



Text Part Number: OL-0047-01

Release Notes for Analog Modem Firmware Version 1.0.1

September 28, 1998

These release notes document firmware version 1.0.1 for analog modem network modules for Cisco 2600 series and Cisco 3600 series routers. Use this document in conjunction with your router installation and configuration guide, the *Network Module Hardware Installation Guide*, the *Software Configuration Guide*, the *Regulatory Compliance and Safety Information* document for your router, and the Cisco IOS configuration guides and command references.

Cisco documentation and additional literature are available in a CD-ROM package, which ships with your product. The Documentation CD-ROM, a member of the Cisco Connection Family, is updated monthly. Therefore, it might be more current than printed documentation. To order additional copies of the Documentation CD-ROM, contact your local sales representative or call customer service. The CD-ROM package is available as a single package or as an annual subscription. You can also access Cisco documentation on the World Wide Web at <http://www.cisco.com>, <http://www-china.cisco.com>, or <http://www-europe.cisco.com>.

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

If you have questions or need help, refer to the "Cisco Connection Online" section on page 5 for further information.

This document includes the following sections:

- Overview
- Features of Firmware Version 1.0.1
- Problems Resolved in Firmware Version 1.0.1
- Known Problems in Firmware Version 1.0.1
- Determining Your Firmware Version
- Firmware Download Instructions
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Overview

Modem firmware is downloaded to the modems at startup. A version of firmware is always bundled with the Cisco IOS image. A separate file can be stored in Flash memory to override this firmware with one that contains newer features. If the router finds more than one version of modem firmware at startup, it automatically loads the latest version.

The firmware version must be compatible with the Cisco IOS software release level, as shown in Table 1.

Table 1 **Firmware Compatibility**

Firmware Version	Cisco IOS Release
1.0.0	11.3(4)T and higher
1.0.1	11.3(5)T and higher

Features of Firmware Version 1.0.1

Firmware version 1.0.1 provides support for the following protocols:

- ITU-T V.34 Annex 12 at 33600 and 31200 bps
- ITU-T V.34 at 28,800, 26,400, 24,000, 21,600, 19,200, 16,800, 14,400, 12,000, 9,600, 7,200, 4,800, and 2,400 bps
- ITU-T V.32bis at 14,400, 12,000, 9,600, 7,200, and 4,800 bps
- V.32 terbo up to 19,200 bps
- ITU-T V.32 at 9,600 and 4,800 bps
- ITU-T V.23 in two modes: split speed and half-duplex 1,200/75 (backchannel) bps
- ITU-T V.22bis at 2,400 and 1,200 bps
- ITU-T V.22 at 1,200 bps
- ITU-T V.21 at 300 bps
- Bell 212A at 1,200 bps
- Bell 103A at 300 bps (asynchronous)
- ITU-T V.42 (including MNP 2 to 4 and LAPM) error correction
- ITU-T V.42bis and MNP 5 data compression

Table 2 shows supported countries and the minimum firmware version and minimum Cisco IOS release needed.

Table 2 **Minimum Firmware Version and Cisco IOS Release by Country**

Country	Firmware Version	Cisco IOS Release
Argentina	1.0.0	11.3(4)T
Australia	1.0.1	11.3(5)T
Austria	1.0.1	11.3(5)T
Belgium	1.0.1	11.3(5)T
Canada	1.0.0	11.3(4)T

Table 2 Minimum Firmware Version and Cisco IOS Release by Country

Country	Firmware Version	Cisco IOS Release
Denmark	1.0.1	11.3(5)T
Finland	1.0.1	11.3(5)T
France	1.0.1	11.3(5)T
Germany	1.0.1	11.3(5)T
Great Britain	1.0.1	11.3(5)T
Greece	1.0.1	11.3(5)T
Iceland	1.0.1	11.3(5)T
India	1.0.0	11.3(4)T
Indonesia	1.0.0	11.3(4)T
Ireland	1.0.1	11.3(5)T
Japan	1.0.1	11.3(5)T
Latin America	1.0.0	11.3(4)T
Luxembourg	1.0.1	11.3(5)T
Malaysia	1.0.0	11.3(4)T
Netherlands	1.0.1	11.3(5)T
New Zealand	1.0.1	11.3(5)T
Philippines	1.0.0	11.3(4)T
Portugal	1.0.1	11.3(5)T
Singapore	1.0.1	11.3(5)T
South America	1.0.0	11.3(4)T
Spain	1.0.1	11.3(5)T
Sweden	1.0.1	11.3(5)T
Thailand	1.0.0	11.3(4)T
United States	1.0.0	11.3(4)T

Problems Resolved in Firmware Version 1.0.1

The following problems in firmware version 1.0.0 are fixed in version 1.0.1:

- CSCdk35161—Fails V.42*bis* negotiation with U.S. Robotics internal modem.
- CSCdk31146—Hardware homologation changes to add TBR 21 support.

Known Problems in Firmware Version 1.0.1

Firmware version 1.0.1 has the following known problem:

- CSCdk43602—Bell 103 connections fail.

For the latest information on known problems, follow these steps to consult Cisco Connection Online (CCO):

- Step 1** Connect to CCO as directed in the “Cisco Connection Online” section on page 5.
- Step 2** On the CCO home page, click **LOGIN**, which appears in green in the menu bar at the top of the page, and log into CCO. (If you are not a registered CCO user, follow the instructions to register so you can log in.)
- Step 3** Click **Software & Support** on the CCO home page.
- Step 4** On the Software & Support page, click **Technical Tools**.
- Step 5** On the Technical Tools page, click **Bug Toolkit II**.
- Step 6** Use one of the tools to get up-to-date bug information. For example, click **Search for Bug by ID Number**, then enter a bug ID, such as CSCdj80580, when prompted.

Note For instructions on using the bug tools, click **Help—How to Use the Bug Toolkit** at the bottom of the Bug Toolkit II page.

Determining Your Firmware Version

To find out what modem firmware version you have now, enter the **show modem version** command at the EXEC prompt, Router> or Router#:

```
Router> show modem version
Slot1: MCOM Analog Integrated Modem Firmware
Source: IOS
Boot firmware: 1.1.0
MIMIC firmware: 1.2.7
Modem firmware: 2.2.44
DSP firmware: 0.0.2
```

A “modem firmware” value of 2.2.44 indicates modem firmware version 1.0.0. A value of 2.2.46 indicates modem firmware version 1.0.1.

Firmware Download Instructions

For firmware download instructions, see the *Cisco 2600 Series and 3600 Series Analog Modem Firmware Upgrade Configuration Note* in printed form or at the URL:

http://www.cisco.com/univercd/cc/td/doc/product/access/acs_mod/cis3600/3600_cn/ana_logfw.htm

Cisco Connection Online

Cisco Connection Online (CCO) is Cisco Systems' primary, real-time support channel. Maintenance customers and partners can self-register on CCO to obtain additional information 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, product documentation, 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 it 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://www-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 connection rates up to 28.8 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.

Use this document in conjunction with your router installation and configuration guide, the *Network Module Hardware Installation Guide*, the *Software Configuration Guide*, the *Regulatory Compliance and Safety Information* document for your router, and the Cisco IOS configuration guides and command references.

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