



Cisco Discovery Protocol Support

Cisco Discovery Protocol (CDP) is a protocol for discovering Cisco devices on a network. CDP enables discovery of Cisco CallManager servers and management of those servers by CiscoWorks2000.

Using CDP Advertisement Support

With CDP Advertisement Support (version 1), Cisco CallManager periodically sends out CDP messages on the active interface to a designated multicast address. These messages contain information such as device identification, interface name, system capabilities, SNMP agent address, and time-to-live.

Any Cisco device with CDP support can locate a Cisco CallManager by listening to these periodic messages. For example, Cisco CallManager Agent IP addresses can be discovered via the CDP cache from their direct neighboring devices.

Default CDP Setting

The default CDP settings are as follows.

Default CDP Settings

Description	Default Value
Default Transmit Frequency	60 seconds
Default Time to Live	180 seconds
Default State	CDP advertisement enabled

CDP Driver System Prerequisites

CDP is designed as a Windows 2000 Protocol Driver to run with Cisco CallManager on a Cisco Media Convergence Server with a 10/100BaseT Ethernet NIC. Other media, such as Token Ring, ATM or Windows NT platforms (including Windows 98 or Windows NT 4.0) are not supported.

Using the CDP Driver

By default, the CDP driver is enabled when Cisco CallManager is started up. You can use CDP to allow CiscoWorks2000 to discover and manage your Cisco CallManagers.



Note

For more information, see the “Using Management Information Bases” section on page 9-2.

Once you have used the CDP cache MIB of the direct neighboring device to discover the Cisco CallManager, you can use CiscoWorks2000 to query other Cisco CallManager-supported MIBs for provisions or statistics information about topology services, user tracking, path analysis and other network management services.

**Tips**

You can use the **show CDP** command from the direct neighboring device of Cisco CallManager to check CDP information advertised by Cisco CallManager.

Accessing CDP Driver Control

You can control the CDP driver using the CISCO-CDP-MIB. For more information, see the “Cisco CallManager MIB Tables” section on page 9-2.

When you are using CiscoWorks2000, you must have the CDP driver enabled at all times to discover Cisco CallManager.

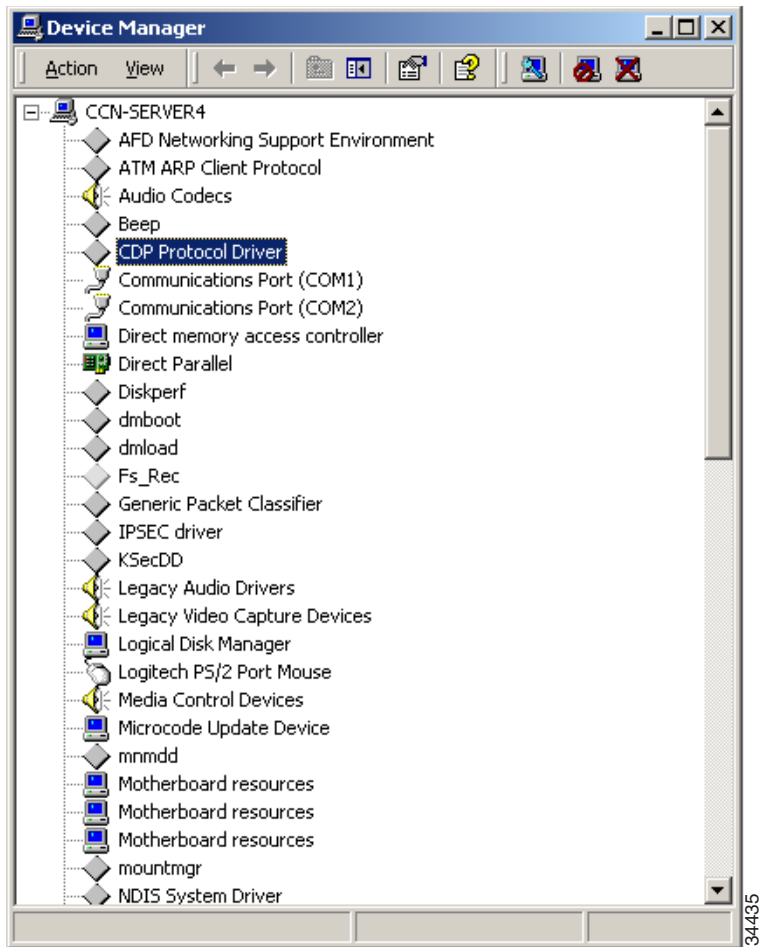
**Caution**

Only in special cases should you alter the CDP setting. For example, you might restart the CDP driver from the Control Panel at run-time to pick up the latest IP configuration changes without resetting the system.

Installing the CDP Protocol Driver

The CDP driver is installed as part of the Cisco CallManager Release 3.0 installation process. Figure 10-1 illustrates that upon completion of a successful Cisco CallManager Release 3.0 installation, the CDP protocol driver resides in the list of device drivers under the Windows 2000 Control Panel.

Figure 10-1 Device Manager Menu



Starting the CDP Protocol Driver

To start the CDP protocol driver:

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- Step 1** Stop the Cisco SNMP Data Collector Service (see the “Stopping the Cisco CallManager SNMP Agent” section on page 9-5 for more details).

- Step 2** Select **Start > Settings > Control Panel** to access the Windows 2000 Control Panel Menu.
- Step 3** Double-click the **System** icon and select the **Hardware** tab in the dialog box.
- Step 4** Select **Device Manager**.
- Step 5** Select **View** and select both devices by connection.
- Step 6** Select **Hidden Devices** to show all drivers.
- Step 7** Double-click **CDP Protocol Driver**, then select the **Driver** tab.
- Step 8** Select **Start** to enable the driver (Default = Start).
- Step 9** Select **OK** to exit menu.
- Step 10** Start the Cisco SNMP Data Collector Service.



Note Selecting **Startup Type=Demand** keeps **Start** setting after a restart.

Enabling the CDP Protocol Driver

To enable the CDP protocol driver:

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- Step 1** Select **Start > Settings > Control Panel** to access the Windows 2000 Control Panel Menu.
 - Step 2** Double-click the **System** icon and select the **Hardware** tab in the dialog box.
 - Step 3** Select **Device Manager**.
 - Step 4** Select **View** and select both devices by connection.
 - Step 5** Select **Show Hidden Devices** to show all drivers.
 - Step 6** Select **CDP Protocol Driver**, then select **Enable Device**.
 - Step 7** Select **Next**, then **Finish** to enable device.
 - Step 8** Select **Close** and restart the system.
 - Step 9** After the system is up, start the Cisco SNMP Data Collector service.
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Showing CDP Protocol Driver Property

To show CDP protocol driver property:

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- Step 1** Go to the Windows 2000 drivers directory (\WINNT\System32\drivers).
- Step 2** Right-click on cdp.sys and select **Properties** to show CDP driver properties, such as driver version and date.
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Updating an IP Address for CDP Protocol Driver

The CDP Protocol Driver runs on top of the existing Ethernet NIC. You can restart CDP when a new IP address is configured at runtime.

To update the CDP protocol driver:

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- Step 1** Restart CDP using the **Device Manager** to update the CDP driver with the new IP address information.
- Step 2** You do not have to reset the system after updating.
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Locating Updated CDP Driver and Interface Files

When you install Cisco CallManager Release 3.0, these components are updated:

- The CDP driver (cdp.sys) is updated to the Windows 2000 driver directory (WINNT\System32\Drivers\cdp.sys).
- The CDP Interface Library (cdpintf.dll) is updated to the Windows 2000 System32 directory (\WINNT\System32\cdpintf.dll).
- A Backup **Regedit** export file for reinstalling CDP registries is updated to the bin directory (\Program Files\Cisco\Bin\cdp2k100.reg). Use this file to restore the CDP registry in case it becomes corrupted.
- After running the cdp2k100.reg file, a System **Reset** is required to restore the CDP registries.