



CISCO SYSTEMS

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IPeXchange Internet Gateway Release Notes

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These release notes describe the features and caveats for the IPeXchange Internet Gateway, which is software that connects Novell NetWare users to the Internet or other TCP/IP-based network services. IPeXchange allows NetWare client workstations to use TCP/IP-based applications such as Telnet, FTP, and Netscape Navigator without requiring a TCP/IP protocol stack on each workstation.

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Platform Support

The IPeXchange Internet Gateway server software runs on the following router platforms:

- Cisco 1003 and Cisco 1004 ISDN routers
- Cisco 1005 high-speed serial router

Documentation

The IPeXchange Internet Gateway software is documented in the *IPeXchange Internet Gateway User Guide*.

The Cisco 1003 and Cisco 1004 routers are documented in the *Cisco 1003 and Cisco 1004 User Guide*, and the Cisco 1005 router is documented in the *Cisco 1005 User Guide*.

Electronic documentation is available on the Cisco Connection Documentation, Enterprise Series CD-ROM. The *IPeXchange Internet Gateway User Guide* is located in the Cisco Product Documentation Internet Gateway Products database. The Cisco 1000 series user guides are located in the Cisco Product Documentation, Access Servers and Access Routers, Fixed Configuration Access Routers database.

You can also access Cisco technical documentation on the World Wide Web URL <http://www.cisco.com>.

Installing the IPeXchange Internet Gateway

To install the IPeXchange Internet Gateway, follow these steps:

- Step 1** Install the router hardware. This router is the one that will act as the IPeXchange server. To install the router, follow the hardware installation procedure in the appropriate Cisco 1000 series user guide.
- Step 2** Install the IPeXchange server software. This software is the Cisco Internetwork Operating System (Cisco IOS) software. To install the server software, follow the procedure in the *IPeXchange Internet Gateway User Guide*. Do not use the software installation procedure in the Cisco 1000 series user guide.
- Step 3** Install the IPeXchange client software. To do this, follow the procedure in the *IPeXchange Internet Gateway User Guide*.

IPeXchange Internet Gateway Packaging

The IPeXchange Internet Gateway server software is available in different feature sets depending upon the number of user licenses you have purchased. Table 1 lists the software for the Cisco 1003 and Cisco 1004 ISDN routers. Table 2 lists the software for the Cisco 1005 router.

Table 1 Cisco 1003 and Cisco 1004 ISDN Routers Software Feature Sets

Feature	Feature Set	
	20 User Licenses	50 User Licenses
SNMP	—	Yes
ISDN	Yes	Yes
PPP	Yes	Yes
HDLC	Yes	Yes
IP	Yes	Yes
IPX	Yes	Yes
IPXWAN 2.0	Yes	Yes
Telnet	Yes	Yes
AutoInstall	Yes	Yes

Feature	Feature Set	
	20 User Licenses	50 User Licenses
ClickStart	Yes	Yes
Router monitoring	Yes	Yes

Table 2 Cisco 1005 Routers Software Feature Sets

Feature	Feature Set	
	20 User Licenses	50 User Licenses
SNMP	—	Yes
Frame Relay (RFC 1490)	Yes	Yes
PPP	Yes	Yes
HDLC	Yes	Yes
IP	Yes	Yes
IPX	Yes	Yes
IPXWAN 2.0	Yes	Yes
Telnet	Yes	Yes
AutoInstall	Yes	Yes
ClickStart	Yes	Yes
Router monitoring	Yes	Yes

Memory Requirements

Table 3 lists the IPeXchange memory requirements for each router platform.

Table 3 IPeXchange Memory Requirements

System	20 User Licenses	50 User Licenses
Cisco 1003 or Cisco 1004 router	4 MB RAM	8 MB RAM
Cisco 1005	4 MB RAM	8 MB RAM

Boot ROM Requirements

Boot ROM versions and system images are independent of each other. Table 4 lists the default boot ROM levels that ship with Cisco platforms. These levels contain the latest features and support all current hardware and software features.

Table 4 Boot ROM Levels of New Cisco Platforms

Platform	Boot ROM Level
Cisco 1003 and Cisco 1004	10.3(7)
Cisco 1005	10.3(7)

Upgrading the IPeXchange Server Software

The IPeXchange software includes a remote shell daemon (RSHD) application, which you can use to upgrade the IPeXchange server software. You install the RSHD application on a NetWare client PC, and you use it to retrieve IPeXchange software upgrades from a server located at Cisco Systems.

Install the Winsock RSHD Application

To install the Winsock RSHD application on a client PC, follow these steps:

Step 1 Insert the floppy disk containing the RSHD application into your floppy disk drive.

Step 2 From the File menu, choose Run and type a:setup.

A Program Group called Winsock RSHD is created.

Upgrade Your IPeXchange Server Software

If necessary, you can upgrade the IPeXchange server software if you have a support contract and are a registered Cisco Connection Online (CCO) user. Once you register, you will receive an access code that will allow you to retrieve software upgrades.

To upgrade the IPeXchange server software that is running on the Cisco 1000 series routers, follow these steps:

Step 1 To retrieve the upgrade software, do one of the following:

- Connect via ftp to cco.cisco.com. Change into the directory cisco/internet/ipexchange, and get a copy of the upgraded software image.
- Using Netscape or another browser, enter the location <http://www.cisco.com>. Select Software Library:Software Images:Internet Products:IPeXchange, and retrieve a copy of the upgraded software image.

Step 2 From the PC on which you installed the Winsock RSHD application, connect to the Cisco 1000 series router. You can do this by connecting the PC to the router's console port or by establishing a Telnet session from the PC to the router. Connecting via the console port is the preferred method so that when you reload the router in Step 9, you will not lose your connection to the router.

Step 3 On the PC, start the Winsock RSHD application by doubleclicking the icon. Verify that the Cisco IPeXchange Window has the IPeXchange Router as the Gateway.

Step 4 At router prompt, enter the following command to copy the IPeXchange software image from the PC to the router:

```
copy rcp flash
```

Step 5 When prompted, enter the IP address or name of the router.

Step 6 When prompted, enter the full path name of the server software to be copied to the router. As an example, you might enter c:\cisco\image.mz.

Step 7 Press **Return** to confirm that you want to copy the file.

Step 8 Enter **yes** if you want to erase the old copy of the server software that is in Flash memory.

Step 9 Reload the router:

```
reload
```

Important Notes

If you are using a Cisco 1005 router as the IPeXchange server, the router might reload when you configure header compression with the **frame-relay ip tcp header-compression** command. This is reported as CSCdi47708. Specifically, the router reloads if you configure **cisco** compression. As a workaround, do not configure TCP/IP header compression. If you require compression, consider using payload compression.

IPeXchange Caveats

This section describes possibly unexpected behavior by the IPeXchange software. The caveats listed here describe only the serious problems. For the complete list of caveats against the IPeXchange software, use the Cisco Connection Documentation, Enterprise Series CD or access CCO as described in the section “Cisco Connection Online (CCO)” later in this document.

Interfaces and Bridging

- A router might pause indefinitely when you enter the **encapsulation ppp** command for async-group interfaces. The **async mode dedicated** command has the same effect. [CSCdi53185]

Novell IPX

- Clearing the SPX spoofing table with either the **clear ipx spx-spoof** command or by removing the **ipx spx-spoof** command from the last interface left spoofing might cause a system reload. [CSCdi53070]

Wide-Area Networking

- Under certain conditions, the router can reload with the message “System was restarted by error - Illegal Instruction, PC 0x300D646.” This problem is related to ISDN. There is currently no workaround. [CSCdi45085]
- When you configure header compression with the **frame-relay ip tcp header-compression** command, the router might reload when you telnet to it. Specifically, the router reloads if you configure **cisco** compression. As a workaround, do not configure TCP/IP header compression. [CSCdi47708]

- The dialer fails to start an additional BRI interface when both BRI B-channels are active and the **dialer load-threshold** *load* is exceeded. [CSCdi50619]
- Using multidrop lines on a 5ESS ISDN switch is not recommended. If used, they will have SPIDs. Currently, the SPIDs are sent out BRI0 only, so on a router equipped with an MBRI, lines other than BRI0 will not be able to place calls. The workaround is to get point-to-point lines from the telco. [CSCdi53168]

Cisco Connection Online (CCO)

Cisco Connection Online (CCO), formerly Cisco Information Online (CIO), is Cisco Systems' primary, real-time support channel. Maintenance customers and partners can self-register on CCO to obtain additional content and 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, Internet e-mail, and fax download options, 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>.
- Telnet: [cco.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 are a network administrator and need personal technical assistance with a Cisco product that is under warranty or covered by a maintenance contract, contact Cisco's Technical Assistance Center (TAC) at 800 553-2447, 408 526-7209, or tac@cisco.com. To obtain general information about Cisco Systems, Cisco products, or upgrades, contact 800 553-6387, 408 526-7208, or cs-rep@cisco.com.

Cisco Connection Documentation

The complete caveats against this release are available on the Cisco Connection Documentation, Enterprise Series CD—formerly UniverCD—which is the Cisco library of product information on CD-ROM. On CD, access the Cisco IOS 11.0 caveats in the Cisco IOS Release 11.0 database.

The CD is updated and shipped monthly so it might be more current than printed documentation. To order the CD, contact your local sales representative or call Customer Service. The CD is available both as a single CD and as an annual subscription. You can also access Cisco technical documentation on the World Wide Web URL <http://www.cisco.com>.

This document is to be used with the *IPeXchange Internet Gateway User Guide*.

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