Upgrade Cisco IOS if you Install This 4xDMT Line Card

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This note applies to the quad-port DMT ATU-C line card (4xDMT), product number ATUC-1-4DMT, revision 800-05262-03 or greater.

The enclosed device is a 4xDMT for use in Cisco 6130 and Cisco 6260 digital subscriber line access multiplexer (DSLAM) systems. To recognize this line card, your Cisco DSLAM must be running Cisco IOS Release 12.0(8)DA2 or later. This line card cannot operate in a DSLAM running Cisco IOS version is 12.0(8)DA1 or earlier.

Use the **show version** command to display the version of software running on your Cisco DSLAM. If the Cisco IOS version is 12.0(8)DA1 or earlier, install a newer version.

You can obtain the new software on the web at this location:

http://www.cisco.com/cgi-bin/Software/Iosplanner/Planner-tool/iosplanner.cgi?majorRel=12.0

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Caution When you boot the DSLAM for the first time after installing Cisco IOS Release 12.0(8)DA2, the DSLAM downloads new microcode to the line cards. The microcode download takes about 35 minutes. During the download period, the Active LED on each line card blinks and the DSLAM does not pass data. Until the download is complete, *do not* remove cards from the chassis. *Do not* reboot the chassis. If you interrupt the download, the line card's flash memory might be damaged, making it necessary to replace the card. When the download is complete, the Active LEDs on the line cards stop blinking and the lines train as usual.

You can track the status of a microcode download through software using the command **show dsl int atm** *slot/port*. In the resulting display, look at the Line Status field. If the Line Status field says DOWNLOADING MICROCODE, wait a few minutes and check again.

Related Documentation

A complete list of all DSL product related documentation is available on the World Wide Web at http://www.cisco.com/univercd/cc/td/doc/product/dsl_prod/index.htm.

Obtaining Documentation

The following sections explain how to obtain documentation from Cisco Systems.

World Wide Web

You can access the most current Cisco documentation on the World Wide Web at the following URL:

http://www.cisco.com

Translated documentation is available at the following URL:

http://www.cisco.com/public/countries_languages.shtml

Documentation CD-ROM

Cisco documentation and additional literature are available in a Cisco Documentation CD-ROM package, which is shipped 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 through an annual subscription. Registered Cisco.com users can order the Documentation CD-ROM through the online Subscription Store:

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

Ordering Documentation

Most Cisco documentation is available only online at:

http://www.cisco.com/univercd/home/home.htm

You can order some printed Cisco documentation 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

- Nonregistered Cisco.com users can order documentation through a local account representative by calling Cisco corporate headquarters (California, USA) at 408 526-7208 or, elsewhere in North America, by calling 800 553-NETS (6387).

Documentation Feedback

We appreciate your comments and feedback about Cisco documentation. There are several ways to submit comments to Cisco.

- If you are reading Cisco product documentation on Cisco.com, you can obtain a comment form electronically. Click **Leave Feedback** at the bottom of the Cisco Documentation home page. After you complete the form, print it out and fax it to Cisco at 408 527-0730.

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

- You can submit your comments by mail. Write to the following address:

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

- If you are a registered Cisco.com user, you can submit comments electronically.

  - To report problems, click **Feedback** in the toolbar at the top of any document web page, press the **Contact Cisco Now** button, and under Problem Type, select **CD/Online Documentation**. After you complete the form, click **Submit** to send it to Cisco.

  - To send your opinion of the DSL documentation, go to the following URL:

    http://www.cisco.com/univercd/cc/td/doc/product/dsl_prod/

    and click **here** at the top of the page in the sentence "Is this Cisco documentation helpful? Click here to give us your feedback." This displays a Documentation Survey that you can complete and submit to Cisco electronically.

Obtaining Technical Assistance

Cisco provides Cisco.com as a starting point for all technical assistance. Customers and partners can obtain documentation, troubleshooting tips, and sample configurations from online tools by using the Cisco Technical Assistance Center (TAC) Web Site. Cisco.com registered users have complete access to the technical support resources on the Cisco TAC Web Site.

Cisco.com

Cisco.com is the foundation of a suite of interactive, networked services that provides immediate, open access to Cisco information, networking solutions, services, programs, and resources at any time, from anywhere in the world.

Cisco.com is a highly integrated Internet application and a powerful, easy-to-use tool that provides a broad range of features and services to help you to

- Streamline business processes and improve productivity

- Resolve technical issues with online support

- Download and test software packages

- Order Cisco learning materials and merchandise

- Register for online skill assessment, training, and certification programs

You can self-register on Cisco.com to obtain customized information and service. To access Cisco.com, go to the following URL:

http://www.cisco.com

Technical Assistance Center

The Cisco TAC is available to all customers who need technical assistance with a Cisco product, technology, or solution. Two types of support are available through the Cisco TAC: the Cisco TAC Web Site and the Cisco TAC Escalation Center.

Inquiries to Cisco TAC are categorized according to the urgency of the issue:

- Priority level 4 (P4)—You need information or assistance concerning Cisco product capabilities, product installation, or basic product configuration.

- Priority level 3 (P3)—Your network performance is degraded. Network functionality is noticeably impaired, but most business operations continue.

- Priority level 2 (P2)—Your production network is severely degraded, affecting significant aspects of business operations. No workaround is available.

- Priority level 1 (P1)—Your production network is down, and a critical impact to business operations will occur if service is not restored quickly. No workaround is available.

Which Cisco TAC resource you choose is based on the priority of the problem and the conditions of service contracts, when applicable.

Cisco TAC Web Site

The Cisco TAC Web Site allows you to resolve P3 and P4 issues yourself, saving both cost and time. The site provides around-the-clock access to online tools, knowledge bases, and software. To access the Cisco TAC Web Site, go to the following URL:

http://www.cisco.com/tac

All customers, partners, and resellers who have a valid Cisco services contract have complete access to the technical support resources on the Cisco TAC Web Site. The Cisco TAC Web Site requires a Cisco.com login ID and password. If you have a valid service contract but do not have a login ID or password, go to the following URL to register:

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

If you cannot resolve your technical issues by using the Cisco TAC Web Site, and you are a Cisco.com registered user, you can open a case online by using the TAC Case Open tool at the following URL:

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

If you have Internet access, it is recommended that you open P3 and P4 cases through the Cisco TAC Web Site.

Cisco TAC Escalation Center

The Cisco TAC Escalation Center addresses issues that are classified as priority level 1 or priority level 2; these classifications are assigned when severe network degradation significantly impacts business operations. When you contact the TAC Escalation Center with a P1 or P2 problem, a Cisco TAC engineer will automatically open a case.

To obtain a directory of toll-free Cisco TAC telephone numbers for your country, go to the following URL:

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

Before calling, please check with your network operations center to determine the level of Cisco support services to which your company is entitled; for example, SMARTnet, SMARTnet Onsite, or Network Supported Accounts (NSA). In addition, please have available your service agreement number and your product serial number.

This document is to be used in conjunction with the documents listed in the "Related Documentation" section.

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