Quick Start FOR THE CISCO 633 SDSL CSU/DSU MODEM



The Cisco 633 channel service unit/digital service unit (CSU/DSU) modem converts frame relay (FR) frames into asynchronous transfer mode (ATM) cells and performs Frame Relay Forum (FRF.8) service interworking by translating FR-encapsulated data into ATM data and transports it over a symmetrical digital subscriber line (SDSL).

Note: The Cisco 633 can achieve rates of 1.168 Mbps up and downstream. However, the maximum operative rate is determined by the CO SDSL equipment.



To configure the Cisco633, you need a PC with a standard terminal emulation program or a dumb terminal, with a DB-9 COM port.



Note: If only a DB-25 serial port is available on the computer, you must also use a DB-9-to-DB-25 adapter to connect the serial cable to the computer.

3 Installing the Cisco 633

This sections provides information necessary to install the Cisco 633 CSU/DSU modem.

Connect the Management Port to the Serial Port of the PC

To configure your Cisco 633, follow these steps:

- Step1 Connect the RJ-45 connector on the serial cable (light blue) to the Cisco 633 management port.
- Step2Connect the other end of the serial cable to the PC's serial
port. (If your computer has only a DB-25 serial port, a
DB--9-to-DB25 adapter is needed for connection.)
- **Step3** Use the terminal access program from your PC's operating system to access the Cisco 633.
- **Step4** Log in to the Cisco Broadband Operating System (CBOS).

Configure the Serial Port

For the best access to CBOS, use your terminal emulation program (such as HyperTerminal in Windows) to set your COM protocol to the following settings:

- Baud rate: 38400 bps recommended (standard 9600 bps possible)
- Data bits: 8
- Parity: None

- Stop bits: 1
- Flow control: None

Connecting Cables

The basic procedure is:

- **Step1** Plug the power connector into the back of the unit.
- **Step2** Connect one end of the SERIAL cable to the back of the Cisco 633 and the other end to the FR router.
- **Step3** Connect one end of the Ethernet cable (yellow) to the Ethernet port on the back of the FR router and then connect the other end to the Ethernet cable to the Ethernet port on the back of your PC.
- **Step4** Connect the provided telephone cable (lavender) to the Cisco 633 WALL connector and then connect the other end of the cable to the wall-mounted telephone connector.
- **Step5** Plug the power supply into the wall.

The Cisco 633 powers on. Check to see that the POWER LED is on.

You have now successfully installed your Cisco 633 SDSL CSU/DSU modem. See the following sections for important configuration information.

Configuring Interworking

Interworking refers to the interworking function (IWF) data path. You must create this path to translate FR frames into ATM cells. To create IWF path, you must provision virtual circuits (VCs) and set data link connection identifiers (DLCIs).

Set Up ATM Virtual Connections

The following procedure describes how to configure VCs. You must be in **enable** mode to do this procedure.

Your system comes preconfigured with one VC already established. Each VC is expressed as wan0-*x*, where *x* is 0 -4. The command to change the value of VCs is:

set interface wan 0-x [vcix | vpix]

The valid ranges for VPI addresses is 0 to 255. The valid range for VCI addresses is 0 to 65535.

Changing VPI Settings

- **1** Disable the logical wan interface: cbos# set interface wan0-0 disable
- To set the VPI number to 2, enter: cbos# set interface wan0-0 vpi 2
- 3 To begin using this connection with the new settings, enter: cbos# set interface wan0-0 enable
- Repeat steps 1 thru 3 for every VPI assignment you want to make.
- To verify settings, enter: cbos# show interface wan0-0
- To save the new WAN port configuration, enter: cbos# write
- To exit the CBOS, enter: cbos# quit

Changing VCI Settings

- Disable the logical wan interface, enter: cbos# set interface wan0-0 disable
- **2** To set the VCI number to 4, enter: cbos# set interface wan0-0 vci 4

- 3 To begin using this connection with the new settings, enter: cbos# set interface wan0-0 enable
- 4 Repeat steps 1 thru 3 for every VCI assignment you want to make.
- 5 To verify settings, enter: cbos# show interface wan0-0
- To save the new WAN port configuration, enter: 6 cbos# write
- To exit the CBOS, enter: cbos# quit

Set DLCI Values

See the following steps to set a dlci value:

- 1 Disable the logical wan interface, enter: cbos# set interface wan0-0 disable
- Configure a DLCI on the FR network: 2 set int serial0-1 dlci 17

Note: Enter a dlci value between 16 and 1,007.

- To begin using this connection with the new settings, enter: 3 cbos# set interface wan0-0 enable
- 4 To save the new configuration, enter: cbos# write
- 5 To exit the CBOS. enter: cbos# guit



If you have purchased your equipment through an outside or third-party vendor, please contact the vendor who supplied your equipment, or contact your Internet service provider for technical support information.

If you have purchased your equipment directly from Cisco, contact the Cisco Technical Assistance Center, 24 hours a day, 7 days a week, at 800 553-2447 and at tac@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.

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