

Quick Start

FOR THE 678 ADSL ROUTER

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Introduction

an asymmetric digital subscriber line (ADSL) provides home connectivity to an ADSL service network over an ADSL/ATM physical layer. The router receives and transmits at rates up to the following rates:

Downstream/Upstream Rate (Mbps)

8.032/.864

7.168/1.088

1.536/.512

The Cisco 678 ADSL router uses the Cisco Broadband Operating

System Requirements

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This list defines the hardware and software requirements necessary to install and configure the Cisco 678:

- Personal computer (either standalone or on a network)
- Terminal emulation application
- DB-9 serial port

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

- Ethernet port or adapter, or a connection to the immediate local area network (LAN)

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Installing the Cisco 678

This section provides basic information necessary to install the Cisco 678. Refer to Chapter 2 of the *Cisco 678 ADSL Router Installation and Operation Manual* for detailed installation instructions and illustrations.

Connecting the Cables

To connect the cables:

Step 1 Plug the power connector into the back of the unit.

Step 2 Connect the Ethernet cable to the ENET connector.

Step 3 If the computer at the customer premises has an Ethernet-equipped computer, attach the provided Ethernet cable to the computer's Ethernet adapter with the Ethernet adapter provided. Otherwise, connect the Cisco 678 to an Ethernet hub using a straight-through Ethernet cable.

Step 4 Connect the provided telephone cable to the WALL connector and then connect the other end of the cable to the wall-mounted telephone outlet.

Step 5 (Optional) Plug the microfilter into the MICROFILTER connector and plug the telephone into the MICROPHONE connector.

Note Never connect a telephone directly to the MICROPHONE connector, as this affects the Cisco 678 performance.

POTS Splitter Configuration

A POTS splitter separates data signals from voice signals on a telephone line. The POTS splitter works by running a separate data line from the voice line, so that the Cisco 678 has a dedicated line for data transmission.

The *Cisco 678 ADSL Router Installation and Operation Manual* shows a POTS splitter configuration. If you are using a POTS splitter, connect the provided telephone cable to the connector that is labeled as going to the external telephone line.

Note Contact your SP if you have questions regarding POTS splitter configuration.

EZ-DSL™ (Splitterless) Configuration

In the EZ-DSL configuration, your telephone equipment is not connected to a POTS splitter. Without a POTS splitter, in certain circumstances, transient noise from the telephone line occurs with the operation of the Cisco 678, and the Cisco 678 may cause noise on the telephone line. To prevent this from occurring, use small microfilters to the telephone lines as shown in the *Cisco 678 ADSL Router Installation and Operation Guide*.

to 678 ADSL Router Installation and Operation
erless configuration. Make sure there is a
l to the line of each telephone that connects to

EZ-DSL Microfilter

eters to connect telephones at the customer
ises telephone wiring. The microfilters are
interference between the Cisco 678 and the
as to reduce the effect of POTS-generated noise
iver.

l home telephones plugged in and in service.
EZ-DSL microfilter at each home telephone.

e telephone from the wall. Plug the telephone
the end of the EZ-DSL microfilter marked

3-inch telephone cord provided, plug one end of
to the microfilter marked WALL. Plug the other
cord into the telephone wall receptacle.

complete the installation, verify that your
service works. If your telephone service does not
connect the EZ-DSL microfilter and contact your
hone company or Cisco Systems.

ers do not function if connected incorrectly. To
filters function, connect the wall side of the
l jack and the telephone side of the microfilter to

e Cisco 678

l the above procedures, you have now
your Cisco 678 and are ready to begin your

Your configuration requirements will vary depending on your SP.
Contact your SP for detailed information regarding how to configure
your Cisco 678 for optimal performance.

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Troubleshooting Tips

If the suggested course of action does not resolve your issue, contact
your SP. For detailed information, refer to Chapter 4 of the *Cisco 678
ADSL Router Installation and Operation Guide*.

- If the WAN LNK LED blinks continuously and fails to achieve a
solid state within a minute, your Cisco 678 configuration might
not be compatible with the SP's server configuration.

Solution: Remove power from the Cisco 678 by removing the
power cord from the router's rear panel. Reconnect the power
cord and check all cables, especially the WALL cable. If your
router still does not connect to the SP, call your SP. Your SP can
assist you to correct your configuration.

- If the WAN LNK LED turns off after the Cisco 678 has
successfully been transferring data between your PC and your SP,
the Cisco 678 or the SP's server might have a timeout set.

Solution: Call your SP and provide an estimate of the time (be as
accurate as possible) that you remain connected before the
Cisco 678 disconnects from the Internet.

- If the WAN LNK LED turns on solid for approximately four
seconds and then turns off and remains off, this might indicate a
user authentication failure. Either your Cisco 678 or your SP's
server might contain incorrect user authentication information.

Solution: Call your SP with the amount of time it took before the
WAN LNK LED turned off.

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Getting Help

If you purchased your equipment through an ou
vendor, please contact the vendor who supplied
contact your SP for technical support informatio

If you purchased your equipment directly from C
Cisco Technical Assistance Center, 24 hours a da
800 553-2447 and at tac@cisco.com.

Documentation CD-ROM

Cisco documentation and additional literature a
CD-ROM package, which ships with your prod
Documentation CD-ROM is updated monthly. T
probably more current than printed documentat
package is available as a single unit or as an ann

Ordering Documentation

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account representative by calling Cisco's corpora
(California, USA) at 408 526-4000 or, in North
800 553-NETS (6387).

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