

CHAPTER 5

Configuring the PMC Application

This chapter provides information about modifying some of the PMC configuration elements to personalize the PMC application end-user interface.

This chapter includes the following sections:

- [Configuring the PMC End-User Interface, page 5-1](#)
- [Using the Optional Settings Menu, page 5-17](#)

Configuring the PMC End-User Interface

The Cisco IPICS server manages the configuration for the PMC. However, as a PMC end-user, you may personalize some of the PMC configuration elements, such as the PMC skin, view and configure settings (such as key mapping), and set up the PMC logs, if necessary.

For information about using the PMC logs, see [“Identifying the PMC Logs” section on page 7-1](#).

This section describes how to change the PMC skin setting and certain caveats that you should be aware of when you configure the PMC skin. It also includes information about using the Status, Skin, Channels, and Advanced settings that appear in the Settings menu. This section describes the following topics:

- [Configuring the PMC Skins, page 5-2](#)
- [Skin Caveats, page 5-5](#)
- [Using the Status Menu, page 5-8](#)
- [Configuring the Channels and Advanced Settings, page 5-9](#)

Configuring the PMC Skins

Cisco IPICS supports a maximum of 36 channels and several different skins that you can use for the PMC. Different skins support a varying number of maximum channels. (The PMC allows the assignment of up to 50 channels, but a maximum of 36 channels may be active at the same time.) See the [“Support for Maximum Number of Channels” section on page 4-16](#) for more information about Cisco IPICS channel support.

The Cisco IPICS administrator creates and configures the skins that are available for the PMC. Your system administrator has the option to allow you to use only selected PMC skins. If you cannot configure your PMC skin, contact your system administrator for additional information and assistance.

The ability to change the PMC skin allows you to individualize your own PMC “look and feel.” You may choose a different skin to create your own individualized interface by accessing the **Settings > Skin** menu in the PMC application. The PMC stores the skin locally on the PMC client machine. For information about accessing the Settings menu, see the [“Procedure” section on page 5-4](#).



Tip

Right-click in the PMC interface, or click the **Menu** button, to access the options that allow you to view and configure settings, choose skins, access online help, find version information, and exit the PMC.

You can change the PMC skin by choosing from one of the following skins as described in [Table 5-1](#). The 4-channel, 6-channel, and advanced console skins may be available in lighter and darker versions.

Table 5-1 Cisco IPICS PMC Skins

Skin Label	Skin Description
4-Channel Mode	This PMC client displays 4 channels that you control with your mouse. It includes the standard set of Cisco IPICS features.
6-Channel Mode	This PMC client displays 6 channels that you control with your mouse.

Table 5-1 Cisco IPICS PMC Skins (continued)

Skin Label	Skin Description
4-Channel Touch Screen Mode	This PMC client displays 4 channels in a low resolution touch screen format. It includes the standard set of Cisco IPICS features. (For information about using the touch screen low resolution skins, see the “Configuring the PMC Skins” section on page 5-2.)
8-Channel Touch Screen Mode	This PMC client displays 8 channels in a low resolution touch screen format. It includes the standard set of Cisco IPICS features. (For information about using the touch screen low resolution skins, see the “Configuring the PMC Skins” section on page 5-2.)
18-Channel Advanced Console	This PMC advanced console client displays up to 18 channels that you control with your mouse. It includes the advanced set of Cisco IPICS features. See Figure 1-1 on page 1-9 for an illustration of the advanced console skin. For more information about the advanced console features, see the “End-user Features and Interactions” section on page 4-20.
36-Channel Radio Console	This PMC client displays up to 36 channels, including a maximum of 9 channel selector buttons per radio channel. See Figure 1-2 on page 1-14 for an illustration of the radio console skin. For more information about the radio console features, see the “End-user Features and Interactions” section on page 4-20.
50-Channel Advanced Console	<p>This PMC advanced console client displays up to 50 channels that you control with your mouse. It includes the advanced set of Cisco IPICS features. See Figure 1-1 on page 1-9 for an illustration of the advanced console skin. For more information about the advanced console features, see the “End-user Features and Interactions” section on page 4-20.</p> <p>Note Although 50 channels display on this skin, a maximum of 36 channels may be active at the same time.</p>

The PMC modifies the PTT behavior on the touch screen skins. For more information, see the [“Touch Screen Skin Caveats” section on page 5-7](#).

For more information about radio skin caveats, see the [“Radio Skin Caveats” section on page 5-7](#).



Caution

If you change the PMC skins while you are actively using the PMC, you may experience degraded audio quality and/or a temporary halt in your transmission.



Note

When you configure your PMC to use one of the supported skins, you may need to adjust your desktop display screen area resolution to view all of the channels. (The PMC minimum supported screen size is 1024x768.) To adjust your screen area resolution, right-click on your desktop and then click **Properties**. Or, navigate to **Start > Settings > Control Panel > Display > Settings**. The Display Properties dialog box displays. Use the slide bar to increase the screen resolution for your client machine. If you cannot increase your screen area resolution to view the entire skin, choose another skin from the **Settings > Skin** menu.

To display the Settings menu, take one of the following actions:

- Click the **Menu** button that is located next to the All Talk button on the applicable PMC skin.
- Or, right-click in the PMC interface and then click **Settings**.

To access the skin configuration in the PMC Settings menu, perform the following procedure:

Procedure

- Step 1** Position your cursor over the PMC GUI that displays on your desktop.
- Step 2** Click the **Menu** button or right-click in the PMC interface; then, click **Settings**.
The Status, Skin, Channels, and Advanced tabs appear in the PMC GUI.
- Step 3** To view the various skin options, click the **Skin** tab.
The Skin menu displays the available PMC skins.
- Step 4** To change the skin, choose a different skin from that which you have currently configured.

Step 5 Click **OK**.

The PMC skin changes to reflect the new setting.

If you reconfigure your PMC skin and your association to channels and VTGs is greater than what has been specified, you may encounter a skin mismatch condition. For more information about skin mismatch conditions, see the [“Skin Caveats” section on page 5-5](#).

Skin Caveats

This section describes the overall caveats that pertain to the PMC skins and includes information about specific skins in the following topics:

- [Touch Screen Skin Caveats, page 5-7](#)
- [Radio Skin Caveats, page 5-7](#)

The following caveats pertain to the PMC skins:

- When you upgrade the PMC from one version to the next, the PMC provides support for only the most current version of the skins, as displayed in the **Settings > Skin** menu. However, the PMC does not remove the obsolete skins from the Skins directory that resides on the PMC client machine hard drive.
- Channels may be repositioned when you switch skins. In this case, you may need to manually reorder your channels to view them in the PMC. For information about reordering your PMC channels, see the [“Configuring the Channels Menu Options” section on page 5-10](#).
- If you change the PMC skin and use a different number of channels than that which has been configured in the Cisco IPICS server, you may encounter a mismatch condition.
- When you have a mismatch condition and the server tries to download more channels than the PMC can display, the PMC processes only the channels that it can support and ignores the rest.

For example, if you configure the 4-channel skin on the PMC and the Cisco IPICS server tries to download eight channels based on the assignment by the dispatcher, the PMC enables visibility only of the first four channels;

you can reorder the remainder of the channels so that they appear on the skin, if needed. For more information about reordering your channels, see the [“Configuring the Channels Menu Options” section on page 5-10](#).

If the PMC displays more than four channels and you attempt to change to the 4-channel skin, the PMC performs the following actions to warn you about the mismatch:

- If channel 5, 6, 7, or 8 is configured and active (currently on a call), the PMC displays a pop-up message to warn you that switching to the 4-channel skin would hide active channels. The PMC does not allow this change to occur.
- If channel 5, 6, 7, or 8 is configured but not active, the PMC displays a pop-up message to warn you that switching to the 4-channel skin will hide the configured channels and requests your input to proceed.
- If you attempt to switch from an 8-channel skin to a 4-channel skin when five or more channels are assigned, a dialog box displays to inform you and ask if you want to switch to a skin that displays fewer channels.
 - If you click **Yes** to proceed with the change, the PMC allows the skin change to occur.
 - If you click **No**, the PMC does not allow the skin change to occur.
- If the server tries to assign more than the maximum number of supported channels, a pop-up message displays to inform you.
- To support urgent communications when skin mismatches occur, Cisco IPICS provides the following functionality:
 - If an emergency situation exists and the PMC does not have sufficient channels configured, the dispatcher may be able to alert the PMC user through the always open policy channel if this channel was defined. (This multicast channel may be the first channel that the dispatcher pushes to each PMC user so that all users can listen in on this channel.)
 - The dispatcher can also assign a channel to the PMC user on an ad hoc basis and initiate communications in that manner.

See the [“Implementing Policies” section on page 3-11](#) for more information about policies.

Touch Screen Skin Caveats

When you use the touch screen skins, the PMC modifies the PTT behavior in the following ways:

- The transmit graphical indicator blinks red to indicate that you are transmitting traffic.
- If your ability to transmit on a channel has been disabled by the server, the PTT button will not highlight.
- If the channel has been disabled by the server, you will not be able to activate the channel.

Radio Skin Caveats

The following caveats pertain to the 36-channel radio console skin:

- The transmit graphical indicator blinks red to indicate that you are transmitting traffic.
- The secure indicator displays along the top of the PTT channel button. This setting is based on the security setting of the radio channel itself and not the individual channel selector buttons.
- The individual channel selector buttons are limited in the number of characters that they can display.
- The PMC must have a sufficient number of channel selector buttons available to display all configured states that have been defined for a stateful control sequence. If there is an insufficient number of channel selector buttons to display all of the configured states for a stateful control sequence the PMC does not display that stateful sequence control at all. For more information, see the [“Overview” section on page 4-33](#).
- You can view radio channels in non-radio skins, but the radio channel selector buttons are available for your use only when you use the radio skin.
- The use of the radio skin requires a screen area resolution of 768 x 819.
- When a radio channel is associated with a PMC user, that channel displays on the PMC client; user access to each individual channel selector button depends on the specific permissions that the system administrator configures.
- The audio that you transmit and receive occurs over the specific channel (frequency) to which the radio is currently tuned.

- Each channel in a radio channel inherits the volume, spatial positioning, VAD, preferred codec, and RX mute during PTT settings from the radio channel. There is currently no provision to enable individual settings.

For information about using the radio skin, see the [“Communicating with Cisco IPICS Users via Tone-Controlled Radios”](#) section on page 4-32.

Using the Status Menu

The Status menu provides information about your PMC and its connectivity to the server. This menu also includes buttons that allow you to easily connect to the server to access and change your user information or download the PMC.

You can access the Status menu by navigating to **Settings > Status** in the PMC application.

To access the Status menu in the PMC Settings menu, perform the following procedure:

Procedure

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- Step 1** Position your cursor over the PMC GUI that displays on your desktop.
- Step 2** Click the **Menu** button that displays on the PMC or right-click in the PMC interface and then click **Settings**.

The Status, Skin, Channels, and Advanced tabs appear in the PMC GUI.

- Step 3** To view the Status menu, click the **Status** tab.

The Status menu displays the following fields:

Table 5-2 Status Menu Fields

Field	Description
Product Name	This field displays the name of the product, Cisco IPICS PMC.
Version	This field specifies the version of the PMC that you are using.
Cisco IPICS Server Address	This field displays the IP address of the server that your PMC is connected to.

Table 5-2 Status Menu Fields (continued)

Field	Description
Server Status and Connectivity Indicator	<p>This field specifies your connectivity status with the server.</p> <ul style="list-style-type: none"> When your PMC is connected to the server, this field displays a green connectivity indicator along with the word “Connected.” When your PMC is not connected to the server, this field displays a red connectivity indicator and an alert icon, along with the word “Disconnected.” <p>Note The PMC updates its connectivity status dynamically based on the status of its connectivity with the server.</p>
Access the Server via Web	<p>Click this button to use your browser to connect to the Cisco IPICS server and access your profile information or download the PMC.</p> <p>Note For information about browsers that are supported for use with Cisco IPICS, see the “Browser Support” section on page 1-18.</p>
User	<p>This field specifies the user ID that you entered when you logged in to the PMC. For more information, see the “PMC Login Procedure” section on page 4-8.</p>
Location	<p>This field specifies the location that you selected as part of your login to the PMC. For more information, see the “PMC Login Procedure” section on page 4-8.</p>

Configuring the Channels and Advanced Settings

You can personalize your PMC by changing the settings that appear under the Channels and Advanced tabs.

This section includes information about each of these menus:

- [Configuring the Channels Menu Options, page 5-10](#)
- [Configuring the Advanced Menu Options, page 5-16](#)

Configuring the Channels Menu Options

You can access the Channels menu by navigating to **Settings > Channels** in the PMC application. The Channels menu provides the option for you to configure certain settings, such as spatial positioning, key mapping, and channel reordering.

To access the Channels menu in the PMC Settings menu, perform the following procedure:

Procedure

- Step 1** Position your cursor over the PMC GUI that displays on your desktop.
- Step 2** Click the **Menu** button or right-click in the PMC interface; then, click **Settings**.
The Status, Skin, Channels, and Advanced tabs appear in the PMC GUI.
- Step 3** To view the Channels menu, click the **Channels** tab.
The Channels menu displays information about the channels that have been assigned to you, along with the following channel properties, as shown in [Table 5-3](#):

Table 5-3 Channels Menu Fields


Field	Description
Channel Label	<p>The channel label that displays corresponds to the channel that you select in the top window pane. The PMC also displays any key mapping assignments that you have defined for each channel. From this menu, you can also rearrange the appearance of your channels by using the Move Down and Move Up buttons.</p> <p>To rearrange or reorder the appearance of the channels on your PMC, follow these steps:</p> <ol style="list-style-type: none"> 1. Click to select and highlight the channel that you want to reposition. 2. Click the Move Up button to move the channel position up on the PMC, or click the Move Down button to move the channel position down on the PMC. The Position field specifies the position of the channel on the PMC. <p> Note Make sure that you do not move an active channel beyond the last available channel position in the skin that you are using. If you move a channel beyond the last position, the PMC can no longer display the channel. Alternatively, you can use this feature to move channels that you do not use beyond the boundaries of the skin.</p> <ol style="list-style-type: none"> 3. Repeat these steps for each channel that you want to move. 4. To save your changes, click Apply; then click OK. <p>Note The PMC does not save your channel ordering on a per-skin basis. That is, if you change skins, you may need to reorder your channels again, as needed.</p>
Spatial Position	<p>This field enables audio playback for selected channels on different speakers by allowing you choose the speaker that the selected channel uses. You can configure spatial playback for a specific channel by highlighting the channel and then choosing one of the following options for that channel:</p> <ul style="list-style-type: none"> • Stereo—This option, as the default value, plays out the channel audio by using both speakers. • Left—This option plays out the channel audio by using only the left speaker. • Right—This option plays out the channel audio by using only the right speaker.

Table 5-3 Channels Menu Fields (continued)

Field	Description
Connection Type	<p>This option specifies the type of connection that Cisco IPICS uses for the associated channel.</p> <p>If your connection type specifies SIP, the following fields display:</p> <ul style="list-style-type: none"> • Local Chan ID—This field specifies a unique channel identifier for the type of channel that you are using for your connection. <p>For example, the Local Chan ID for a channel displays as “chan<uid>” where uid represents the unique identifier for that channel; for a VTG, the Local Chan ID displays as “vtg<uid>” where the uid is the unique identifier for that VTG.</p> <ul style="list-style-type: none"> • Dialed Number—This number specifies the number that your PMC dials to connect on the corresponding channel. • SIP Proxy—This IP address specifies the preconfigured address and port of the SIP proxy that Cisco IPICS uses for this connection. (The PMC uses this IP address to connect to the RMS component to enable SIP-based remote connections.) <p>If your connection type specifies multicast, the following fields display:</p> <ul style="list-style-type: none"> • Recv Addr—This IP address specifies the multicast address and port that has been configured for your PMC to receive traffic. • Send Addr—This IP address specifies the multicast address and port that has been configured for your PMC to send traffic.
Preferred Codec	<p>This field specifies the preferred codec that the PMC uses for the corresponding channel.</p> <ul style="list-style-type: none"> • If your connect type specifies SIP, the Preferred Codec field displays. • If your connection type specifies multicast, the Preferred Codec RX and Preferred Codec TX fields display to signify the receive and transmit channels.

Table 5-3 Channels Menu Fields (continued)

Field	Description
RX Mute During PTT	<p>This option specifies the transmission duplex settings for all channels or only one channel; it controls the audio from the active channels while you are transmitting. (This attribute is defined in the server but it may be overridden on the PMC.) From the drop-down list box, choose one of the following options:</p> <ul style="list-style-type: none"> • None—When you choose this option, you are able to hear audio while the PTT channel is depressed because the PMC does not mute any of the received traffic. • This channel only—When you choose this option, you will not be able to hear audio on the selected channel while the PTT channel is depressed. This option, as the default value, simulates the behavior of a true PTT device. • All channels—When you choose this option, you will not be able to hear audio on any of the active channels while the PTT channel(s) are depressed.
Use VAD	<p>This option enables voice activity detection (VAD). When you enable VAD, the PMC only sends voice traffic when it detects your voice. (Although this attribute is defined in the server and it may be overridden on the PMC, Cisco recommends that you do not change the default setting.)</p> <p>Note VAD is disabled by default. You should not edit this field unless you are instructed to do so by your system administrator or Cisco support personnel as part of your troubleshooting efforts.</p>

Table 5-3 Channels Menu Fields (continued)

Field	Description
Key Mapping	<p>This option allows you to assign specific keys to each of your channels and provides transmit functionality when you press and hold the assigned key. To use this feature, highlight a channel to select it; then, from the drop-down list box, choose one of the available letters.</p> <ul style="list-style-type: none"> • You can choose letters that range from e to z, and you can choose complex keystrokes, which are Shift-Ctrl-Alt and a letter key, number key, or function key. To save your changes, click Apply; then, OK. • You can create new key map assignments or change current mappings by choosing another letter or key combination for the channel. • The keys or key combinations that are mapped to channels display in the table next to the channel names. • When you map new channels, you can choose from the letters or key combinations that have not already been assigned. • If you want to map a key or key combination that has already been assigned to another channel, you must unmap the key or key combination before you can reassign it. To unmap the key, highlight the channel to select it; then, from the drop-down list box, choose None. • The PMC does not allow you to map the same key or key combination to more than one channel at a time. <p>The PMC displays the key map on each channel that you configured. When you want to transmit on that channel, you can press and hold the assigned key or complex keystroke instead of using your mouse.</p> <p>This feature also provides support for devices that simulate key down and key up events, such as a footswitch or other USB device. Refer to the product documentation that you received with your USB device for information about how to configure your USB device to generate the proper key sequence.</p> <p>Note The key mapping that you configure applies only to the PMC client machine that you logged in to. If you use another PMC client machine, you must reconfigure your key mapping assignments.</p>

Table 5-3 Channels Menu Fields (continued)

Field	Description
Optimize for low bandwidth	<p>This option allows you to optimize your audio quality, on a per-channel basis, when you are connected via a low bandwidth and/or high latency (high delay) link, such as when you use a satellite connection. To use this feature, follow these steps:</p> <ol style="list-style-type: none"> 1. From the channel list that displays at the top of this menu, click to select and highlight a low bandwidth channel. 2. Check the Optimize for low bandwidth check box to enable this feature on the selected channel. 3. Repeat these steps for all channels that require optimization. <p>By using this feature, you should notice an improvement in voice quality when you use a low bandwidth and/or high latency channel. In some cases, you may experience delay that ranges from 200 ms to 2 seconds on the incoming audio from other Cisco IPICS users.</p> <p>Note Upon the first PMC login, an error message displays to inform you that the channels are being disabled. This error occurs because of the time delay to connect. To recover from this error, click OK. After the server completes its tasks, the channels display on the PMC (this timing varies based on latency). For more information about using the PMC over a low bandwidth and/or high latency link, refer to the Solution Reference Network Design (SRND) (Latest version).</p> <p>If you are not sure whether you should enable this option, contact your system administrator for assistance.</p> <p>Note When you enable this feature, the PMC does not upload any logs to the server.</p> <p>For information about troubleshooting this type of connection, see the “Troubleshooting PMC Connectivity Issues with a High Latency, Low Bandwidth Link” section on page 8-24.</p>

Step 4 To save your changes, click **OK**.

Configuring the Advanced Menu Options

You can access the Advanced menu by navigating to **Settings > Advanced** in the PMC application. The Advanced menu provides the option for you to modify certain settings, such as the All Talk key mapping and VPN settings.

To access the Advanced menu in the PMC Settings menu, perform the following procedure:

Procedure

-
- Step 1** Position your cursor over the PMC GUI that displays on your desktop.
- Step 2** Click the **Menu** button or right-click in the PMC interface; then, click **Settings**.
The Status, Skin, Channels, and Advanced tabs appear in the PMC GUI.
- Step 3** To view the Advanced menu, click the **Advanced** tab.
The Advanced menu displays the following fields:

Table 5-4 **Advanced Menu Fields**

Field	Description
All Talk Key Mapping	<p>Choose one of the following options to configure key mapping for the All Talk channel:</p> <ul style="list-style-type: none"> • None—Choose this option if you do not want to map any key to the All Talk channel. • Space—This option, as the default value, specifies that the space bar maps to the All Talk channel. • Tab—Choose this option to map the tab key to the All Talk channel. • Complex keystrokes—Choose an available complex keystroke to map this keystroke combination to the All Talk channel. The list of complex keystrokes displays only complex keystrokes that are not already assigned to other functions.

Table 5-4 *Advanced Menu Fields (continued)*

Field	Description
VPN Settings	<p>Choose one of the following options to configure your VPN settings, if necessary:</p> <ul style="list-style-type: none"> • Use Default IP Address—Click this radio button to use the default IP address that the PMC has configured. Cisco IPICS specifies this option as the default. <p>At startup, the PMC attempts to determine the best IP address to use for connection to the server; that is, the default IP address. Under most conditions, this default IP address requires no reconfiguration.</p> <ul style="list-style-type: none"> • Use VPN Address—Click this radio button to override the default IP address option and to specify a VPN address that the PMC should use for connectivity to the Cisco IPICS server; then, enter your IP address. <p>Contact your system administrator if you are not sure about whether you need to choose the Use VPN Address option for your connection.</p>

Step 4 To save your changes, click **OK**.

Using the Optional Settings Menu

The optional settings menu provides access to additional submenus, such as the PMC log files. This section describes how to access and use the optional settings submenus.



Caution

You should only use these optional settings to aid troubleshooting and debugging efforts as directed by your system administrator or Cisco support personnel. To ensure system integrity, make sure that you contact your system administrator before you use any of these optional settings submenus.

To access the PMC optional settings, perform the following procedure:

Procedure

Step 1 Position your cursor so that it is over the PMC GUI that displays on your desktop.

Step 2 Hold down the left **Shift** key and right-click in the PMC interface.

The following submenu items display:

- Settings—Click **Settings** to see the Settings menu.
- Logs—Click **Logs** to access the log submenus.

From here, you can manually turn on and turn off logging, as well as set the debug log levels.



Note Be aware that logging for these log files should only be turned on when you need help in isolating and resolving problems with the PMC and as directed by your system administrator or Cisco support personnel. To ensure system integrity, be sure to contact your system administrator before you use any of the available logs.

See [“Identifying the PMC Logs” section on page 7-1](#) for more information about using the PMC log files.

- Help—Click **Help** to display online help information for the PMC.
- About—Click **About** to display version information for the PMC.



Note Alternatively, you can access the **Settings > Status** menu to see version information for the PMC. For more information, see the [“Using the Status Menu” section on page 5-8](#).

- Exit—Click **Exit** to close the PMC application.

Step 3 Click the submenu that you need to access.

**Note**

If you are configuring changes to the PMC settings when the PMC retrieves an update from the server, the server may overwrite your changes and redisplay the channel information. If this situation occurs, you may need to reenter any changes that you want to make.

Related Topics

- [Identifying the PMC Logs, page 7-1](#)
- [Channel Support, page 3-12](#)
- [Implementing Policies, page 3-11](#)
- [Dynamic Configuration, page 4-15](#)

Where to Find More Information

- [Cisco IPICS Server Administration Guide](#)

