

Computer Configuration and Cisco DVB CAR100 Startup

After installing the Cisco DVB CAR100, you need to configure the connected computers to communicate with the CATV network.

This chapter provides the procedures necessary to configure the computers connected to the Cisco DVB CAR100 cable access router.

The chapter contains the following sections:

- Configuration Overview
- Configuration Procedure
- Automatic Network Configuration
 - Automatic Network Configuration for Windows 95/98
 - Automatic Network Configuration for Windows NT
- Manual Network Configuration (only if instructed by cable service provider)
 - Manual TCP/IP Configuration for Windows 95/98
 - Manual TCP/IP Configuration for Windows NT
- Startup

Configuration Overview

Every Cisco DVB CAR100 is allocated an IP address and subnet mask on the CATV cable interface by the cable service provider. These communication parameters are used for all data traffic toward the CATV network. On the Ethernet interface of the Cisco DVB CAR100, the cable service provider usually allocates an IP address for all data traffic toward the Ethernet.

Other specific settings, such as port-level Network Address Translation (NAPT) status and public IP addresses for a host computer, are allocated by the cable service provider. When the unit performs NAPT, all IP addresses on the connected computers are local and cannot be seen by the outside world.

Configuration Procedure

The Cisco DVB CAR100 comes preconfigured for full end-user operation. However, you will need to configure the connected computers to communicate with the CATV network.



Consult the documentation provided by your CATV Service Provider. Typically you will be advised to use the Automatic Network Configuration described below. Use the Manual Network Configuration only if instructed to do so by your CATV service provider.

Automatic Network Configuration

The following sections detail automatic network configuration in Windows 95/98 and Windows NT. If you have another operating system, consult your operating system user documentation to ensure that your computers are configured to obtain an IP address automatically from a DHCP server.



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Automatic Network Configuration for Windows 95/98

- Step 1 Choose Start>Settings>Control Panel>Network.
- Step 2 Select the Configuration tab.
- Step 3 Select TCP/IP>[your Ethernet adapter]>Properties>IP Address tab.
- Step 4 Click Obtain an IP address from a DHCP Server.
- Step 5 Click OK and reboot the PC, if neccessary.

Note

If you have the Cisco DVB CAR100-LAN version, repeat Steps 1 to 5 for each connected PC.

Automatic Network Configuration for Windows NT

- Step 1 Choose Start>Settings>Control Panel>Network>Protocols.
- Step 2 Select TCP/IP Protocols>Properties>IP Address tab.
- Step 3 Click Obtain an IP address from a DHCP Server.
- Step 4 Click Apply.
- Step 5 Click OK and reboot the PC, if neccessary



If you have the Cisco DVB CAR100-LAN version, repeat Steps 1 to 5 for each connected PC. Manual Network Configuration

Manual Network Configuration



Use the manual network configuration only if instructed to do so by your CATV service provider.



All operating systems: Use the TCP/IP settings provided by your CATV service provider or, if no other data is provided, use the values listed in Table 4-1 below. Consult your operating system documentation for TCP/IP configuration procedures.

Table 4-1 TCP/IP Settings

		IP Address
Cisco DVB CAR100-PC	Single computer	192.168.128.10
Cisco DVB CAR100-LAN	Computer 1	192.168.128.10
	Computer 2	192.168.128.11
	Computer 3	192.168.128.12
	Computer 4 to 20	192.168.128.13 to 29

All versions of the	Subnet Mask	Default Gateway
Cisco DVB CAR100	255.255.255.0	192.168.128.2

Manual TCP/IP Configuration for Windows 95/98

- Step 1 Choose Start>Settings>Control Panel>Network.
- Step 2 Select the Configuration tab.
- Step 3 Select TCP/IP>[your Ethernet adapter]>Properties>IP Address tab.
- **Step 4** Click **Specify an IP address** and enter values for IP address and subnet mask from Table 4-1 above to configure the TCP/IP settings of your PC.



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- Step 5 Click the Gateway tab and enter values for the default gateway from Table 4-1 on page 4-4.
- **Step 6** Select **DNS Configuration**, **Enable DNS** and enter the DNS server information supplied by your CATV service provider.
- Step 7 Click OK and reboot the PC, if neccessary.

Note

If you have the Cisco DVB CAR100-LAN version, repeat Steps 1 to 7 for each connected PC.

Manual TCP/IP Configuration for Windows NT

	Use the manual network configuration only if instructed to do so by your CATV service provider.
	Choose Start>Settings>Control Panel>Network>Protocols.
	Select TCP/IP Protocols>Properties>IP Address tab.
Click Specify an IP Address . If no other configuration data is provided by yo cable operator, enter the values from Table 4-1 on page 4-4 to configure the TCP/ settings of your PC.	
	Click Apply.
	Select the DNS tab and enter the DNS server information supplied by your caservice provider.
	Click OK and reboot the PC, if neccessary.

Note

If you have the Cisco DVB CAR100-LAN version, repeat Steps 1 to 6 for each connected PC.

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Startup

Having configured the computers attached to the Cisco DVB CAR100, you can now start the Cisco Cisco DVB CAR100, connect to the CATV network, and access the Internet. This procedure is described in the next section.

Startup

To start the Cisco DVB CAR100 and connect to the Internet:

Step 1 If you have not already done so, connect the Ethernet cables and coaxial cable to the Cisco DVB CAR100. See Chapter 3, "Installing the Cisco DVB CAR100" for details.



Get ready to watch the Master LED on the top of the Cisco DVB CAR100 as you connect the power.

Step 2 Connect the power supply to the Cisco DVB CAR100. See Chapter 3, "Installing the Cisco DVB CAR100" for details.



- Note The Master LED should blink amber as the Cisco DVB CAR100 goes through its initialization and sign-on procedures, which might take several minutes. (During the very first sign-on, this procedure can take up to 20 minutes.) When a connection to the cable service operator is established, the LED turns a steady green and does not blink. If the LED does not turn green, it means that you are not connected to the CATV network. See Chapter 5, "Troubleshooting" for recommendations and procedures.
- Step 3 When you have connected to the CATV network, switch on a connected computer and try to access a web site, using an Internet browser (such as Netscape Navigator or Microsoft Internet Explorer), to verify that the installation has been successful.



If you cannot connect to a web site, proceed to Chapter 5, "Troubleshooting" for recommendations and procedures.



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Startup

Step 4 Cisco DVB CAR100-LAN ONLY: Repeat Step 3 for all your connected computers.

If you can access the Internet, then the installation procedure is complete.



Cisco recommends leaving the Cisco DVB CAR100 switched on at all times to enable automatic software updates to be performed by your cable service provider.



If the Cisco DVB CAR100 is powered off, it should remain off for at least 10 minutes before being restarted. If the unit is powered on within 10 minutes, it is possible that it will fail to reestablish communication with the service provider's headend unit. If this occurs, power the unit off again, and leave it off for at least 10 minutes. Then power on the Cisco DVB CAR100 again, and communication with the service provider's headend unit should be reestablished as normal. Startup

Chapter 4 Computer Configuration and Cisco DVB CAR100 Startup