The Point to Point over Ethernet (PPPoE) feature is PPP encapsulation over ATM adaptation layer 5 (AAL5) to support bridged protocols. The encapsulation method is AAL5 Subnetwork Access Protocol (AAL5SNAP), which is PPP over Ethernet over Logical Link Control and Subnetwork Access Protocol (LLC/SNAP) over AAL5 over ATM. Although this encapsulation primarily supports bridging, if the router is configured to support routing, you can use PPPoE for routing.

PPPoA (RFC 2364)

The Point to Point over ATM (PPPoA) feature is PPP encapsulation over ATM AAL5 to support routed protocols. There are two encapsulation methods. The first method is AAL5MUX, which is PPP over AAL5 over ATM. The second method is AAL5SNAP, which is PPP over SNAP/LLC over AAL5 over ATM. PPPoA cannot be used for bridging.

Support for RFC1483

RFC1483 provides multi-protocol encapsulation over ATM AAL5 to support bridged and routed protocols. The feature includes two encapsulation methods. The first method, LLC/SNAP encapsulation, multiplexes multiple protocols over a single virtual circuit (VC). The second method, VC-multiplexed, assumes each protocol is carried over a separate VC.

New or Modified Commands

Release 12.1(3)XP contains the following three new or modified Cisco IOS commands for configuring the ADSL WAN interface card:

- **[no] dsl operating-mode { auto | ansi-dmt | itu-dmt }**
- **show dsl interface atm *n***
- **show diag wic-slot-num { mem start_address end_address | log }**

For details about these commands and ADSL WAN interface card configuration instructions, see the following publications:

- *1-Port ADSL WAN Interface Card* online feature module documentation
- *Configuring an ADSL WAN Interface Card on Cisco 1700 Series Routers*
- The “Configuring ATM” section of the *Cisco IOS Wide-Area Networking Configuration Guide*
- The “ATM Commands” section of the *Cisco IOS Wide-Area Networking Command Reference*

Important Notes

The following sections contain important notes that can apply to the Cisco 1700 series.

Caveat CSCdr91706 and IOS HTTP Vulnerability

A defect in multiple releases of Cisco IOS software causes a Cisco router or switch to halt and reload if the IOS HTTP service is enabled and you browse to `http://router-ip/anytext?/` and enter the enable password when it is requested. This defect can be exploited to produce a denial of service (DoS) attack. This vulnerability can only be exploited if the enable password is known or not set.

The vulnerability, identified as Cisco bug ID CSCdr91706, affects virtually all mainstream Cisco routers and switches running Cisco IOS software releases 12.0 through 12.1, inclusive. This is not the same defect as CSCdr36952.

The vulnerability has been corrected and Cisco is making fixed releases available for free to replace all affected IOS releases. Cisco urges all customers to upgrade to releases that are not vulnerable to this defect as listed in the complete advisory, which is available at: <http://www.cisco.com/warp/public/707/ioshttpserverquery-pub.shtml>. You are strongly encouraged to read the complete advisory.

Cisco Express Forwarding

When installed in a Cisco 1720 or 1750 router, the Cisco Virtual Private Network (VPN) module does not support Cisco express forwarding (CEF).

Fan Operation in Cisco 1700 Series Routers

The fans in Cisco 1700 series routers stay off until thermally activated.

Flash defaults to Flash:1 on Multipartition Flash

When using a multipartition flash card, the various flash partitions are referred to as “flash:1:”, “flash:2:”, etc. If you specify only “flash” in a multipartition flash, the parser assumes “flash:1:.” For example, if you enter **show flash all**, the parser defaults to “show flash:1: all” and only the flash information for the first partition displays. To see information for all flash partitions, enter **show flash ?**. This will list all of the valid partitions. Then enter **show flash:xx: all** on each valid partition.

Peak Cell Rate and Sustainable Cell Rate Values

On Cisco 1700 routers, specify the Peak Cell Rate (PCR) and Sustainable Cell Rate (SCR) as multiples of 32 Kbps. Other rates are treated as the next lower value of a multiple of 32. For example, an entered PCR value of 150 is considered 128.

Using the boot flash Command

Booting a Cisco 1700 series router with the commands **boot flash** or **boot system flash** results in unpredictable behavior. To work around this problem, be sure to enter a colon (:) following both commands (for example, **boot flash:** or **boot system flash:**.)

Caveats

Caveats describe unexpected behavior in Cisco IOS software releases. Severity 1 caveats are the most serious caveats; severity 2 caveats are less serious.

All caveats in Cisco IOS Release 12.1 and Cisco IOS Release 12.1 T are also in Cisco IOS Release 12.1(3)XP4.

For information on caveats in Cisco IOS Release 12.1, see *Caveats for Cisco IOS Release 12.1*.

For information on caveats in Cisco IOS Release 12.1 T, see *Caveats for Cisco IOS Release 12.1 T*, which lists severity 1 and 2 caveats and is located on Cisco.com and the Documentation CD-ROM.

**Note**

If you have an account with Cisco.com, you can also use the Bug Toolkit to find select caveats of any severity. To reach the Bug Toolkit, log in to Cisco.com and click **Service & Support: Technical Assistance Center: Tool Index: Bug Toolkit**. Another option is to go to http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl.

Resolved Caveats—Release 12.1(3)XP4

This section describes possibly unexpected behavior by software releases prior to Release 12.1(3)XP4 that have been resolved in Release 12.1(3)XP4 and above.

Management

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>

Open Caveats—Release 12.1(3)XP3

This section describes possibly unexpected behavior by Release 12.1(3)XP3. Only severity 1 through 3 caveats are included.

Miscellaneous

CSCds04747

Connection setup improvements.

CSCds32217

D-write community string readable with read-only community, Cisco IOS.

Resolved Caveats—Release 12.1(3)XP3

This section describes possibly unexpected behavior by software releases prior to Release 12.1(3)XP3 that have been resolved in Release 12.1(3)XP3 and above.

Miscellaneous

CSCds05811

If secondary IP addresses are configured on either an Ethernet or FastEthernet interface and the running-config is saved to NVRAM, when the router is reloaded the secondary IP addresses disappear from the configuration. This caveat is identical to the caveats: CSCdr51651, CSCdr72866, CSCdr72868, and CSCdr77724, as well as cases A445655, A519050, and A466616. The problem was originally found in Release 12.1(2)T. This caveat is fixed in Cisco IOS Release 12.1(3)XP3.

Open Caveats—Release 12.1(3)XP

This section describes possibly unexpected behavior by Release 12.1(3)XP. Only severity 1 through 3 caveats are included.

SNMP/MIBs

CSCdr72822

When using SNMP queries to retrieve information on the ADSL WIC, the serial number information and cardIfCardIndex is reported incorrectly by a Cisco 1700 series router.

CSCdr76180

SNMP queries can retrieve AAL5 MIB information, which is configured under a sub-interface (such as [atm { 0 | 1 }]). However, SNMP queries to retrieve AAL5 MIB information do not return correct data from the main ATM interface (atm { 0 | 1 }).

Voice

CSCdr86655

The use of a hidden command is required to use an E&M interface with a PBX. If the remote end is also using a “y7” image, it must also be configured with the command **voice rtp send-recv**, regardless of which voice interface it uses.

CSCds31256

When configuring a connection trunk, do not precede the phone number with a “+”. Use only numbers when specifying the digits to make the connection. Other characters may cause a crash when unconfiguring the connection trunk.

WAN

CSCdr72822

Cisco 1700 series routers incorrectly report serial number information when using SNMP queries to retrieve information on an ADSL-WIC.

CSCdr83635

A Cisco 1700 series router cannot achieve Systems Network Architecture (SNA) connectivity with Qualified Logical Link Control (QLLC) over remote source-route bridging (RSRB) with local acknowledgement. There is no known workaround.

CSCdr95335

Under some rare situations, an operational ADSL-WIC might generate the following debug message: “dslsar_tx_status_ind;” freeing more buffers than exist.

CSCdr98842

After reloading a Cisco 1700 series router with an ADSL-WIC, the router might intermittently generate the following error message: “ASSERTION FAILED: file ../les/if_dslsar_rcv.c, line 707.” To work around this problem, reset the ATM interface(s) by using the command **shutdown** and then bring up the interface(s) again using the command **no shutdown**.

CSCds01047

If you enter the command **shutdown** on an ATM interface and reload a Cisco 1700 series router, subsequently using the command **show running-config** does not display the ATM interface as **shut down**. However, using the command **show start** correctly displays the ATM interface as **shut down**.

CSCds06523

Under certain undetermined conditions, an operational ADSL-WIC might occasionally produce the following debug message: “atm_parse_packet(ATM0):Invalid VC(32776) received, type=xxxx.”

CSCds04829

If the **show dsl interface** command is entered multiple times back to back while the ADSL WIC is passing data, a transmitter section of the ADSL WIC goes to freeze and data can not be transmitted through the interface. To work around this problem, reset the ATM interface(s) by using **clear interface ATM {0 | 1}**.

Related Documentation

The following sections describe the documentation available for the Cisco 1700 series routers. Typically, these documents consist of hardware and software installation guides, Cisco IOS configuration and command references, system error messages, feature modules, and other documents.

Documentation is available as printed manuals or electronic documents, except for feature modules, which are available online on Cisco.com and the Documentation CD-ROM.

Use these release notes with the documents listed in the following sections:

- Release-Specific Documents
- Platform-Specific Documents
- Feature Modules
- Cisco IOS Software Documentation Set

Release-Specific Documents

The following documents are specific to Release 12.1. They are located on Cisco.com and the Documentation CD-ROM.

- *Release Notes for Cisco IOS Release 12.1*

On Cisco.com at:

Technical Documents: Documentation Home Page: Cisco IOS Software Configuration: Cisco IOS Release 12.1: Release Notes: Cross-Platform Release Notes

On the Documentation CD-ROM at:

Cisco Product Documentation: Cisco IOS Software Configuration: Cisco IOS Release 12.1: Release Notes: Cross-Platform Release Notes

- Product bulletins, field notices, and other release-specific documents on Cisco.com at:

Technical Documents: Product Bulletins

- Caveats for Cisco IOS Release 12.1 and 12.1 T

As a supplement to the caveats listed in the “Caveats” section on page 12 section in these release notes, see the *Caveats for Cisco IOS Release 12.1* and *Caveats for Cisco IOS Release 12.1 T* documents, which contain caveats applicable to all platforms for all maintenance releases of IOS Releases 12.1 and 12.1 T.

On Cisco.com at:

Technical Documents: Documentation Home Page: Cisco IOS Software Configuration: Cisco IOS Release 12.1: Caveats

On the Documentation CD-ROM at:

Cisco Product Documentation: Cisco IOS Software Configuration: Cisco IOS Release 12.1: Caveats



Note If you have an account with Cisco.com, you can also use the Bug Toolkit to find select caveats of any severity. To reach the Bug Toolkit, log in to Cisco.com and click **Service & Support: Technical Assistance Center: Tool Index: Bug Toolkit**. Another option is to go to http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl.

Platform-Specific Documents

Cisco 1720

These documents are available for the Cisco 1720 router on Cisco.com and the Documentation CD-ROM:

- *Installing Your Cisco 1720*
- *Cisco 1720 Router Hardware Installation Guide*
- *Cisco 1700 Router Software Configuration Guide*
- *Regulatory Compliance and Safety Information*
- Configuration Notes
- Release Notes for the Cisco 1720 Router
- *WAN Interface Cards Hardware Installation Guide*

On Cisco.com at:

Technical Documents: Documentation Home Page: Access Servers and Access Routers: Modular Access Routers: Cisco 1720 Router

On the Documentation CD-ROM at:

Cisco Product Documentation: Access Servers and Access Routers: Modular Access Routers: Cisco 1720 Router

Cisco 1750

These documents are available for the Cisco 1750 router on Cisco.com and the Documentation CD-ROM:

- *Cisco 1750 Router Hardware Installation Guide*
- *Voice-over-IP Quick Start Guide*
- *Cisco 1750 Software Configuration Guides*
- *Cisco WAN Interface Cards Hardware Installation Guide*
- Cisco 1700 Series Configuration Notes
- Release Notes for the Cisco 1750 Router
- *Safety Information for Cisco 1600 and 1700 Routers*

On Cisco.com at:

Technical Documents: Documentation Home Page: Access Servers and Access Routers: Modular Access Routers: Cisco 1750 Router

On the Documentation CD-ROM at:

Cisco Product Documentation: Access Servers and Access Routers: Modular Access Routers: Cisco 1750 Router

Feature Modules

Feature modules describe new features supported by Release 12.1(3)XP4 and are updates to the Cisco IOS documentation set. A feature module consists of a brief overview of the feature, benefits, configuration tasks, and a command reference. As updates, the feature modules are available online only. Feature module information is incorporated in the next printing of the Cisco IOS documentation set.

On Cisco.com at:

Technical Documents: Documentation Home Page: Cisco IOS Software Configuration: Cisco IOS Release 12.1: New Feature Documentation: New Features in 12.1-Based Limited Lifetime Releases: New Features in 12.1X Releases

On the Documentation CD-ROM at:

Cisco Product Documentation: Cisco IOS Software Configuration: Cisco IOS Release 12.1: New Feature Documentation: New Features in 12.1-Based Limited Lifetime Releases: New Features in 12.1X Releases

Cisco IOS Software Documentation Set

The Cisco IOS software documentation set consists of the Cisco IOS configuration guides, Cisco IOS command references, and several other supporting documents that are shipped with your order in electronic form on the Documentation CD-ROM—unless you specifically ordered printed versions.

Documentation Modules

Each module in the Cisco IOS documentation set consists of two types of books: a configuration guide and a corresponding command reference. Chapters in a configuration guide describe protocols, configuration tasks, Cisco IOS software functionality, and contain comprehensive configuration examples. Chapters in a command reference provide complete command syntax information. Use each configuration guide with its corresponding command reference.

The Cisco IOS software documentation set is available on Cisco.com and on the Documentation CD-ROM.

On Cisco.com at:

Technical Documents: Documentation Home Page: Cisco IOS Software Configuration: Cisco IOS Release 12.1: Configuration Guides and Command References

On the Documentation CD-ROM at:

Cisco Product Documentation: Cisco IOS Software Configuration: Cisco IOS Release 12.1: Configuration Guides and Command References

Release 12.1 Documentation Set

Table 6 describes the contents of the Cisco IOS Release 12.1 software documentation set, which is available in both electronic and printed form.



Note

You can find the most current Cisco IOS documentation on Cisco.com and the Documentation CD-ROM. These electronic documents may contain updates and modifications made after the hard-copy documents were printed.

On Cisco.com at:

Technical Documents: Documentation Home Page: Cisco IOS Software Configuration: Cisco IOS Release 12.1

On the Documentation CD-ROM at:

Cisco Product Documentation: Cisco IOS Software Configuration: Cisco IOS Release 12.1

Table 6 Cisco IOS Software Release 12.1 Documentation Set

Books	Major Topics
<ul style="list-style-type: none"> <i>Cisco IOS Configuration Fundamentals Configuration Guide</i> <i>Cisco IOS Configuration Fundamentals Command Reference</i> 	Configuration Fundamentals Overview Cisco IOS User Interfaces Cisco IOS File Management Cisco IOS System Management Cisco IOS User Interfaces Commands Cisco IOS File Management Commands Cisco IOS System Management Commands
<ul style="list-style-type: none"> <i>Cisco IOS Bridging and IBM Networking Configuration Guide</i> <i>Cisco IOS Bridging and IBM Networking Command Reference, Volume I</i> <i>Cisco IOS Bridging and IBM Networking Command Reference, Volume II</i> 	Using Cisco IOS Software Overview of SNA Internetworking Bridging IBM Networking
<ul style="list-style-type: none"> <i>Cisco IOS Dial Services Configuration Guide: Terminal Services</i> <i>Cisco IOS Dial Services Configuration Guide: Network Services</i> <i>Cisco IOS Dial Services Command Reference</i> 	Preparing for Dial Access Modem Configuration and Management ISDN and Signalling Configuration PPP Configuration Dial-on-Demand Routing Configuration Dial-Backup Configuration Terminal Service Configuration Large-Scale Dial Solutions Cost-Control Solutions Virtual Private Networks X.25 on ISDN Solutions Telco Solutions Dial-Related Addressing Services Interworking Dial Access Scenarios

Table 6 Cisco IOS Software Release 12.1 Documentation Set (continued)

Books	Major Topics
<ul style="list-style-type: none"> • <i>Cisco IOS Interface Configuration Guide</i> • <i>Cisco IOS Interface Command Reference</i> 	Interface Configuration Overview Configuring LAN Interfaces Configuring Serial Interfaces Configuring Logical Interfaces
<ul style="list-style-type: none"> • <i>Cisco IOS IP and IP Routing Configuration Guide</i> • <i>Cisco IOS IP and IP Routing Command Reference</i> 	IP Addressing and Services IP Routing Protocols IP Multicast
<ul style="list-style-type: none"> • <i>Cisco IOS AppleTalk and Novell IPX Configuration Guide</i> • <i>Cisco IOS AppleTalk and Novell IPX Command Reference</i> 	AppleTalk and Novell IPX Overview Configuring AppleTalk Configuring Novell IPX
<ul style="list-style-type: none"> • <i>Cisco IOS Apollo Domain, Banyan VINES, DECnet, ISO CLNS, and XNS Configuration Guide</i> • <i>Cisco IOS Apollo Domain, Banyan VINES, DECnet, ISO CLNS, and XNS Command Reference</i> 	Apollo Domain, Banyan VINES, DECnet, ISO CLNS, and XNS Overview Configuring Apollo Domain Configuring Banyan VINES Configuring DECnet Configuring ISO CLNS Configuring XNS
<ul style="list-style-type: none"> • <i>Cisco IOS Multiservice Applications Configuration Guide</i> • <i>Cisco IOS Multiservice Applications Command Reference</i> 	Multiservice Applications Overview Voice Video Broadband
<ul style="list-style-type: none"> • <i>Cisco IOS Quality of Service Solutions Configuration Guide</i> • <i>Cisco IOS Quality of Service Solutions Command Reference</i> 	Quality of Service Overview Classification Congestion Management Congestion Avoidance Policing and Shaping Signalling Link Efficiency Mechanisms Quality of Service Solutions
<ul style="list-style-type: none"> • <i>Cisco IOS Security Configuration Guide</i> • <i>Cisco IOS Security Command Reference</i> 	Security Overview Authentication, Authorization, and Accounting (AAA) Security Server Protocols Traffic Filtering and Firewalls IP Security and Encryption Other Security Features
<ul style="list-style-type: none"> • <i>Cisco IOS Switching Services Configuration Guide</i> • <i>Cisco IOS Switching Services Command Reference</i> 	Cisco IOS Switching Services Overview Cisco IOS Switching Paths Cisco Express Forwarding NetFlow Switching Multiprotocol Label Switching Multilayer Switching Multicast Distributed Switching Virtual LANs LAN Emulation

Table 6 Cisco IOS Software Release 12.1 Documentation Set (continued)

Books	Major Topics
<ul style="list-style-type: none"> • <i>Cisco IOS Wide-Area Networking Configuration Guide</i> • <i>Cisco IOS Wide-Area Networking Command Reference</i> 	Wide-Area Networking Overview Configuring ATM Configuring Frame Relay Configuring Frame Relay-ATM Interworking Configuring SMDS Configuring X.25 and LAPB
<ul style="list-style-type: none"> • <i>Cisco IOS Configuration Guide Master Index</i> • <i>Cisco IOS Command Reference Master Index</i> • <i>Cisco IOS Debug Command Reference</i> • <i>Cisco IOS Dial Services Quick Configuration Guide</i> • <i>Cisco IOS Software System Error Messages</i> • <i>New Features in 12.1-Based Limited Lifetime Releases</i> • <i>New Features in Release 12.1 T</i> • Release Notes (Release note and caveat documentation for 12.1-based releases and various platforms) 	

**Note**

Cisco Management Information Base (MIB) User Quick Reference is no longer published. If you have an account with Cisco.com, you can find the current list of MIBs supported by Cisco. To reach the *Cisco Network Management Toolkit*, go to Cisco.com, press **Login**, and click to **Software Center: Network Mgmt Products: Cisco Network Management Toolkit: Cisco MIB**.

Obtaining Documentation

World Wide Web

You can access the most current Cisco documentation on the World Wide Web at <http://www.cisco.com>, <http://www-china.cisco.com>, or <http://www-europe.cisco.com>.

Documentation CD-ROM

Cisco documentation and additional literature are available in a CD-ROM package, which ships with your product. The Documentation CD-ROM is updated monthly. Therefore, it is probably more current than printed documentation. The CD-ROM package is available as a single unit or as an annual subscription.

Ordering Documentation

Registered Cisco.com users can order the Documentation CD-ROM and other Cisco Product documentation through our online Subscription Services at <http://www.cisco.com/cgi-bin/subcat/kaojump.cgi>.

Nonregistered Cisco.com users can order documentation through a local account representative by calling Cisco's corporate headquarters (California, USA) at 408 526-4000 or, in North America, call 800 553-NETS (6387).

Obtaining Technical Assistance

Cisco provides Cisco.com as a starting point for all technical assistance. Warranty or maintenance contract customers can use the Technical Assistance Center. All customers can submit technical feedback on Cisco documentation using the web, e-mail, a self-addressed stamped response card included in many printed documents, or by sending mail to Cisco.

Cisco.com

Cisco continues to revolutionize how business is done on the Internet. Cisco.com is the foundation of a suite of interactive, networked services that provides immediate, open access to Cisco information and resources at anytime, from anywhere in the world. This highly integrated Internet application is a powerful, easy-to-use tool for doing business with Cisco.

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Customers and partners can self-register on Cisco.com to obtain additional personalized information and services. Registered users may order products, check on the status of an order and view benefits specific to their relationships with Cisco.

You can access Cisco.com in the following ways:

- WWW: www.cisco.com
- Telnet: [cco.cisco.com](telnet://cco.cisco.com)
- Modem using standard connection rates and the following terminal settings: VT100 emulation; 8 data bits; no parity; and 1 stop bit.
 - From North America, call 408 526-8070
 - From Europe, call 33 1 64 46 40 82

You can e-mail questions about using Cisco.com to cco-team@cisco.com.

Technical Assistance Center

The Cisco Technical Assistance Center (TAC) is available to warranty or maintenance contract customers who need technical assistance with a Cisco product that is under warranty or covered by a maintenance contract.

To display the TAC web site that includes links to technical support information and software upgrades and for requesting TAC support, use www.cisco.com/techsupport.

To contact by e-mail, use one of the following:

Language	E-mail Address
English	tac@cisco.com
Hanzi (Chinese)	chinese-tac@cisco.com
Kanji (Japanese)	japan-tac@cisco.com
Hangul (Korean)	korea-tac@cisco.com
Spanish	tac@cisco.com
Thai	thai-tac@cisco.com

In North America, TAC can be reached at 800 553-2447 or 408 526-7209. For other telephone numbers and TAC e-mail addresses worldwide, consult the following web site:
<http://www.cisco.com/warp/public/687/Directory/DirTAC.shtml>.

Software Configuration Tips on the Cisco Technical Assistance Center Home Page

If you have a Cisco.com log-in account, you can access the following URL, which contains links and tips on configuring your Cisco products:

http://www.cisco.com/public/technotes/tech_sw.html

This URL is subject to change without notice. If it changes, point your Web browser to Cisco.com, press **Login**, and click on this path: **Technical Assistance Center: Technical Tips**.

The following sections are provided from the Technical Tips page:

- **Access Dial Cookbook**—Contains common configurations or recipes for configuring various access routes and dial technologies.
- **Field Notices**—Notifies you of any critical issues regarding Cisco products and includes problem descriptions, safety or security issues, and hardware defects.
- **Frequently Asked Questions**—Describes the most frequently asked technical questions about Cisco hardware and software.
- **Hardware**—Provides technical tips related to specific hardware platforms.
- **Hot Tips**—Describes popular tips and hints gathered from the Cisco Technical Assistance Center (TAC). Most of these documents are available from the TAC Fax-on-demand service. To reach Fax-on-demand and receive documents at your fax machine from the United States, call 888-50-CISCO (888-502-4726). From other areas, call 650-596-4408.
- **Internetworking Features**—Lists tips on using Cisco IOS software features and services.
- **Sample Configurations**—Provides actual configuration examples that are complete with topology and annotations.

Documentation Feedback

If you are reading Cisco product documentation on the World Wide Web, you can submit technical comments electronically. Click **Feedback** in the toolbar and select **Documentation**. After you complete the form, click **Submit** to send it to Cisco.

You can e-mail your comments to bug-doc@cisco.com.

To submit your comments by mail, for your convenience many documents contain a response card behind the front cover. Otherwise, you can mail your comments to the following address:

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Document Resource Connection
170 West Tasman Drive
San Jose, CA 95134-9883

We appreciate and value your comments.

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