Release Notes for Cisco DVB CAR100 Cable Access Router for Software Release 1.2

March 26, 2001

These release notes for the Cisco DVB CAR100 Cable Access Router support the software release 1.2, and are updated as needed to describe new features, memory requirements, hardware support and configuration software, and related documents.

Note You can find the most current Cisco documentation on Cisco.com. This set of electronic documents may contain updates and modifications made after the hard-copy documents were printed.

Contents

These release notes discuss the following topics:

CISCO SYSTEMS

78-10963-02

Introduction

The Cisco DVB CAR100 is a cable modem based on the Digital Video Broadcasting (DVB) standard. It enables two-way data communication at bit rates up to 10 Mbps between a hybrid fiber-coaxial (HFC) network and an Ethernet network. The Cisco DVB CAR100 is primarily intended for enabling broadband Internet access.

System Requirements

Supported Hardware

The hardware components supported in this release include:

- Cisco DVB CAR100 Cable Access Router, PC version and LAN version

New and Changed Information

New Software Features in Cisco DVB CAR100 Release 1.2

The following new software features are supported by the Cisco DVB CAR100 Release 1.2:

- Dynamic Host Configuration Protocol (DHCP) Relay Agent.

- Built-in DHCP server. This is also now the default configuration.

- Simple Network Management Protocol (SNMP) traps. An SNMP trap is an unsolicited SNMP event from the cable modem to the operator.

- Cisco DVB CAR100 can be configured as a bridge.

- Ethernet MAC Bridging Encapsulation.

- 1- and 4-MHz upstream bandwidth support.

- Dynamic BOOTP IP configuration of the Ethernet interface. This is required for the DHCP relay feature in the cable modem.

- Configuration of routing tables using SNMP. You can configure 16 entries for multiple LANs behind the Cisco DVB CAR100 Ethernet interface.

- Modem Time-Of-Day (TOD) can be set by SNMP. This is required for EuroModem MIB support. Formerly, TOD configuration was only supported using Simple Mail Transfer Protocal. (SMTP).

Installation Notes

Files Included in the Release 1.2

You can download the files for the Cisco DVB CAR100 Release 1.2 from Cisco.com under http://www.cisco.com/kobayashi/sw-center/sw-access.shtml.

- /readme.txt
- MD5 check sum file: /md5-checksums
- RCM MIB file: /mibs/rcm.mib
- RCMEEU MIB file: /mmibs/receeu.mib

Software Images Available for Download

The following images are available for downloading using the file transfer protocol TFTP:

- /bin/car100.bin
- /bin/car100fpga300.bin

Note Some Cisco DVB CAR100 cable modems that operate with software older than version 0.6i do not accept the car100.bin file. Use the image car100fpga300.bin instead.

Upgrading to a New Software Release

If software version 1.2 is not already installed on the Cisco DVB CAR100, perform a software update.

Step 1 If necessary, install a TFTP program on the management PC you want to use for the software upgrade.

The management PC must be connected to the backbone of your HFC network where the units to be upgraded are installed.

Step 2 Copy the new software file to the root directory or a subfolder of the TFTP server program.

Step 3 Start the Cisco Cable DVB/DAVIC Management Program or MIB browser.

Step 4 Double-click the Cisco DVB CAR100 you want to upgrade (or use the **Edit** command in the Network Devices menu and enter the relevant device's IP address). Check that the Community password matches the password defined for the Software Upgrade Community (**rcmSwUpgradeCommunity**) password in the System (**rcmSoftware**) section of your MIB browser. The factory default is **default**.

Caution If you change the software upgrade password from the factory default (that is, **default**) and then lose or forget the new password, there is no backdoor solution. You will have effectively rendered the Cisco DVB CAR100 unconfigurable.

Step 5 Enter the Software section (**rcmSoftware**).

Step 6 Click **Server** (**rcmSwServer**).

Step 7   Enter the IP address of the TFTP server to be used for the upgrade and click **Set**.

Step 8   Click **Filename** (**rcmSwFilename**).

Step 9   Enter the TFTP filename (*.bin), for example, car100.bin, and if necessary a path, and click **Set**.

Step 10   Set **Admin status** (**rcmSwAdminStatus**) to **upgradeNow** and click **Set**.

This causes the Cisco DVB CAR100 to load the new software file—the status line of the TFTP servers will show a confirmation message.

Tips   To verify if the software upgrade has been successful, check that the value for Upgrade version (**rcmSwUpgradeVer**) in rcm Software matches the version you have just uploaded.

Step 11   Restore the **Community** password back to the current read or write community password for the unit.

Step 12   Now reset the cable modem by opening the section **rcm System** and clicking **Reset now**. In the Properties box that appears, select **reset** (2) from the pull-down menu and click **Set**.

Upgrading the Fallback Image

The Cisco DVB CAR100 is manufactured with two identical software images: Image 1 and Image 2. Image 1 is the fallback image. Image 2 is the primary image selected for execution by the Cisco DVB CAR100, and is directly upgradable from a TFTP server. If Image 2 becomes corrupted, Image 1 is selected for execution at the next reboot by the Cisco DVB CAR100.

If Image 2 has been successfully upgraded, Image 1 will be out of date, and it is therefore recommended that this image also be upgraded regularly. Upgrading Image 1 can be performed only from a successfully running Image 2. This is done by copying Image 2 over Image 1. If the operation fails for some reason, the operation is retried at the next reboot until successful. This should ensure that there is always at least one valid image available to successfully reboot the Cisco DVB CAR100.

To upgrade the fallback image:

Step 1   Set the Community password to the password for the Software Upgrade Community (see Step 3 and Step 4 above in "Upgrading to a New Software Release".

Step 2   Choose **copy Upgrade To Fall Back** and click **Set**.

Step 3   Reset the Community password back to the current read or write community password for the DVB/DAVIC Management Program or MIB browser.

Tips   A power failure during a software upgrade can damage the new software image, Image 2. The Cisco DVB CAR100 automatically reverts to Image 1 if Image 2 is damaged. Simply start the download procedure again.

Limitations and Restrictions

There are no known limitations in this release.

Caveats

Caveats describe unexpected behavior in the Cisco DVB CAR100 software release. Severity 1 caveats are the most serious caveats; severity 2 caveats are less serious. Severity 3 caveats are moderate caveats.

> **Note** If you have an account with Cisco.com, you can use Bug Navigator II to find caveats of any severity for any release. To reach Bug Navigator II, go to CCO and click **Login**. Then go to **Software Center: Cisco IOS Software: Cisco Bugtool Navigator II**. Another option is to go to http://www.cisco.com/support/bugtools.

Open Caveats—Release 1.2

- CSCds67966 Out of order IP fragments bug

  When Network Address Translation Protocol (NATP) is turned on, receiving out-of-order IP fragments does not work. The NATP library used has to know the first fragment to correctly de-NATP later fragments.

  The problem should be fixed by holding out-of-order fragments until the first is received and then flush the held fragments. The fix should also take into account out-of-order IP datagrams from the same peer (IP Source Address, IP Protocol). The solution should not assume that full IP datagrams are received in the order sent.

Documentation Update

The following manuals have been updated to cover this software release:

- *Cisco DVB CAR100 Cable Access Router Quick Start Guide*
- *Cisco DVB CAR100 Cable Access Router Hardware Installation Guide*
- *Cisco DVB CAR100 Cable Access Router Installation and Configuration Guide*

Related Documentation

These documents are available for the Cisco DVB CAR100 on Cisco.com:

- *Cisco DVB CAR100 Cable Access Router Quick Start Guide*
- *Cisco DVB CAR100 Cable Access Router Hardware Installation Guide*
- *Cisco DVB CAR100 Cable Access Router Installation and Configuration Guide*

Obtaining Documentation

The following sections provide sources for obtaining documentation from Cisco Systems.

World Wide Web

The most current Cisco documentation is available on the World Wide Web at http://www.cisco.com. Translated documentation can be accessed at http://www.cisco.com/public/countries_languages.shtml.

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 and may be more current than printed documentation. The CD-ROM package is available as a single unit or as an annual subscription.

Ordering Documentation

Cisco Documentation is available in the following ways:

- Registered Cisco Direct Customers can order Cisco product documentation from the Networking Products MarketPlace:

  http://www.cisco.com/cgi-bin/order/order_root.pl

- Registered Cisco.com users can order the Documentation CD-ROM through the online Subscription Store:

  http://www.cisco.com/go/subscription

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

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.

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

Cisco Systems, Inc.
Document Resource Connection
170 West Tasman Drive
San Jose, CA 95134-9883

We appreciate and value your comments.

Obtaining Technical Assistance

The following sections provide sources for obtaining technical assistance from Cisco Systems.

Cisco.com

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.

Cisco.com provides a broad range of features and services to help customers and partners streamline business processes and improve productivity. Through Cisco.com, you can find information about Cisco and our networking solutions, services and programs. In addition, you can resolve technical issues with online technical support, download and test software packages, and order Cisco learning materials and merchandise. Valuable online skill assessment, training, and certification programs are also available.

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

To access Cisco.com, go to the following website:

http://www.cisco.com

Technical Assistance Center

The Cisco TAC website is available to all customers who need technical assistance with a Cisco product or technology that is under warranty or covered by a maintenance contract.

Contacting TAC by Using the Cisco TAC Website

If you have a priority level 3 (P3) or priority level 4 (P¤) problem, contact TAC by going to the TAC website:

http: www.cisco.com/tac

P3 and P4 level problems are defined as follows:

• P3—Your network performance is degraded. Network functionality is noticeably impaired, but most business operations continue.

• P4—You need information or assistance on Cisco product capabilities, product installation, or basic product configuration.

In each of the above cases, use the Cisco TAC website to quickly find answers to your questions.

To register for Cisco.com, go to the following website:

http://www.cisco.com/register/

Cisco.com registered users who cannot resolve a technical issue by using the TAC online resource can open a case online by using the TAC Case Open tool at the following website:

http://www.cisco.com/tac/caseopen

Contacting TAC by Telephone

If you have a priority level 1 (P1) or priority level 2 (P2) problem, contact TAC by telephone and immediately open a case. To obtain a directory of toll-free numbers for your country, go to the following website:

http://www.cisco.com/warp/public/687/Directory/DirTAC.shtml

P1 and P2 level problems are defined as follows:

* P1—Your production network is down, causing a critical impact to business operations if service is not restored quickly. No workaround is available.

* P2—Your production network is severely degraded, affecting significant aspects of your business operations. No workaround is available.