



Preface

The Cisco IPICS Troubleshooting Guide, Release 2.1(1) provides you with the information that you need to troubleshoot problems that you may encounter when you install, configure, or use the Cisco IP Interoperability and Collaboration System (hereafter referred to as *Cisco IPICS*) solution. System administrators should review this document to aid in their troubleshooting efforts for problems that they may encounter when they use Cisco IPICS.

Audience

The *Cisco IPICS Troubleshooting Guide, Release 2.1(1)* targets system administrators who install, configure, operate, and manage tasks on the Cisco IPICS system. This document also targets end users who communicate with other users by using the Cisco IPICS Push-to-Talk Management Center (PMC) application or Cisco Unified IP Phone.

Organization

This document is organized as follows:

Chapter 1, “Finding Troubleshooting Information for Cisco IPICS”	This chapter provides information about how to find troubleshooting information for Cisco IPICS.
Chapter 2, “Troubleshooting Cisco IPICS Network Processes”	This chapter includes troubleshooting tips for the network processes that the Cisco IPICS server uses, such as the tomcat service, the database server, the license manager, the dial engine, and the Cisco Security Agent (CSA).
Chapter 3, “Troubleshooting the Cisco IPICS Server”	This chapter includes information about troubleshooting the Cisco IPICS server and Cisco IPICS policy engine (hereafter known as policy engine). It also includes information about components that work with Cisco IPICS, such as Cisco Unified IP Phones and the router media service (RMS).
Chapter 4, “Troubleshooting Communication, Voice Quality and Other Equipment Issues”	This chapter describes how to resolve communications and voice quality issues and hardware, firmware, and software issues that you might encounter with non-server equipment, such as the RMS.
Chapter 5, “Troubleshooting Tips for the PMC Application”	This chapter includes troubleshooting information for the PMC.
Chapter 6, “Using the Cisco IPICS CLI Tools and Service Commands”	This chapter includes information about the command line interface (CLI) tools and service commands that you can use with Cisco IPICS.
Chapter 7, “Understanding the Cisco IPICS Logs”	This chapter includes information about the activity and error logs that Cisco IPICS generates, along with information about how to interpret the data in the logs.

Related Documentation

For more information about Cisco IPICS and the PMC application, refer to the following documentation:

- *Cisco IPICS PMC Installation and User Guide, Release 2.1(1)*—This document describes how to install, configure, manage, and operate the Cisco IPICS PMC application.
- *Cisco IPICS PMC Quick Start Reference Card, Release 2.1(1)*—This document provides tips and quick references for the most frequently used procedures that a user can perform on the Cisco IPICS PMC.
- *Cisco IPICS PMC Debug Reference Quick Start Card, Release 2.1(1)*—This document provides a quick reference for troubleshooting and debugging the Cisco IPICS PMC.
- *Cisco IPICS PMC Command Line Interface, Release 2.1(1)*—This document describes the commands that you can use from the command line interface (CLI) to obtain information or to change settings for the Cisco IPICS PMC.
- *Cisco IPICS Server Administration Guide, Release 2.1(1)*—This document contains information about the key configuration, operation, and management tasks for the Cisco IPICS server.
- *Cisco IPICS Server Quick Start Guide, Release 2.1(1)*—This document is a condensed version of the *Cisco IPICS Server Administration Guide* to help the administrator to quickly get started with Cisco IPICS.
- *Cisco IPICS Server Quick Start Reference Card, Release 2.1(1)*—This document provides tips, quick references, and usage guidelines for the Cisco IPICS server.
- *Using Cisco IPICS on Your IP Phone Quick Start Reference Card, Release 2.1(1)*—This document contains information about accessing Cisco IPICS from your IP phone and tips and guidelines for using this service.
- *Using the Cisco IPICS TUI Quick Start Reference Card, Release 2.1(1)*—This document describes the steps that you follow to dial in to, or receive a call from, the policy engine telephony user interface (TUI) and guidelines for using the system.

- *Cisco IPICS Radio and Tone Descriptor File Examples Reference Card, Release 2.1(1)*—This document contains examples of valid and invalid radio control and signaling descriptor file entries and guidelines for creating these entries.
- *Cisco IPICS Server Installation and Upgrade Guide, Release 2.1(1)*—This document describes how to install, configure, and upgrade the Cisco IPICS server software and Cisco IPICS operating system.
- *Cisco IPICS Server Quick Start Installation Reference Card, Release 2.1(1)*—This document provides tips and quick references for installing and upgrading the Cisco IPICS server.
- *Release Notes for Cisco IPICS Release 2.1(1)*—This document contains a description of the new and changed features, important notes, caveats, and documentation updates for this release of Cisco IPICS.
- *Solution Reference Network Design (SRND) for Cisco IPICS Release 2.1(1)*—This document provides information about design considerations and guidelines for deploying the Cisco IPICS solution.
- *Cisco IPICS Compatibility Matrix*—This document contains information about compatible hardware and software that is supported for use with Cisco IPICS.
- *Cisco IPICS 2.1(1) Resources Card (Documentation Locator)*—This document provides a summary of the documentation that is available for this release of Cisco IPICS.

To access the documentation suite for Cisco IPICS, refer to the following URL:

http://www.cisco.com/en/US/products/ps7026/tsd_products_support_series_home.html

Cisco Unified Communications Manager (CallManager) Documentation

For information about Cisco Unified Communications Manager (CallManager), refer to the documentation at this URL:

http://cisco.com/en/US/products/sw/voicesw/ps556/tsd_products_support_series_home.html

Cisco Unified Communications Manager Express Documentation

For information about Cisco Unified Communications Manager Express, refer to the documentation at this URL:

http://cisco.com/en/US/products/sw/voicesw/ps4625/tsd_products_support_series_home.html

Cisco 7800 Series Media Convergence Servers Documentation

For information about Cisco 7800 Series Media Convergence Servers, refer to the MCS data sheets at this URL:

http://www.cisco.com/en/US/products/hw/voiceapp/ps378/products_data_sheets_list.html

Cisco Unified IP Phones 7900 Series Documentation

For information about Cisco Unified IP Phones, refer to the documentation at this URL:

http://cisco.com/en/US/products/hw/phones/ps379/tsd_products_support_series_home.html

Session Initiation Protocol Documentation

The dial engine, which controls the dial-in and dial-out functionality of the policy engine, uses the Session Initiation Protocol (SIP). For information about SIP, refer to the documentation at this URL:

http://cisco.com/en/US/tech/tk652/tk701/tk587/tsd_technology_support_sub-protocol_home.html

Cisco Land Mobile Radio over IP/Solution Reference Network Design

For information about Cisco Land Mobile Radio (LMR) over IP, refer to the documentation at the following URLs:

- http://www.cisco.com/en/US/products/ps6441/products_feature_guide09186a00801f092c.html
- http://www.cisco.com/en/US/products/sw/iosswrel/ps5207/products_implementation_design_guide_book09186a0080347c1b.html

Cisco Security Agent

For information about Cisco Security Agent, refer to the documentation at this URL:

<http://www.cisco.com/en/US/products/sw/secursw/ps5057/index.html>

Cisco IOS Documentation

The Cisco IOS software documentation set describes the tasks and commands necessary to configure certain system components and other Cisco products, such as access servers, routers, and switches. Each configuration guide can be used in conjunction with its corresponding command reference.

For information about Cisco IOS software configuration, refer to the documentation at this URL:

http://www.cisco.com/en/US/products/sw/iosswrel/products_ios_cisco_ios_software_category_home.html

Document Notes and Conventions

This document uses the following conventions for instructions and information:

**Note**

Means *reader take note*. Notes contain helpful suggestions or references to materials not contained in this manual.

**Caution**

This caution symbol means *reader be careful*. In this situation, you might do something that could result in equipment damage or loss of data.

Table 1 **Conventions**

Convention	Description
boldface font	Commands and keywords appear in boldface .
<i>italic font</i>	Command input for which you supply the values appear in <i>italics</i> .
[]	Optional keywords and default responses to system prompts appear within square brackets.
{ x x x }	A choice of keywords (represented by x) appears in braces separated by vertical bars. You must select one.
string	A nonquoted set of characters. Do not use quotation marks around the string or the string will include the quotation marks.
^ or Ctrl	Represent the key labeled <i>Control</i> . For example, when you read ^D or <i>Ctrl-D</i> , you should hold down the Control key while you press the D key.
screen font	Examples of information displayed on the screen.
boldface screen font	Information that you must enter is in boldface screen font .
<i>italic screen font</i>	Arguments for which you supply values are in <i>italic screen font</i> .

Obtaining Documentation, Obtaining Support, and Security Guidelines

For information on obtaining documentation, obtaining support, providing documentation feedback, security guidelines, and also recommended aliases and general Cisco documents, see the monthly *What's New in Cisco Product Documentation*, which also lists all new and revised Cisco technical documentation, at:

<http://www.cisco.com/en/US/docs/general/whatsnew/whatsnew.html>