



## CHAPTER

# 3

## Alarms

This chapter provides information on Serviceability Alarms and contains the following topics:

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- [Alarm Configuration, page 3-2](#)
- [Alarm Definitions, page 3-2](#)
- [Viewing Alarm Information, page 3-2](#)
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## Understanding Alarms

Cisco CallManager Serviceability Alarms allows you to configure alarms and events and provides alarm message definitions. Both functions assist the system administrator and support personnel in troubleshooting Cisco CallManager problems.

You use alarms to provide run-time status and state of the Cisco CallManager system and to take corrective action for problem resolution; for example, to determine whether phones are registered and working. Alarms contain information such as explanation and recommended action. Alarm information includes application name, machine name, and cluster name to help you perform troubleshooting, even for problems that are not on your local Cisco CallManager.

You configure the alarm interface to send alarm information to multiple destinations, and each destination can have its own alarm event level (from debug to emergency). You can direct alarms to the Syslog Viewer (local syslog), Syslog file (remote syslog), an SDI trace log file, an SDL trace log file (for Cisco CallManager and CTIManager only), or to all destinations. When a service issues an alarm, the alarm interface sends the alarm to the chosen monitors (for example, SDI trace). The monitor forwards the alarm or writes it to its final destination (such as a log file).

You use the trace and log central option in the Real-Time Monitoring Tool (RTMT) to collect alarms that are sent to an SDI or SDL trace log file. You use the SysLog Viewer in the real-time monitoring tool to view alarms that are sent to the local syslog.

The alarm definitions describe alarm messages: what they mean and how to recover from them. You search the Alarm Definitions window for alarm information. When you click on any service-specific alarm, a description of the alarm information (including any user-defined text that you have added) and a recommended action display.

## Alarm Configuration

You configure alarm information that will be used for trace and troubleshooting. You can configure alarms for services, such as Cisco CallManager and Cisco CTIManager, on a particular server, or you configure alarms for a particular service on all servers in the cluster.

You choose an alarm event level, such as Error, and a destination(s), such as Syslog Viewer (local syslog), for the alarms for an individual service and the monitor destination. Choosing an event level accomplishes two tasks: helps the administrator narrow the types of alarms that Cisco CallManager collects and prevents the Syslog and trace files from becoming overloaded.

## Alarm Definitions

Cisco CallManager stores alarm definitions and recommended actions in a standard query language (SQL) server database. The system administrator can search the database for definitions of all the alarms. The definitions include the alarm name, description, explanation, recommended action, severity, parameters, and monitors. This information aids the administrator in troubleshooting problems that Cisco CallManager encounters.

Serviceability Alarm Definitions allow administrators to add additional explanation or recommendations for an alarm. All administrators have access to the added information. Administrators directly enter information into the User Defined Text box that displays in the Alarm Details window. Standard horizontal and vertical scroll bars support scrolling. Cisco CallManager Serviceability adds the information to the database.

## Viewing Alarm Information

You view alarm information to determine whether Cisco CallManager problems exist. The method that you use to view the alarm depends on the destination that you chose when configuring the alarm. You can view alarm information that is sent to the SDI or SDL trace log file by using the trace and log central option in RTMT or by using a text editor. You can view alarm information that is sent to local syslog by using the SysLog Viewer.



**Tip**

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You can also use CiscoWorks2000 report viewer to view remote syslog messages.

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# Alarm Configuration Checklist

Table 3-1 provides an overview of the steps for configuring alarms.

**Table 3-1      Alarm Configuration Checklist**

Configuration Steps	Related Procedures and Topics
<b>Step 1</b> Choose the server and service for which you want the alarm information.	<a href="#">Understanding Alarms, page 3-1</a> <a href="#">Configuring or Updating an Alarm for a Service, Cisco CallManager Serviceability Administration Guide</a>
<b>Step 2</b> Choose the destination of the alarm: <ul style="list-style-type: none"> <li>• All services can go to the SDI log (but must be configured in Trace also).</li> <li>• All services can go to the SysLog Viewer.</li> <li>• If you are using CiscoWorks2000, check the Remote Syslog destination and specify a host name.</li> <li>• Only Cisco CallManager and Cisco CTIManager use the SDL log.</li> </ul>	<a href="#">Configuring or Updating an Alarm for a Service, Cisco CallManager Serviceability Administration Guide</a> <a href="#">Alarm Destination Settings, Cisco CallManager Serviceability Administration Guide</a>
<b>Step 3</b> Choose the alarm event level.	<a href="#">Configuring or Updating an Alarm for a Service, Cisco CallManager Serviceability Administration Guide</a> <a href="#">Alarm Event Level Settings, Cisco CallManager Serviceability Administration Guide</a>
<b>Step 4</b> If desired, add a definition to an alarm.	<a href="#">Alarm Definitions, Cisco CallManager Serviceability Administration Guide</a>
<b>Step 5</b> If you chose an SDI or SDL trace file as the alarm destination, collect traces and view with the trace and log central option of RTMT.	<a href="#">Trace Collection and Log Central in RTMT, Cisco CallManager Serviceability Administration Guide</a> <a href="#">Using Local Browse, Cisco CallManager Serviceability Administration Guide</a> <a href="#">Using the Query Wizard, Cisco CallManager Serviceability Administration Guide</a>
<b>Step 6</b> If you chose local syslog as the alarm destination, view the alarms in the SysLog Viewer.	<a href="#">Using SysLog Viewer in RTMT, Cisco CallManager Serviceability Administration Guide</a>
<b>Step 7</b> See the corresponding alarm definition for the description and recommended action.	<a href="#">Viewing Alarm Definitions and Adding User-Defined Descriptions, Cisco CallManager Serviceability Administration Guide</a>

# Where to Find More Information

## Related Topics

- [Configuring or Updating an Alarm for a Service, page 3-1, Cisco CallManager Serviceability Administration Guide](#)
- [Viewing Alarm Definitions and Adding User-Defined Descriptions, page 4-1, Cisco CallManager Serviceability Administration Guide](#)
- [Alarm Definition Catalog Descriptions, page 4-2, Cisco CallManager Serviceability Administration Guide](#)
- [Trace Collection and Log Central in RTMT, page 10-1, Cisco CallManager Serviceability Administration Guide](#)