

# снарте 2

# **Cisco IPICS Dispatch Console Installation, Configuration, and Maintenance**

This chapter describes how to install and uninstall the Cisco IPICS Dispatch Console. It also explains how to optimize audio on a client PC for use with the Cisco IPICS Dispatch Console and provides other information that relates to operations.

This chapter includes these topics:

- Installing the Cisco IPICS Dispatch Console, page 2-1
- Uninstalling the Cisco IPICS Dispatch Console, page 2-6
- WAVE Engine Process Requirements, page 2-6
- Cisco IPICS Dispatch Console Logs, page 2-7
- Cisco IPICS Dispatch Console Guidelines for Use, page 2-8
- Optimizing Audio for the Cisco IPICS Dispatch Console, page 2-11

# **Installing the Cisco IPICS Dispatch Console**

The following sections provide information about downloading and installing the Cisco IPICS Dispatch Console on a client PC. The client PC must adhere to the requirements and guidelines that the "Client PC" section on page 1-2 describes.

• Installation Guidelines, page 2-2

- Installation Directories, page 2-2
- Installation Procedure, page 2-3

### **Installation Guidelines**

Before you install the Cisco IPICS Dispatch Console, review the following information:

- The installation process involves downloading a self-extracting Cisco IPICS Dispatch Console installation program from a Cisco IPICS server. This process downloads required installation and configuration files. If you are authorized to use alert tones, the download may also include alert tones (or they may be downloaded separately).
- The installation program automatically installs the Cisco IPICS Dispatch Console software on your client PC. The Cisco IPICS Dispatch Console does not need to be connected to the Cisco IPICS server to perform this installation.
- The installation automatically adds an entry for the Cisco IPICS Dispatch Console to the Windows Start menu, and adds a Cisco IPICS Dispatch Console shortcut to your Windows desktop.
- If you are running the Cisco Security Agent (CSA) on your client PC and see a CSA access permission dialog box during the installation process, click **Yes** to grant permission to the Cisco IPICS Dispatch Console installation.

### **Installation Directories**

If you are not logged into a client PC with Window Administrator privileges, you must have write privileges to either of following directories and their subdirectories and files to install, uninstall, or run the Cisco IPICS Dispatch Console:

- For 32-bit system Client PCs—C:\Program Files\Cisco Systems\ CISCO IDC 4.5\4.5\Bin
- For 64-bit system Client PCs—C:\Program Files (x86)\ Cisco Systems\CISCO IDC 4.5\4.5\Bin



The C:\Program Files folder is the default installation folder for the Cisco IPICS Dispatch Console. If you install the Cisco IPICS Dispatch Console in another folder, you must have write privileges to the Bin folder and its subfolders and files in that folder.

### **Installation Procedure**

Installing Cisco IPICS Dispatch Console involves the two general procedures that the following sections describe:

- Downloading the Cisco IPICS Dispatch Console installation program from the Cisco IPICS Server, page 2-3
- Installing the Cisco IPICS Dispatch Console, page 2-4

# Downloading the Cisco IPICS Dispatch Console installation program from the Cisco IPICS Server

Before you can install the Cisco IPICS Dispatch Console on a client PC, you must download its installation file from the Cisco IPICS server. To do so, follow these steps:

#### Procedure

**Step 1** From a web browser on the client PC, enter the fully qualified hostname (for example, ipics1.cisco.com) or the IP address of the server on which Cisco IPICS is running.

A fully qualified hostname is preferred. If you enter an IP address and the PC that you are using does not have a valid trust certificate from the server, a pop-up window prompts you to download a certificate. Follow the prompts to do so.

**Step 2** Log in to the Cisco IPICS server.

The Cisco IPICS Administration Console appears.

- **Step 3** On the **Server** tab, choose **Home > Download IDC**.
- **Step 4** In the Download IDC page, click **Download IDC**.

- **Step 5** In the dialog box that appears, click **Save**.
- **Step 6** Use the Save As pop-up window to save the Cisco IPICS Dispatch Console installation program (called idcsetup.exe) on your local hard drive.

#### Installing the Cisco IPICS Dispatch Console

After you download the Cisco IPICS Dispatch Console installation program as described in the "Downloading the Cisco IPICS Dispatch Console installation program from the Cisco IPICS Server" section on page 2-3, perform the following steps to install it on your PC client.

Before you install, review the information in the "Installation Guidelines" section on page 2-2. Also, make sure that you are logged in to the client PC with Window Administrator privileges or that you have write privileges to the directories that the "Installation Directories" section on page 2-2 lists.

**Step 1** Start the Cisco IPICS Dispatch Console installation program (called idcsetup.exe).

The installation program starts and the IDC Setup Wizard appears.



- Note If an "Error 740" message appears when you start the Cisco IPICS Dispatch Console installation program, User Account Control (UAC) is enabled for your Windows operating system. In this case, restart the installation program by right-clicking it and choosing **Run as** Administrator.
- **Step 2** In the IDC Setup Wizard, take these actions:
  - a. In the Welcome window, click Next.
  - **b.** In the Select Installation Folder window:
    - (Optional) Enter a folder in which to install the Cisco IPICS Dispatch Console. Cisco recommends that you use the default folder unless there is a reason to specify another folder.

- Click the Everyone radio button if you want to allow all Windows accounts on the client PC to access the Cisco IPICS Dispatch Console, or click Just Me if you want to allow access only by your Windows account.
- Click Next.
- c. In the Confirm Installation window, click Next.

The Cisco IPICS Dispatch Console installs. A progress bar provides information about this process.

d. In the Installation Complete window, click Close.

The installation is complete and an icon for the Cisco IPICS Dispatch Console appears on your PC desktop.

**Step 3** If a dialog box asks if you want to install the Cisco Video Surveillance Client, click **Yes**, then take the following actions.

This dialog box appears if the Cisco Video Surveillance Client is not installed already on the client PC. The Cisco IPICS Dispatch Console requires the Cisco Video Surveillance Client to display VSM videos, which are in bwims format.

- a. In the Cisco Video Surveillance Client Setup window, click Next.
- **b.** In the window that asks for the number of cores on your client PC process, enter that number, then click **Next**.

This window provides instructions for determining this number.

- c. In the window that prompt for user information:
  - Enter your name in the Full Name field.
  - Enter your organization name in the Organization field.
  - Click the Anyone who uses this computer radio button if you want to allow all Windows accounts on the client PC to access the Cisco Video Surveillance Client, or click Only for Me if you want to allow access only by your Windows account.
  - Click Next.
- **d.** In the window that prompts for a destination folder, enter a folder in which to install the Cisco Video Surveillance Client, then click **Next**. Cisco recommends that you use the default folder unless there is a reason to specify another folder.
- e. In the Window that prompts you to begin the installation, click Next.

- f. In the window that informs you that the Cisco Video Surveillance Client has been installed, click **Finish**.
- **Step 4** In the Cisco IDC window, click Yes if you want to start the Cisco IPICS Dispatch Console now, otherwise click No.
- **Step 5** (Optional) Exit the Cisco IPICS server.

### **Uninstalling the Cisco IPICS Dispatch Console**

Removing (uninstalling) the Cisco IPICS Dispatch Console from a client PC removes the application from the PC. To uninstall the Cisco IPICS Dispatch Console, perform the following steps on the PC.

If you are running the CSA on your client PC and see a CSA access permission dialog box during the uninstallation process, click **Yes** to continue.

Before you uninstall, make sure that you are logged in to the client PC with Window Administrator privileges or that you have write privileges to the directories that the "Installation Directories" section on page 2-2 lists.

#### Procedure

- Step 2 In the confirmation pop-up window, click Yes to continue.

This Cisco IPICS Dispatch Console is removed from your client PC. This process can take several minutes.

### **WAVE Engine Process Requirements**

The Cisco IPICS Dispatch Console requires the WAVE Engine process to be running on the client PC. This process enables the Cisco IPICS Dispatch Console to send, receive, and play audio. The WAVE Engine process is installed a client

PC as part of the Cisco IPICS Dispatch Console installation process. It starts automatically when you start the Cisco IPICS Dispatch Console and stops when you exit the Cisco IPICS Dispatch Console.

To determine if the WAVE Engine process is running, take either of these actions:

- Make sure that the WaveEngine.exe process appears in the Processes tab in the Windows Tasks Manager
- Make sure that "Media State: Running" appears in the System Information area in the Cisco IPICS Dispatch Console. (For more information, see the "System Information Area" section on page 3-119.)

If the WAVE Engine process stops, the Cisco IPICS Dispatch Console displays an error message and shuts down. In this case, restarting the Cisco IPICS Dispatch Console should restart the WAVE Engine process.



Some Windows security applications do not allow the WAVE Engine process to run or to communicate at the levels that audio processing requires. In this situation, you must modify the settings in the security application to give the WAVE Engine process permission to run with no restrictions.

# **Cisco IPICS Dispatch Console Logs**

The Cisco IPICS Dispatch Console maintains XML log file in the following directories:

- For 32-bit system Client PCs—C:\Program Files\Cisco Systems\ CISCO IDC 4.5\4.5\Bin\ExLogs
- For 64-bit system Client PCs—C:\Program Files (x86)\ Cisco Systems\CISCO IDC 4.5\4.5\Bin\ExLogs



The C:\Program Files folder is the default installation folder for the Cisco IPICS Dispatch Console. If you install the Cisco IPICS Dispatch Console in another folder, the log files will be under that folder.

These log files store information about exceptions and warnings from the Cisco IPICS Dispatch Console. A new log file is created every day, and the system stores a maximum of 30 log files. When this limit is reached, older files are purged to allow for new ones.

The log file is named IDC\_*mm\_dd\_yyyy*, where:

- *mm* is the two-digit representation of the month in which the file was created
- *mm* is the two-digit representation of the date on which the file was created
- yyyy is the four-digit representation of the year in which the file was created

For example, the file name IDC\_03\_23\_2012.xml indicates a log file that was created on March 23, 2012.



Note

By default, the Cisco IPICS Dispatch Console uploads Channel Activity and Authentication logs to the Cisco IPICS server at regular intervals. You can configure this process from the Administration > Options > Client tab in the Server drawer in the Cisco IPICS Administration Console, and you can generate activity log reports from the Cisco IPICS server. For related information, see *Cisco IPICS Server Administration Guide*.

# **Cisco IPICS Dispatch Console Guidelines for Use**

Be aware of the following guidelines when you use the Cisco IPICS Dispatch Console:

#### **General Guideline**

- When using the push-to-talk (PTT) feature, it is a best practice to talk in short bursts and monitor the incoming traffic indicator for a resource so that you do not talk over other Cisco IPICS users.
- To ensure that Cisco IPICS operates efficiently in a typical environment, your Cisco IPICS Dispatch Console should not have more than 50 resources in any combination powered on at any time. This number can vary depending on a variety of factors in your environment client PC configuration.
- Reboot your client PC at least once a week. This process helps ensure that Microsoft Windows operates efficiently, which in turn helps your Cisco IPICS Dispatch Console operate efficiently.

#### **Connectivity Guidelines**

- Before you launch the Cisco IPICS Dispatch Console, establish network connectivity to make sure that you have a valid IP address.
- If the Cisco VPN Client is installed on your client PC, disable the "Stateful Firewall (Always On)" option. Otherwise, SIP and multicast connections may not work correctly.
- You may need to modify your Windows firewall settings so that the Cisco IPICS Dispatch Console can send and receive the required protocols.
- Network limitations such as multicast boundaries or low bandwidth may prevent some client PCs from sending audio. In these cases, choose the Remote location to connect to Cisco IPICS.
- If you use a docking station or pluggable audio devices with your PC client, exit the Cisco IPICS Dispatch Console and unplug your audio devices before you undock your PC. Otherwise, your PC may become unresponsive and require you to reboot.
- If the Cisco IPICS Dispatch Console has more than one network connection (for example, wired, wireless, VPN), make sure to configure the Cisco IPICS Dispatch Console to use the network card that is appropriate for the location that you want to use.
- To connect the Cisco IPICS Dispatch Console via a SIP-based remote connection, make sure that the Cisco IPICS Dispatch Console can establish connectivity to the RMS router. (The Cisco IPICS Dispatch Console connects to the RMS by using the IP address of the loopback interface that is assigned to the RMS.) If the Cisco IPICS Dispatch Console cannot establish connectivity to the RMS, you may experience channel activation issues (such as fast busy) when you attempt to use a SIP-based remote connection.
- To conserve system resources, Cisco IPICS allocates resources that are required for communication on an RMS or UMS when you power on a resource that communicates via SIP. These resources are not allocated automatically when you start the Cisco IPICS Dispatch Console.

#### Account Lockout and Password Expiration Guidelines

• If you incorrectly enter your Cisco IPICS Dispatch Console password multiple times and exceed the maximum number of consecutive invalid login attempts as configured in the server, your user account may be locked. In this case, the server does not allow you to log in to the system. A message displays to alert you to contact your system administrator to unlock your user account.

- If the number of consecutive invalid login attempts has been exceeded while you are already logged in to the Cisco IPICS Dispatch Console, the server allows you to continue to use the password for your current session. The server does not allow additional logins, however, until your user account is unlocked or your password is reset.
- If the number of consecutive invalid login attempts has been exceeded while you are logged in to the Cisco IPICS Dispatch Console via off-line mode, the server allows you to continue to use the password after it returns to on-line mode. The server does not allow additional logins, however, until your user account is unlocked or your password is reset.
- If your password has expired, the Cisco IPICS Dispatch Console does not allow you to log in to the system until after you have changed your password. To change your password, log in to the Cisco IPICS server and navigate to **Home > My Profile** to enter your old and new passwords.
- If your password expires while you are logged in to the Cisco IPICS Dispatch Console, the Cisco IPICS Dispatch Console allows you to continue to use the password for your current session. You must change your password before the next login.
- If your password expires while you are logged in via off-line mode, the system allows you to continue to use the password after the Cisco IPICS Dispatch Console returns to online mode. You must change your password before the next login.

#### **Cisco Security Agent (CSA) Guidelines**

If the Cisco Security Agent (CSA) is installed on your client PC, follow these guidelines:

- If you see a CSA access permission dialog box when you try to perform an Cisco IPICS Dispatch Console operation, click **Yes** to grant permission and continue with that operation.
- If you see a CSA access permission dialog box when you activate a channel on the Cisco IPICS Dispatch Console, be sure to click **Yes** to grant permission.
- If you are prompted with a CSA access permission dialog box when you start a new version of the Cisco IPICS Dispatch Console or after a system reboot, make sure that you click **Yes** to allow the Cisco IPICS Dispatch Console to monitor the media device (microphone). If you allow the CSA to time out

based on its default value of No after you launch the Cisco IPICS Dispatch Console, the Cisco IPICS Dispatch Console can to receive voice traffic but it cannot send voice traffic.

• If the CSA "Don't ask me again" check box displays, you may check it to instruct CSA not to prompt you again.

# Optimizing Audio for the Cisco IPICS Dispatch Console

After you install the Cisco IPICS Dispatch Console, check the settings for playback and recording audio devices on your client PC to ensure that you are using the preferred or default sound devices with the Cisco IPICS Dispatch Console. The following sections guide you through the audio configuration. They also provide information about properly using a USB DSP headset and microphone.

- Using a USB DSP Headset with the Cisco IPICS Dispatch Console, page 2-11
- Using a Microphone with the Cisco IPICS Dispatch Console, page 2-12
- Voice Quality Guidelines, page 2-13

Be aware that if the microphone on the client PC cannot be opened by the Cisco IPICS Dispatch Console, you can listen to active conversations but you will not be able to talk.

Also be aware that you can enable multiple speakers for audio output, but you should not enable multiple microphones because doing so can cause echoing or buzzing.

### Using a USB DSP Headset with the Cisco IPICS Dispatch Console

When you use a USB DSP headset (that is, a headset that includes its own sound card) with the Windows operating system, Windows may configure that headset as the default speaker and microphone. Therefore, make sure that you connect the USB DSP headset to the client PC before you launch the Cisco IPICS Dispatch Console.

### Using a Microphone with the Cisco IPICS Dispatch Console

Make sure that you use a high-quality microphone with the Cisco IPICS Dispatch Console. In addition, check the placement and settings of your microphone before you begin using the Cisco IPICS Dispatch Console.

If you encounter a situation in which you can hear other users but they cannot hear you, make sure that your microphone is not set to mute. (Microphones may be set to mute in several ways, including from the Cisco IPICS Dispatch Console, from the Windows Control Panel, or by a switch on some microphones.)

To check the audio recording and playback capability of a microphone on your client PC, perform the following steps to access the Windows Sound Recorder to record your voice and then listen to the recording. (Make sure that you have an audio input device connected to your PC.)

#### Procedure for Client PCs that are running the Microsoft Windows XP Operating System

Step 1	Choose Start > All Programs > Accessories > Entertainment > Sound Recorder.
	The Sound Recorder dialog box appears.
Step 2	Choose File > New.
Step 3	To begin recording, click the <b>Record</b> button.
	This button appears in the lower right corner of the Sound Recorder dialog box.
Step 4	Speak into the microphone to record your voice.
Step 5	To stop recording, click the <b>Stop</b> button.
Step 6	Take either of these actions:
	• To listen to your recording, click the <b>Play</b> button. You should hear your voice as it was recorded.
	• Alternatively, you can choose <b>File &gt; Save as</b> and then enter a file name to save your recording file. Recorded sounds are saved as waveform (.wav) files. To play the file, choose <b>File &gt; Open</b> , locate the sound file that you want to play,

**Step 7** To stop playing the recording, click the **Stop** button.

then, double-click the file.

Procedure for Client PCs that are running the Microsoft Windows 7 Operating System

Step 1	Choose Start > All Programs > Accessories > Sound Recorder.
	The Sound Recorder dialog box appears.
Step 2	To begin recording, click the Start Recording button.
Step 3	Speak into the microphone to record your voice.
Step 4	To stop recording, click the Stop Recording button.
Step 5	Use the Save As dialog box to save your recording as a sound file.
Step 6	To listen to your recording, locate the sound file that you saved, then, double-click the file.

### **Voice Quality Guidelines**

The following tips can help to ensure good voice quality when you use the Cisco IPICS Dispatch Console:

- Make sure that you use a high-quality headset and microphone, and check the placement and settings of both components. A high-quality and properly-configured headset can greatly enhance voice quality for both receive and transmit activity. A microphone should be close enough to your mouth so that it clearly captures your voice, but not so close that it captures the sound of you breathing.
- For enhanced voice quality, make sure that you plug your USB headset or audio device into a dedicated USB port instead of a USB hub. The use of USB hubs, which multiplex data from USB devices into one data stream, can result in timing issues and can affect voice quality.
- If other Cisco IPICS users tell you that they hear a persistent or intermittent noise, such as an audible hum, when you talk, the problem may be due to defective headset hardware or interference from other electrical equipment. In this situation, Cisco recommends that you isolate the source of the audio quality issue by replacing the defective headset with a new, high-quality headset, or by moving the client PC away from the source of interference. You

can determine how you sound when talking into a microphone by following the procedures that the "Using a Microphone with the Cisco IPICS Dispatch Console" section on page 2-12 describes.

- Check your Windows audio settings to make sure that the volume is not set too low. If the volume is set low, increase the input gain on your microphone by sliding the bar up on the volume controls to increase the volume.
- For optimum connectivity, use the most appropriate location for your connection type when you log in to the Cisco IPICS Dispatch Console. For example, if you are using a wireless connection, choose the location that correlates to wireless connectivity for your organization. You can ensure higher quality audio by choosing the appropriate connection type.
- Be aware that a slow-speed connection, such as a digital subscriber line (DSL) or any slow wired link, may affect voice quality. If possible, try to use a high-speed connection with the Cisco IPICS Dispatch Console.
- Try to limit the use of applications that consume significant CPU and network bandwidth on a client PC when you use the Cisco IPICS Dispatch Console. If your CPU is overburdened by other programs, there may insufficient CPU cycles for the Cisco IPICS Dispatch Console to run properly. Check the CPU activity on your client PC and close any programs that do not need to be open.
- Ensure that your client PC does has sufficient RAM. If not, the PC tries to use slower virtual memory, which can degrade system performance and cause instability.