Trace

This chapter, which provides information on Cisco Unified Serviceability trace, contains the following topics:

Trace tools

Cisco Unified Serviceability provides trace tools to assist you in troubleshooting issues with your voice application. Cisco Unified Serviceability supports SDI (System Diagnostic Interface) trace and Log4J trace (for Java applications).

You use the Trace Configuration window to specify the level of information that you want traced as well the type of information that you want to be included in each trace file.

In the Alarm Configuration window, you can direct alarms to various locations including SDI trace log files. After you have configured information that you want to include in the trace files for the various services, you can collect and view trace files by using the trace and log central option in the Cisco Unified Real-Time Monitoring Tool.

Trace parameters

You can configure trace parameters for any feature or network service that displays in Cisco Unified Serviceability. If you have a Cisco Unified CCX cluster, you can configure trace parameters for any feature or network service that is available on any Cisco Unified CCX server in the cluster. Use the Trace Configuration window to specify the parameters that you want to trace for troubleshooting problems.

You can configure the level of information that you want traced (debug level), what information you want to trace (trace fields), and information about the trace files (such as number of files per service, size of file, and time that the data is stored in the trace files.) If you have a Cisco Unified CCX cluster, you can configure trace for a single service or apply the trace settings for that service to all servers in the cluster.

If you want to use predetermined troubleshooting trace settings rather than choosing your own trace fields, you can use the Troubleshooting Trace window.

After you have configured information that you want to include in the trace files for the various services, you can collect trace files by using the trace and log central option in RTMT.

Related Topics

Trace settings

The Troubleshooting Trace Settings window allows you to choose the services in Cisco Unified Serviceability for which you want to set predetermined troubleshooting trace settings. In this window, you can choose a single service or multiple services and change the trace settings for those services to the predetermined trace settings.

If you have a Cisco Unified CCX cluster , you can choose the services on different servers in the cluster, so the trace settings of the chosen services get changed to the predetermined trace settings. You can choose specific activated services for a single server or all activated services for the secondary server. In the window, N/A displays next to inactive services.

Note The predetermined troubleshooting trace settings for a Cisco Unified CCX feature or network service include SDI and Log4j trace settings. Before the troubleshooting trace settings get applied, the system backs up the original trace settings. When you reset the troubleshooting trace settings, the original trace settings get restored.

When you open the Troubleshooting Trace Settings window after you apply troubleshooting trace settings to a service, the service that you set for troubleshooting displays as checked. In the Troubleshooting Trace Settings window, you can reset the trace settings to the original settings.

After you apply Troubleshooting Trace Setting to a service, the Trace Configuration window displays a message that troubleshooting trace is set for the given service(s). From the Related Links drop-down list box, you can choose the Troubleshooting Trace Settings option if you want to reset the settings for the service. For the given service, the Trace Configuration window displays all the settings as read-only, except for some parameters of trace output settings; for example, Maximum No. of Files. You can modify these parameters even after you apply troubleshooting trace settings.

Trace collection

Use Trace and Log Central, an option in the Cisco Unified Real-Time Monitoring Tool, to collect, view, and zip various service traces and/or other log files. With the Trace and Log Central option, you can collect SDI traces, Application Logs, System Logs (such as Event View Application, Security, and System logs), and crash dump files.

Tip Do not use Notepad to view collected trace files.

For more information on trace collection, refer to the *Cisco Unified CCX Real-Time Monitoring Tool Administration Guide*.

Trace configuration and collection checklist

Before You Begin

Cisco Unified Real-Time Monitoring Tool must be installed on a local PC. Use RTMT if you want to:

- Generate an alarm when the specified search string exists in a monitored trace file. Enable the LogFileSearchStringFound alert in RTMT.

- Automatically capture traces for alerts such as CriticalServiceDownand CodeYellow. Check the **Enable Trace Download** check box in the Set Alert/Properties dialog box for the specific alert in RTMT and configure how often you want the download to occur.

- Collect the traces.

- View the log file in the appropriate viewer.

Procedure

Step 1 Choose **Tools** > **Service Parameters** from Cisco Unified CCX Serviceability menu bar to configure the values of the TLC Throttling CPU Goal and TLC Throttling IOWait Goal service parameters (Cisco RIS Data Collector service).

Step 2 Configure the trace setting for the service for which you want to collect traces.

a) Choose what information you want to include in the trace log by choosing the debug level and trace fields. To run predetermined traces on services, set troubleshooting trace for those services.

Note If you have a Cisco Unified CCX cluster, you can configure trace for the service on one server or on all servers in the cluster.

Step 3 Choose **Alarms** > **Definitions** to find the LogFileSearchStringFound alarm in the LpmTctCatalog.

a) In the Find alarms drop-down list box, choose the **System Alarm Catalog**; in the Equals drop-down list box, choose **LpmTctCatalog**.

Step 4 If you enabled troubleshooting trace, reset the trace settings services, so the original settings get restored.

Note Leaving Troubleshooting trace enabled for a long time increases the size of the trace files and may impact the performance of the services.

Related Topics

Trace configuration
Configure troubleshooting trace settings
View alarm definition
Cisco Unified CCX Real-Time Monitoring Tool Administration Guide