



Tools Overview

This chapter provides an overview of the different types of tools that Cisco CallManager Serviceability provides to monitor and analyze the various Cisco CallManager systems, and comprises the following topics:

- [Performance Monitoring Tools, page 4-2](#)
- [Device Monitoring Tools, page 4-2](#)
- [Analyzing Tools, page 4-3](#)
- [Log Files, page 4-3](#)
- [SDI Information, page 4-4](#)
- [SDL Information, page 4-4](#)
- [Where to Find More Information, page 4-5](#)

Performance Monitoring Tools

Cisco CallManager Serviceability monitors the performance of Cisco CallManager services both locally and remotely. The following list comprises the tools used to monitor services for local and remote Cisco CallManager systems:

- Local Cisco CallManager Systems—The tools you can use to locally monitor the performance of Cisco CallManager services include Microsoft Performance and the Real-Time Monitoring Tool (RTMT).
- Remote Cisco CallManager Systems—The tools you can use to remotely monitor the performance of Cisco CallManager services include Microsoft Performance, SNMP MIBs, and CiscoWorks2000.

Device Monitoring Tools

Serviceability monitors the performance and activity of Cisco CallManager devices using RTMT. The following list comprises the devices that RTMT monitors:

- Phone (includes the Cisco IP SoftPhone)
- Gateway Devices
- Media resource manager (used for conference bridge, media termination point, and music on hold)
- H.323 Devices
- CTI
- Voice mail

RTMT monitors the following device information in real time:

- Name
- Directory number
- IP address
- Model name
- Status
- Node name

- Status reason
- Time and date

Analyzing Tools

You can analyze the data from a trace log file, that contains information about Cisco CallManager devices and services, by using the following analyzing tools:

- Trace Analysis—Use this tool to debug Cisco CallManager system problems.
- Bulk Trace Analysis—Use this plugin application to analyze trace files that contain over 2MB of data. This is a stand alone application that runs from a PC on the Cisco CallManager network.

Log Files

You can view alarms and trace information sent to log files for troubleshooting purposes. Trace supports text and XML formatted log files.

Configuring Log Files

Configure log files for alarm information by using Serviceability Alarm Configuration.

Configure log files for trace information by using Serviceability Trace Configuration. Using Serviceability Trace Collection, you can filter the SDI and SDL XML trace log files for specific information.

Viewing Log Files

Using a text editor such as Microsoft Word, you can view text log files. You can use Serviceability Trace Analysis or Bulk Trace Analysis to view XML log files.

SDI Information

You can direct alarms to the Win2000 event viewer, CiscoWorks2000 Syslog, SDI or SDL trace log files, or to all destinations. You can base traces for Cisco CallManager services on debug levels, specific trace fields, and Cisco CallManager devices such as phones or gateways. You can perform a trace on the alarms that are sent to the SDI or SDL trace log files.

An SDI Trace log file contains information for all Cisco CallManager services. The system traces system diagnostic interface (SDI) information from the services and logs run-time events and traces to a log file. You can view SDI trace files in text or XML format.

**Note**

To log alarms in the SDI trace log file, check two check boxes in Trace Configuration and one check box in Alarm Configuration: the Trace on check box in Trace Configuration, the Enable trace file log check box in Trace Configuration, and the SDI alarm destination check box in Alarm Configuration.

SDL Information

You can direct alarms to the Win2000 event viewer, CiscoWorks2000 Syslog, SDI or SDL trace log files, or to all destinations. You can base traces for Cisco CallManager services on debug levels, specific trace fields, and Cisco CallManager devices such as phones or gateways. You can perform a trace on the alarms that are sent to the SDI or SDL trace log files.

An SDL Trace log file contains call-processing information from services such as Cisco CallManager, Cisco CTIManager, and Cisco TFTP. The system traces the signal distribution layer (SDL) of the call and logs state transitions into a log file. You can view SDL trace files in text or XML format.

The SDL trace library applies only to Cisco CallManager and CTIManager services. In addition to specifying SDL trace library in Alarms Configuration, configure this alarm destination using Serviceability Trace SDL Configuration.

Where to Find More Information

Related Topics

- [Chapter 7, “Alarms”](#)
- [Chapter 8, “Trace”](#)
- [Chapter 9, “Real-Time Monitoring Tool”](#)
- [Chapter 12, “Microsoft Performance”](#)
- [Chapter 13, “Bulk Trace Analysis”](#)
- [Chapter 18, “Simple Network Management Protocol”](#)
- [Chapter 19, “CiscoWorks2000”](#)
- [Chapter 20, “Path Analysis”](#)
- [Chapter 21, “System Log Management”](#)
- [Appendix A, “Cisco CallManager Performance Counters, RTMT, and CISCO-CCM-MIB”](#)

Additional Cisco Documentation

- *Cisco CallManager Serviceability Administration Guide*
- *Troubleshooting Guide for Cisco CallManager*
- CiscoWorks2000 user documentation:
<http://www.cisco.com/univercd/cc/td/doc/product/rtrmgmt/cw2000/index.htm>

■ Where to Find More Information