



Troubleshooting the IDC and Cisco Instant Connect

This chapter describes how to resolve problems that you may encounter when you use the Cisco IPICS Dispatch Console (IDC), Cisco Instant Connect for Windows, and Cisco Instant Connect for Android devices, and includes the following sections:

- [Troubleshooting IDC Issues, page 5-1](#)
- [Troubleshooting Cisco Instant Connect Issues, page 5-9](#)

Troubleshooting IDC Issues

The following sections describe how to resolve problems that you may encounter when you use the IDC:

- [Resolving IDC Execution Issues, page 5-1](#)
- [Generating a IDC Installation Log File, page 5-2](#)
- [Using the idcsetup.exe Installer with an Encrypted File System, page 5-3](#)
- [Making idcsetup.exe Configuration File Changes, page 5-4](#)
- [Resolving IDC Dialer Issues, page 5-4](#)
- [Resolving Footswitch/USB Device Issues, page 5-4](#)
- [Configuring the Audio Settings, page 5-5](#)
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- [Troubleshooting IDC Voice Quality Issues, page 5-6](#)
- [Resolving Name Resolution Failures, page 5-8](#)
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Resolving IDC Execution Issues

The IDC allows only one instance of the IDC to be open on a given IDC client machine. If you launch the IDC, then immediately close it and attempt to relaunch it, the IDC may terminate unexpectedly because the first instance of the IDC has not completed its cleanup procedures. If this situation occurs, wait at least 10 seconds before you restart the IDC.

If you find that you cannot launch the IDC after you have recently closed the application, it may be because the IDC.exe process is still running on the IDC client machine.

To verify that the IDC.exe process is still running and to end the task, if necessary, follow this procedure:

Procedure

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- Step 1** On the client machine, press **Ctrl-Alt-Delete** to launch the Windows Task Manager application.
- Step 2** Click **Task Manager**.
- Three tabs display on Windows Task Manager: Applications, Processes, and Performance. An additional tab, Networking, displays in the Windows XP Task Manager.
- Step 3** Click the **Processes** tab.
- Step 4** Click **Image Name** to alphabetize the list of running processes.
- Scroll down through this list to look for the IDC.exe process.
- Step 5** Click **IDC.exe** to highlight or right-click **IDC.exe**; then, click **End Process**.
- A warning message displays to ask if you are sure that you want to terminate this process.
- Step 6** Click **Yes**.
- Step 7** Close Windows Task Manager by clicking the “X” in the upper right corner.
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Note

After you close the IDC, you may need to wait about 30 seconds before you can relaunch the application to provide sufficient time for the IDC to terminate its processes.

Generating a IDC Installation Log File

If you encounter any of the following problems when you try to run the idcsetup.exe installation file, you can generate an IDC installation log file to help identify and resolve the issue:

- You do not get a response when you attempt to execute the pidcsetup.exe file
- The installation begins to run but it does not complete successfully
- You receive an error that indicates an unsuccessful installation
- You do not see the Cisco IPICS IDC shortcut on the IDC client machine desktop or the Cisco IPICS IDC entry in your programs menu (**Start > Programs > Cisco Systems > IDC**).

If you experience any of these errors, you can use the following procedure to generate the IDC installation log file from the pidcsetup.exe self-extracting binary file that contains the idcinst.exe IDC installation file and the idc.ini file. This log file can provide valuable information to Cisco support personnel to assist in your troubleshooting efforts.

To generate the IDC installation log file, perform the following procedure:

Procedure

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- Step 1** Create a **C:\temp** directory in Windows, if this directory does not already exist.

- Step 2** Use Windows Explorer to navigate to the location where you saved the `idcsetup.exe` file, as described in the “Downloading the Cisco IPICS Dispatch Console Installation Program from the Cisco IPICS Server” section in the “Installing the Cisco IPICS Dispatch Console” section in the “Cisco IPICS Dispatch Console Installation, Configuration, and Maintenance” chapter in *Cisco IPICS Dispatch Console User Guide* for your release.
- Step 3** Locate the `idcsetup.exe` file in this stored location and click to highlight the file; then, right-click the `idcsetup.exe` file and click **Copy**.
- Step 4** Use Windows Explorer to navigate to the `C:\temp` directory and right-click in an open area in this directory; then, click **Paste** to copy the `idcsetup.exe` file to the `C:\temp` directory.



Note Make sure that the `C:\temp` directory does not contain any versions of the `idcinst.exe` or `idc.ini` files. If either file is present, you must rename the existing files or delete them.

- Step 5** Open up a command line prompt (**Start > Run > cmd**) on the `idcsetup.exe` client machine to access the `C:\temp` directory.
- Step 6** To generate the IDC installation log file, enter the following command from the `C:\temp` directory:
idcsetup.exe -log
The `idcsetup.log` file appears in the `C:\temp` directory.
If the `idcsetup.exe` is already installed on your client machine, you may see a message that asks if you want to upgrade the `idcsetup.exe`. Make sure that you click **Yes** to continue.
- Step 7** To close the command line prompt, enter the **exit** command.
- Step 8** After you have created the `idcsetup.exe` installation log file, contact your Cisco support personnel for further assistance.
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Using the `idcsetup.exe` Installer with an Encrypted File System

The `idcsetup.exe` installer uses the Temp folder (`%temp%` environment variable) on your `idcsetup.exe` client machine during the installation process. If the Temp folder has been encrypted by using the Encrypted File System (EFS), the `idcsetup.exe` installer cannot proceed. In this situation, the `idcsetup.exe` installer attempts to use the TMP or the SystemRoot folder to continue with the installation.

If the `idcsetup.exe` installation cannot proceed because of encrypted files on the `idcsetup.exe` client machine, you can modify the `%temp%` and `%tmp%` environment variables to point at nonencrypted folders and then rerun the `idcsetup.exe` installation.

To identify the folders that are specified by the `%temp%` and `%tmp%` environment variables to determine if they are encrypted, perform the following procedure:

Procedure

- Step 1** On the `idcsetup.exe` client machine, open a command line prompt by choosing **Start > Run** and entering **cmd**.
A command line window displays.
- Step 2** At the command line, enter the following command:
`C:\ echo %temp%`

The location of the TEMP folder displays.

If the folder that is specified by the %temp% environment variable is encrypted, you can assign the %temp% environment variable to a folder that is not encrypted.

Step 3 To reassign the %temp% environment variable to a nonencrypted folder, enter the following command:

```
C:\ set TEMP=new location
```

where:

new location specifies the new, nonencrypted folder for the %temp% environment variable.

The new location of the TEMP folder displays.

Step 4 To reassign the %tmp% environment variable to a nonencrypted folder, enter the following command:

```
C:\ set TMP=new location
```

where:

new location specifies the new, nonencrypted folder for the %tmp% environment variable.

Step 5 Rerun the idcsetup.exe installation by entering the following command:

```
C:\ run idcsetup.exe
```

Step 6 To close the command line prompt, enter the **exit** command.

For more information about the Encrypted File System, visit the Microsoft support website.

Making idcsetup.exe Configuration File Changes

If you have the idcsetup.exe application open and you need to make changes to the idcsetup.exe configuration file, make sure that you close the idcsetup.exe application before you edit the configuration file on your hard drive; otherwise, the idcsetup.exe can overwrite your configuration changes. Be sure to save any changes that you make to the configuration file.

Resolving IDC Dialer Issues

Problem All IDC Dialers show “Unregistered.”

Solution Make sure that the host name of the IP address of Cisco Unified Communications Manager or Cisco Unified Communications Manager Express is properly configured in Cisco IPICS. To do so, in the Administration Console, choose **Server** drawer > **Administration** > **Options** and enter the IP address in the CUCM Host Name or IP Address field.

Resolving Footswitch/USB Device Issues

Cisco IPICS supports the use of a device that simulates key down and key up events, such as a footswitch or other USB device. This device must also be capable of simulating key held events as if you were holding down a key on a keyboard.

If you use a footswitch or similar USB device, and you encounter a situation where the All Talk channel button flickers between orange and yellow, you may not have properly configured the device.

Make sure that the device can generate key down events when you hold down the footswitch pedal followed by a key up event when you release the pedal (to simulate pressing and holding a key on a keyboard and then releasing it).

See the product documentation that you received with your USB device for details about how to configure it to properly function with Cisco IPICS.

Configuring the Audio Settings

This section contains information about configuring the audio settings and it includes the following topics:

- [Using a USB DSP Headset with the IDC, page 5-5](#)
- [Checking the Microphone with the IDC, page 5-6](#)

After you have installed the IDC application, check the current settings for the playback and recording audio devices on your client machine to ensure that you are using the preferred or default sound devices with the IDC.

**Tip**

If you change your audio settings while you are running the IDC, you may need to restart the IDC for the changes to become effective.

**Note**

It is very important that you choose the preferred or default sound device option in the Windows audio settings in order to limit echo that can be caused by multiple microphones picking up traffic on the same machine.

Using a USB DSP Headset with the IDC

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 the USB DSP headset as the default speaker and microphone. Therefore, make sure that you connect the USB DSP headset to the IDC client machine before you launch the IDC.

If you launch the IDC after you plug the headset into your IDC client machine, the IDC does not automatically remember the audio setting for the USB DSP headset; instead, the IDC reverts to the Windows operating system's default audio settings. For more information about checking and reconfiguring the Windows audio settings for use with a USB DSP headset, see the "Using a USB DSP Headset with the Cisco IPICS Dispatch Console" section in the "Cisco IPICS Dispatch Console Installation, Configuration, and Maintenance" chapter in *Cisco IPICS Dispatch Console User Guide* for your Cisco IPICS release.

**Note**

If you use the microphone on a USB headset for an extended period of time, your voice may become unintelligible. If this problem occurs, close the IDC and unplug the USB headset from the IDC client machine. Then, plug the USB headset back into the IDC client machine and restart the IDC.

Checking the Microphone with the IDC

You should also check the audio recording and playback capability of the microphone on your IDC client machine by accessing the Microsoft Sound Recorder to record your voice and then listen to the recording. (Make sure that you have an audio input device connected to your machine.)

- Make sure that you use a high-quality microphone with the IDC; otherwise, the Cisco IPICS system may not be able to accurately detect your voice and properly register transmit and/or receive traffic.
- If the Cisco IPICS system cannot detect your voice when you transmit, the system may squelch the transmission; in this situation, another Cisco IPICS user may start speaking over your transmission because your voice cannot be heard and the IDC receive indicator may not display any indication of the transmission.

**Note**

Be aware that if the microphone on the IDC client machine is busy or if it cannot be opened by the IDC for other reasons, you will be able to listen to active conversations but you will not be able to talk.

For related information about the audio setting configuration and sound recording capability, see the “Optimizing Audio for the Cisco IPICS Dispatch Console” section, the “Using a USB DSP Headset with the Cisco IPICS Dispatch Console” section, and the “Installing the Cisco IPICS Dispatch Console” section in the “Cisco IPICS Dispatch Console Installation, Configuration, and Maintenance” chapter in *Cisco IPICS Dispatch Console User Guide* for your Cisco IPICS release.

IDC Coexistence with Other Voice Applications

The capability for the IDC application to coexist with other voice applications depends on the operating system that you use.

For example, Microsoft Windows 7 allows multiple applications to run concurrently and open and use the microphone at the same time. Some operating systems, however, do not provide support for this same capability; that is, only one voice application, such as the IDC or another voice application, may be active at the same time on a IDC client machine.

For instance, if you try to open the IDC application while you are running Microsoft NetMeeting conferencing software, the IDC displays an error because it cannot access the media device. In this case, you must first close the NetMeeting application and then launch the IDC. You can then restart NetMeeting.

Troubleshooting IDC Voice Quality Issues

You may encounter voice quality issues, which can arise due to several factors, such as noise and voice distortion.

For detailed information about voice quality problems and symptoms, see *Recognizing and Categorizing Symptoms of Voice Quality Problems*, which can be found at the following URL:

http://www.cisco.com/en/US/tech/tk652/tk698/technologies_white_paper09186a00801545e4.shtml.

This document categorizes and defines voice quality problem symptoms and may aid your troubleshooting efforts by helping you to identify specific problems through the use of sample sound recordings.

Troubleshooting Multicast Communications Issues

Certain IDC client machines that are running the Windows XP operating system may not be able to send multicast communications because of an issue with the operating system; in these situations, IDC multicast users may experience one-way audio where they can hear, but they may not be heard by, other Cisco IPICS users.



Tip

To ensure identification of this specific problem, please check to make sure that the microphone mute options on the headset and in the Windows operating system are not enabled. For more information about using the microphone with the IDC, see the “Using a Microphone with the Cisco IPICS Dispatch Console” section in the “Cisco IPICS Dispatch Console Installation, Configuration, and Maintenance” chapter in *Cisco IPICS Dispatch Console User Guide* for your Cisco IPICS release.

This problem with multicast communications may be caused by the network component of the operating system being unable to transmit multicast traffic. Cisco IPICS IDC users who encounter this problem should connect to Cisco IPICS over a unicast connection by choosing the **remote** location from the location selection dialog box. (By choosing the remote location, Cisco IPICS uses SIP-based connectivity for all channels on the IDC.)

To positively identify this problem, use a network packet sniffer as described below:

1. Run the sniffer on the affected IDC client machine and filter for outgoing multicast UDP packets.
2. Then, launch the IDC application and click the **PTT** channel button on one of the channels and speak into the microphone or headset. (The channel highlights and changes color to indicate that you are transmitting traffic.)
3. Observe the sniffer; you will see that no multicast UDP packets are sent from the IDC client machine.

To fully resolve this problem, you must perform a fresh installation of the Windows XP operating system on the IDC client machine.

Troubleshooting Offline Mode Issues

Cisco IPICS allows the IDC to operate in offline mode when the connection to the server has been interrupted so that you can continue to communicate during periods of server downtime.

There are several situations that may cause the IDC to enter offline mode, such as, the inability of the IDC to communicate with the server, networking issues that prevent routing from the IDC client machine to the server, and IE browser settings that cause your PC to work in offline mode.

If you encounter a situation where Cisco IPICS returns a message that states that the IDC is in offline mode while the connection to the server is online, check to make sure that your IE browser is not operating in offline mode. To check this setting, choose **File** from the IE browser window. Scroll down to the Work Offline option and make sure that a check mark does not appear next to this option. (If a check mark does not appear next to this option, then it is disabled.)

If a check mark appears next to this option, click **Work Offline** to remove the check mark and disable offline mode.



Note

Be sure that the “Work Offline” option in your IE browser settings is not enabled on your IDC client machine. If this option is enabled, you must disable it; otherwise, you may not be able to connect to the server.

Resolving Name Resolution Failures

Cisco IPICS requires IP name resolution. An incorrect Domain Name Service (DNS) IP configuration could result in a service outage.

To resolve name resolution failures, consult with your system administrator to confirm IP name resolution within the entire network, which includes local device IP configurations, network-based name resolution systems (such as DNS), and DHCP systems.

Identifying Channel Activation Issues

When you click the **Activate** button on the IDC, the system enters the activating state; that is, the Activate button highlights and the system attempts to connect to the Cisco IPICS server.

- When you click the Activate button immediately after a SIP-based (unicast) channel becomes available on the IDC, you may hear a busy tone if the RMS has not completely configured the line. If you encounter this situation, click the **Activate** button to deactivate the channel; then, wait a few seconds and click **Activate** again to reactivate the channel.

After the connection has been established, the remaining IDC buttons, including the PTT channel button, highlight to indicate that they are in an active state.

- If your ability to transmit on a channel has been disabled by the server, and/or if the channel has been configured by the server as a listen-only channel, the channel will appear dimmed. If the channel has been disabled by the server, you will not be able to activate the channel, as none of the buttons will appear.

If the remaining IDC buttons do not become active, and if you are using a SIP-based connection, one of the following conditions may be occurring:

- Network connectivity issues that prevent connection to the RMS.
- The RMS may be in an offline or invalid state.
- The RMS may be misconfigured in the server.
- The dial peers may not have been configured or the dial peers and/or the voice ports may be misconfigured in the RMS.
- The RMS may not have yet created the dial peers because of a delay between the server configuration and RMS dial peer creation. In this case, you should wait a couple of minutes and then restart the IDC to try again.



Note

When SIP-based remote connections fail, the IDC displays a warning indicator in the form of a yellow triangle next to the channel. This indicator signifies that a problem exists with the remote end (IDC, RMS, or server) and that it may not be able to send or receive traffic. This situation may be caused by a network interruption or reset/restart activity at the remote end. During this period of interruption, the IDC continues to attempt to connect to the remote end. After operations return to normal, the IDC removes the warning indicator from view.

If there is no traffic activity after a 30 minute interval, channels that are activated via a SIP-based remote connection may be deactivated by the system.

The IDC automatically reactivates the connection after 30 seconds. Alternatively, you can reactivate the channel by clicking the **Activate** button on the IDC.

Troubleshooting Cisco Instant Connect Issues

The following sections describe how to resolve problems that you may encounter when you use Cisco Instant Connect for Windows or Cisco Instant Connect for Android Devices:

- [Resolving Cisco Instant Connect for Windows Issues, page 5-9](#)
- [Resolving Cisco Instant Connect for Android Issues, page 5-9](#)

Resolving Cisco Instant Connect for Windows Issues

Problem Cannot install Cisco Instant Connect for Windows on a PC.

Solution You must have Windows admin privileges on the local PC to install Cisco Instant Connect. When installing, right-click the installation file and choose **Run as administrator**.

Problem Cisco Instant Connect for Windows does not receive audio.

Solution Check sound card settings and headphone configuration in the Windows Control Panel.

Problem Cisco Instant Connect for Windows shuts down unexpectedly when running on Microsoft Windows 7.

Solution Update networking and display device drivers on the local machine.

Problem When sending a PTT transmission the remote party cannot hear you.

Solution Check the microphone settings on your system and check the speaker settings on the system of the receiver.

Resolving Cisco Instant Connect for Android Issues

Problem You cannot log in to Cisco IPICS server from Cisco Instant Connect for Android.

Solution Make sure that you are not logged in to Cisco IPICS from another endpoint such as the IDC or an IP Phone. Cisco IPICS allows a user to be logged in from only one endpoint at a time.

Problem You cannot find a channel, radio, or VTG in the list of talklines.

Solution Make sure that you are associated with the channel, radio, or VTG. For more information, see *Cisco IPICS Server Administration Guide* for your release.

Problem You can join a talkline but cannot transmit audio on it.

Solution Make make sure that multicast is configured properly in your network.

Problem You can join a talkline but cannot receive audio on it.

Solution Check network and multicast configuration and connectivity.

Problem Cannot make a point-to-point call.

Solution Try to determine whether the issue relates to the device that you are using or to multiple devices by make a point-to-point call from another Android device. If the issue affects to multiple devices, make sure that voice resources on the UMS components are available. If the issues affects only your device, reinstall the Cisco Instant Connect app on the device.

