



## CHAPTER 2

# Setting Up Your Cisco Unified Videoconferencing 3500 Gateway

This section describes the following topics:

- [Physical Description, page 2-1](#)
- [Preparing for Installation of the Cisco Unified Videoconferencing 3527 PRI Gateway, page 2-3](#)
- [Preparing for Installation of the Cisco Unified Videoconferencing 3522 BRI Gateway, page 2-4](#)
- [Verifying the Package Contents, page 2-5](#)
- [Mounting the Cisco Unified Videoconferencing 3500 Gateway Unit in a 19-inch Rack, page 2-5](#)
- [Cisco Unified Videoconferencing 3500 Gateway Unit Initial Configuration, page 2-6](#)
- [Connecting the Cisco Unified Videoconferencing 3500 Gateway Unit to the LAN, page 2-10](#)
- [Managing and Monitoring the Cisco Unified Videoconferencing 3500 Gateway Unit, page 2-10](#)
- [Accessing the Cisco Unified Videoconferencing 3500 Gateway Administrator Interface, page 2-11](#)
- [Registering the Online Help, page 2-12](#)

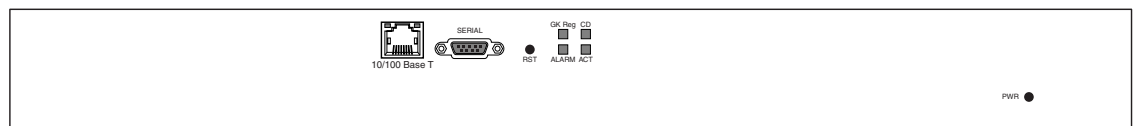
## Physical Description

This section provides a physical description of the Cisco Unified Videoconferencing 3500 Gateway units.

### Front Panel

[Figure 2-1](#) shows the front panel of the Cisco Unified Videoconferencing 3500 Gateway unit. [Table 2-1](#) describes the components of the front panel.

**Figure 2-1** Cisco Unified Videoconferencing 3500 Gateway Front Panel



157264

**Table 2-1 Front Panel Components**

Component	Description
10/100 BaseT connector	An RJ-45 connector that provides the primary Ethernet connection for the IP network port.
SERIAL connector	A DB-9 connector that allows you to connect a PC terminal for local configuration.
RST button	Allows you to reset the Cisco Unified Videoconferencing 3500 Gateway unit manually.
GK Reg LED	Lights green when the Cisco Unified Videoconferencing 3500 Gateway unit is registered with a gatekeeper.
CD LED	Lights green when a PRI or BRI line is enabled and a carrier signal is detected
ACT LED	Lights green to indicate that there are active calls in the Cisco Unified Videoconferencing 3500 Gateway unit.
ALARM LED	Lights green to indicate that an error has occurred and the Cisco Unified Videoconferencing 3500 Gateway unit requires resetting.
10/100 BaseT LEDs	The top part of the 10/100 BaseT connector contains two LED indicators. The left-hand LED lights green when the local IP network link is active. The right-hand LED lights green if the connection speed is 100 Mbps, and is off when the connection speed is 10 Mbps.

## Cisco Unified Videoconferencing 3527 PRI Gateway Rear Panel

Figure 2-2 shows the rear panel components of the Cisco Unified Videoconferencing 3527 PRI Gateway unit. Table 2-2 describes these components.

**Figure 2-2 Cisco Unified Videoconferencing 3527 PRI Gateway: Rear Panel****Table 2-2 Cisco Unified Videoconferencing 3527 PRI Gateway Rear Panel Components**

Component	Description
ACT LED	Lights green to indicate that there are active calls in the gateway.
D-Ch LED	Lights green to indicate that the PRI line is enabled and a carrier signal is detected.

**Table 2-2** Cisco Unified Videoconferencing 3527 PRI Gateway Rear Panel Components

Component	Description
ALARM LED	Displays alarm events for the PRI line. <ul style="list-style-type: none"> <li>YELLOW—Lights yellow when there is a loss of frame alignment at the remote side.</li> <li>ORANGE—Lights orange when there is a loss of frame alignment in the gateway.</li> </ul>
PRI LINE connector	RJ-45 connector that provides the PRI line connection for the gateway ISDN PRI port.

## Cisco Unified Videoconferencing 3522 BRI Gateway RTM

Figure 2-3 shows the rear panel components of the Cisco Unified Videoconferencing 3522 BRI Gateway unit. Table 2-3 describes these components.

**Figure 2-3** Cisco Unified Videoconferencing 3522 BRI Gateway: Rear Panel**Table 2-3** Cisco Unified Videoconferencing 3522 BRI Gateway Rear Panel Components

Component	Description
ACT LEDs	Lights green to indicate that there are active calls in the gateway on the specified BRI line.
BRI LINE connectors	RJ-45 connectors that provide the BRI line connections for the specified gateway ISDN BRI port.

## Preparing for Installation of the Cisco Unified Videoconferencing 3527 PRI Gateway

This section describes the requirements for installing the Cisco Unified Videoconferencing 3527 PRI Gateway unit.

- Proper clearance at the sides of the unit to allow adequate ventilation, and at least 20 cm clearance at the back of the unit to allow access to cable connections
- PC with a serial port and terminal emulation software to assign the Cisco Unified Videoconferencing 3527 PRI Gateway unit an IP address
- Dedicated IP address for the Cisco Unified Videoconferencing 3527 PRI Gateway unit
- IP address of the router that the Cisco Unified Videoconferencing 3527 PRI Gateway unit will use to communicate across the network
- For an H.323 environment, IP address of the H.323 gatekeeper with which you want the Cisco Unified Videoconferencing 3527 PRI Gateway unit to register

- Available IP network ports on the switch for the Cisco Unified Videoconferencing 3527 PRI Gateway unit
- A grounded AC power outlet
- 10BaseT or 100BaseT LAN cable
- Ambient room temperature range of 32° to 104°F (0° to 40°C)
- Non-condensing relative humidity range of 5% to 90%

## Preparing for Installation of the Cisco Unified Videoconferencing 3522 BRI Gateway

The Cisco Unified Videoconferencing 3522 BRI Gateway prepares the signaling for outbound videoconference calls that are transmitted over Integrated Services Digital Network (ISDN) networks. For videoconference information to arrive at its destination, you must work with the BRI service provider to ensure that the gateway and the ISDN service are compatible. You must gather information about the service provider equipment and provide the service provider with information about the gateway.

Before you order BRI service or connect the Cisco Unified Videoconferencing 3522 BRI Gateway to your existing BRI service, we suggest that you gather the following information.

---

**Step 1** Identify the ISDN provider you want to use as your Local Exchange Carrier (LEC) for local calls.



**Note** The LEC is the local telephone company that provides ISDN services for your local calling area and to which your equipment connects.

---

**Step 2** Identify the ISDN provider you want to use as your Interexchange Carrier (IEC) for long-distance calls.



**Note** The IEC and the LEC are different companies. Often the LEC will contact the IEC and provision long-distance service for you. Verify that your LEC performs this task, and contact an IEC if the LEC does not.

---

**Step 3** Determine how many BRI lines you want to connect to the gateway.

**Step 4** Identify the ISDN equipment or signaling format your LEC uses.

**Step 5** Determine whether you want to use layer 1 line hunting.

**Step 6** Have your ISDN service provider turn off the following switch settings:

- Packet Mode Data on the D channel
  - Terminal Display Text
  - EKTS
  - Call Appearances
  - Key Hold
  - ACO
-

# Verifying the Package Contents

Inspect the contents of the box for shipping damage. Report any damage or missing items to your Cisco representative. [Table 2-4](#) lists the package contents for the Cisco Unified Videoconferencing 3500 Gateway unit.

**Table 2-4** Package Contents with Cisco Unified Videoconferencing 3500 Gateway Unit

Product	Contents
Cisco Unified Videoconferencing 3527 PRI Gateway or Cisco Unified Videoconferencing 3522 BRI Gateway unit	<ul style="list-style-type: none"><li>• Cisco Unified Videoconferencing 3500 Gateway Unit</li><li>• Guide to Cisco Conferencing Documentation</li><li>• Regulatory Compliance and Safety Information for Cisco Unified Videoconferencing 3500 Products</li><li>• Cisco Unified Videoconferencing Software CD-ROM</li><li>• Cisco Information Package</li></ul>

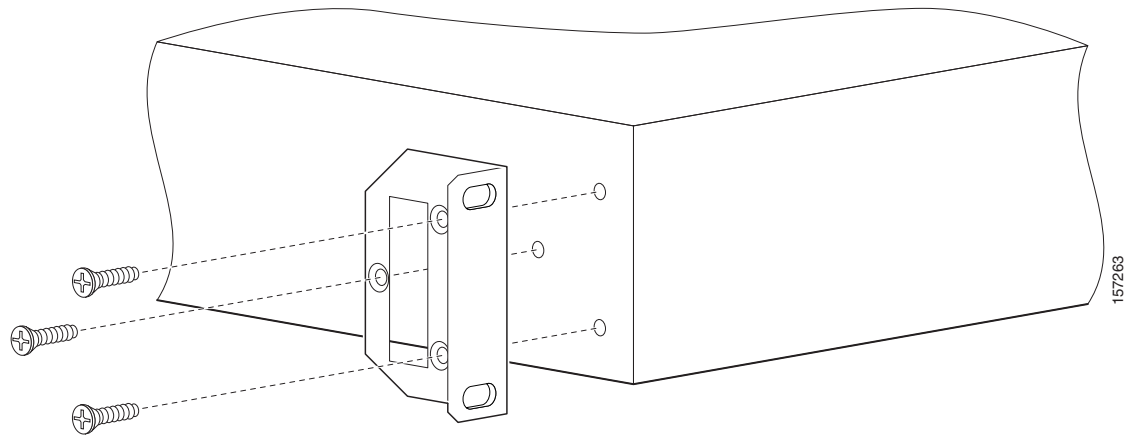
## Mounting the Cisco Unified Videoconferencing 3500 Gateway Unit in a 19-inch Rack

You can optionally mount the Cisco Unified Videoconferencing 3500 Gateway unit in a standard 19-inch rack. Two mounting brackets and a set of screws are included in the Cisco Unified Videoconferencing 3500 Gateway unit shipping box.

### Procedure

- Step 1** Disconnect all cables including the power cables.
- Step 2** Place the Cisco Unified Videoconferencing 3500 Gateway unit right-side up on a hard flat surface, with the front panel facing you.
- Step 3** Position a mounting bracket over the mounting holes on each side of the Cisco Unified Videoconferencing 3500 Gateway unit, as shown in [Figure 2-4](#).

Figure 2-4 Fitting a Bracket for Rack Mounting



- Step 4** Pass the screws through the brackets and tighten them into the screw holes on each side of the Cisco Unified Videoconferencing 3500 Gateway unit using a suitable screwdriver.
- Step 5** Insert the Cisco Unified Videoconferencing 3500 Gateway unit into the 19-inch rack.
- Step 6** Fasten the brackets to the side rails of the rack.
- Step 7** Make sure that the air vents at the sides of the Cisco Unified Videoconferencing 3500 Gateway unit are not blocked.

## Cisco Unified Videoconferencing 3500 Gateway Unit Initial Configuration

Initial monitoring and administration of the Cisco Unified Videoconferencing 3500 Gateway unit are performed from a remote PC via a serial connection. This allows you to access the boot configuration menu of the Cisco Unified Videoconferencing 3500 Gateway unit. At power-up, the Cisco Unified Videoconferencing 3500 Gateway unit goes through the following boot phases:

- Auto-boot—The embedded operating system initializes and displays basic information.
- Configuration menu—A 6-second countdown allows you to enter the configuration menu.
- Initialization—The Cisco Unified Videoconferencing 3500 Gateway unit completes its boot sequence and is ready for operation.



### Note

You can perform serial port configuration of the Cisco Unified Videoconferencing 3500 Gateway unit only at startup, during a short period indicated by a 6-second countdown. Once the initialization phase is complete, the only way you can access the configuration menu is by restarting the Cisco Unified Videoconferencing 3500 Gateway unit.

## Connecting to a PC

This section describes how to use the serial port connection to configure the Cisco Unified Videoconferencing 3500 Gateway unit with an IP address.

### Procedure

- 
- Step 1** Locate the terminal cable shipped with the Cisco Unified Videoconferencing 3500 Gateway unit.
  - Step 2** Connect the end labeled PC to the serial port on the computer.
  - Step 3** Connect the end labeled Unit to the serial port connector on the Cisco Unified Videoconferencing 3500 Gateway unit front panel.



**Note** The PC terminal should have an installed terminal emulation application, such as HyperTerminal.

---

## Setting the IP Address

This section describes how to use the serial port to configure the unit with an IP address and other address information.

The serial port on the Cisco Unified Videoconferencing 3500 Gateway unit front panel is used to assign a new IP address to your Cisco Unified Videoconferencing 3500 Gateway unit. You must assign the IP address before you connect the Cisco Unified Videoconferencing 3500 Gateway unit to the network.

### Before You Begin

Gather the items listed in [Table 2-5](#) to assign an IP address to the Cisco Unified Videoconferencing 3500 Gateway unit.

**Table 2-5** Requirements for Setting the IP Address

Requirements	Notes
Dedicated IP address for the Cisco Unified Videoconferencing 3500 Gateway unit	
IP address of the default router the Cisco Unified Videoconferencing 3500 Gateway unit uses to communicate over the network	
PC with available serial port and terminal emulator software installed	
RS-232 terminal cable (shipped with the unit)	

### Procedure

- 
- Step 1** Connect the supplied terminal cable to the PC terminal.
  - Step 2** Connect the power cable.
  - Step 3** Start the terminal emulation application on the PC.

**Step 4** Set the communication settings in the terminal emulation application on the PC as follows:

- Baud rate: 9600
- Data bits: 8
- Parity: None
- Stop bits: 1
- Flow control: None

**Step 5** Turn on the power to the Cisco Unified Videoconferencing 3500 Gateway unit.

**Step 6** After the terminal emulator session starts, press the **RST** button on the Cisco Unified Videoconferencing 3500 Gateway unit front panel to reset the module.

A log of the auto-boot events and a VxWorks banner scrolls across the computer monitor.



**Note** When the Cisco Unified Videoconferencing 3500 Gateway unit is started for the first time, two VxWorks banners appear. The configuration option appears after the second banner.

**Step 7** When the message “Press any key to start configuration” appears on the screen, press any key within 6 seconds.

The Network Configuration menu displays:

```
Press any Key To start configuration...
6
Enter <N> to configure default network port values
Enter <P> to change the configuration software password
Enter <A> to display advanced configuration menu
Enter <Q> to quit configuration menu and start GW
```



**Caution** If you do not press a key before the countdown ends, the device continues its initialization and you can only configure the device by pressing the RST button on the front panel.

**Step 8** At the prompt, type **N** to configure default network port values and press **Enter**.

**Step 9** At the **Enter IP address for default interface** prompt, type the IP address you want to assign to the Cisco Unified Videoconferencing 3500 Gateway unit and press **Enter**.



**Caution** Do not use leading zeros in the IP address.

**Step 10** At the **Enter Default Router IP Address** prompt, type the IP address of the router associated with the segment in which the unit will be installed and press **Enter**.



**Caution** Do not use leading zeros in the IP address.

**Step 11** At the **Enter IP Mask <HEX> for default device** prompt, type the subnet mask as follows:

- Convert the subnet mask IP address to hexadecimal notation, type the hexadecimal number at the prompt, and press **Enter**.

For example, for the subnet mask 255.255.255.0 the hexadecimal value you type is FFFFFFF0.





**Note** You can use the computer's desktop calculator to convert the subnet mask ID to hexadecimal notation.

- If a subnet mask is not used, press **Enter**.

**Step 12** Allow the unit to complete the reboot process. A new emulator session begins.

**Step 13** Close the terminal emulator session.

---

## Changing the Configuration Tool Login Password

You can use the terminal emulator to change the default password of the default login user before others can use the Cisco Unified Videoconferencing 3500 Gateway interface.

### Procedure

- 
- Step 1** Start a terminal emulator session for the Cisco Unified Videoconferencing 3500 Gateway unit.
- Step 2** Press the **RST** button on the front panel of the Cisco Unified Videoconferencing 3500 Gateway unit. After 60 seconds, a new terminal emulator session begins on the computer monitor.
- Step 3** After the second VxWorks banner scrolls across the screen, the following message appears: “Press any Key to start the configuration.”
- Step 4** Press any key and then press **Enter**. The default network properties screen appears.
- Step 5** At the prompt, enter **P** and press **Enter** to select “change the configuration software password.” The “Enter user name” prompt appears.
- Step 6** Enter the user login name for which you want to change the password and press **Enter**. The default user name is admin. This is the user name that allows you to access the Cisco Unified Videoconferencing 3500 Gateway interface. The Enter new password prompt appears.
- Step 7** Enter the password you want the user to use to log in to the Gateway interface and press **Enter**. There is no default password.
- Step 8** The configuration menu re-appears.
- Step 9** Enter **Q** and press **Enter** to exit.
-

# Connecting the Cisco Unified Videoconferencing 3500 Gateway Unit to the LAN

This section describes how to connect the Cisco Unified Videoconferencing 3500 Gateway unit to the Local Area Network (LAN).

## Procedure

- 
- Step 1** Connect the supplied LAN cable from your network hub to the 10/100BaseT Ethernet port on the front panel of the Cisco Unified Videoconferencing 3500 Gateway unit. The 10/100BaseT port accepts an RJ-45 connector.
- Step 2** Connect a separate ISDN or serial line to each PRI or BRI port in the rear panel of the Cisco Unified Videoconferencing 3500 Gateway unit. The port accepts an RJ-45 connector.
- 

# Managing and Monitoring the Cisco Unified Videoconferencing 3500 Gateway Unit

You can manage and monitor the Cisco Unified Videoconferencing 3500 Gateway unit locally or from remote connections. You can also upgrade Cisco Unified Videoconferencing 3500 Gateway software.

## SNMP Management

The Cisco Unified Videoconferencing 3500 Gateway unit is equipped with an SNMP agent. You can access the Cisco Unified Videoconferencing 3500 Gateway unit using an SNMP management client.

## Local Port Monitoring Connections

You should access the Cisco Unified Videoconferencing 3500 Gateway unit using a local port connection for preliminary configuration and monitoring.

### Serial Port

The Cisco Unified Videoconferencing 3500 Gateway unit includes a DB-9 serial port connector and an RJ-45 serial port connector. The DB-9 serial port is used to access the boot sequence menu from a local PC. Using a terminal emulation application running on the PC, you can assign an IP address and subnet mask to the Cisco Unified Videoconferencing 3500 Gateway unit.

The RJ-45 serial port is used to connect a PC terminal to the Cisco Unified Videoconferencing 3500 Gateway unit.



#### Note

A special adapter cable for connecting between a standard DB-9 serial cable and the RJ-45 serial port is supplied with the Cisco Unified Videoconferencing 3500 Gateway unit.

## SVGA Port

The Cisco Unified Videoconferencing 3500 Gateway unit is equipped with an SVGA port for connecting to a standard PC monitor screen. The SVGA port allows you to view the operating system desktop and to monitor the applications that are active on the desktop.

## Performing Software Upgrades

You can perform software upgrades by using the Cisco Upgrade Utility to upload files via a network or modem connection to the Cisco Unified Videoconferencing 3500 Gateway unit. For more information, see [Chapter 7, “Using the Cisco Software Upgrade Utility”](#).

# Accessing the Cisco Unified Videoconferencing 3500 Gateway Administrator Interface

The Cisco Unified Videoconferencing 3500 Gateway Administrator is a web interface that allows you to configure general Cisco Unified Videoconferencing 3500 Gateway unit settings, monitor Cisco Unified Videoconferencing 3500 Gateway unit operation, create or edit services and perform maintenance.

You access the Cisco Unified Videoconferencing 3500 Gateway Administrator web interface in the Cisco Unified Videoconferencing 3500 Gateway unit access window by signing in as an Administrator.

You can use your web browser from any remote PC station to monitor and to configure the Cisco Unified Videoconferencing 3500 Gateway unit. A web server is installed in the Cisco Unified Videoconferencing 3500 Gateway unit to facilitate the use of the remote web-based monitoring and management.

Access to the Cisco Unified Videoconferencing 3500 Gateway configuration interface is controlled by a user name and a password. Once you have entered the settings you want, you should upload them to the unit for them to take effect, or you can save them to a configuration file to be loaded at a later time.

The following requirements are necessary to access the Gateway Administrator web interface:

- A Java-compliant browser. Microsoft Internet Explorer version 5.5 or later is recommended.
- The Cisco Unified Videoconferencing 3500 Gateway unit IP address or a web link to the Cisco Unified Videoconferencing 3500 Gateway unit.
- Administrator level-access
- The required user name and password.



---

**Note**

For first-time installation, you must assign an IP address to the Cisco Unified Videoconferencing 3500 Gateway unit using a serial port connection before you can access the web interface. For more information, see the [“Setting the IP Address” section on page 2-7](#).

---

### Procedure

---

- Step 1** Launch your browser and type the IP address or the name of the Cisco Unified Videoconferencing 3500 Gateway unit.

For example, `http://125.221.23.44` or `board_name`.

The Cisco Unified Videoconferencing 3500 Gateway login page appears.

- Step 2** Type the Administrator user name and password in the appropriate fields and click **Login**. The default global user name is *admin*. The default password is `<null>`.

The Gateway Administrator interface appears.



**Note**

If you try to sign in as an Administrator and another Administrator is currently signed in, the Cisco Unified Videoconferencing 3500 Gateway signs you in as a **Read only** user and the words *Read Only* appear at the top of the window. **Read only** users cannot edit any of the Cisco Unified Videoconferencing 3500 Gateway settings.

## Registering the Online Help

The online help files for the Cisco Unified Videoconferencing 3500 Gateway Administrator interface are shipped on the Cisco IPVC Software CD-ROM. To use the online help, you must install the help files for the appropriate Cisco Unified Videoconferencing 3500 Gateway in a shared directory on your network and register the directory location in the Administrator interface.

### Procedure

- Step 1** Ensure that you have installed the online help library from the Cisco IPVC Software CD-ROM on your PC.
- Step 2** Open a Java-compliant web browser and access the Cisco Unified Videoconferencing 3500 Gateway Administrator web interface.
- The Administrator login page appears.
- Step 3** In the **Name** field, type your user name.
- Step 4** In the **Password** field, type your password.
- Step 5** Click **Go**.
- Step 6** On the sidebar, click **Device**.
- Step 7** Click the **Web** tab.
- Step 8** In the **Online Help URL** field, type the path to the directory in which the Cisco Unified Videoconferencing 3545 MCU online help files that you want to use are stored as follows:
- If the directory is located on a file server, type:  
`file://.../shared_directory_name /program_folder`
  - If the directory is located on a web server, type:  
`http://.../shared_directory_name /program_folder`



**Note**

The online help files are stored in the folder `3500gw` by default. The Gateway interface retrieves online help text from these files. In the path statement, include all directories in the path up to, but not including, `3500gw`

**Step 9** On the toolbar, click **Upload**.

---

## Netscape Navigator Users

Online help files located on the local network and accessed using Netscape Navigator 4.x must be located on a mapped network drive.

