Cisco
Customer Response Applications
Historical Reports User Guide

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CHAPTER 1

Overview

The Cisco CRA Historical Reports system is designed to provide you with information about the call activities of your Cisco Customer Response Applications (CRA) system. With Cisco CRA Historical Reports, you can

- Easily access historical data
- View, print, and save reports
- Sort and filter reports
- Send scheduled reports to a file or to a printer
- Export reports in a variety of formats, including PDF (Portable Document Format), Microsoft Excel, RTF (Rich Text Format), XML (Extensible Markup Language), and CSV (comma-separated values)
- Prepare custom reports using a variety of generally available third-party applications that are designed to create reports from databases

The following sections include these topics:

- System Databases, page 1-2
- The Cisco CRA Historical Reports Client Interface, page 1-2

System Databases

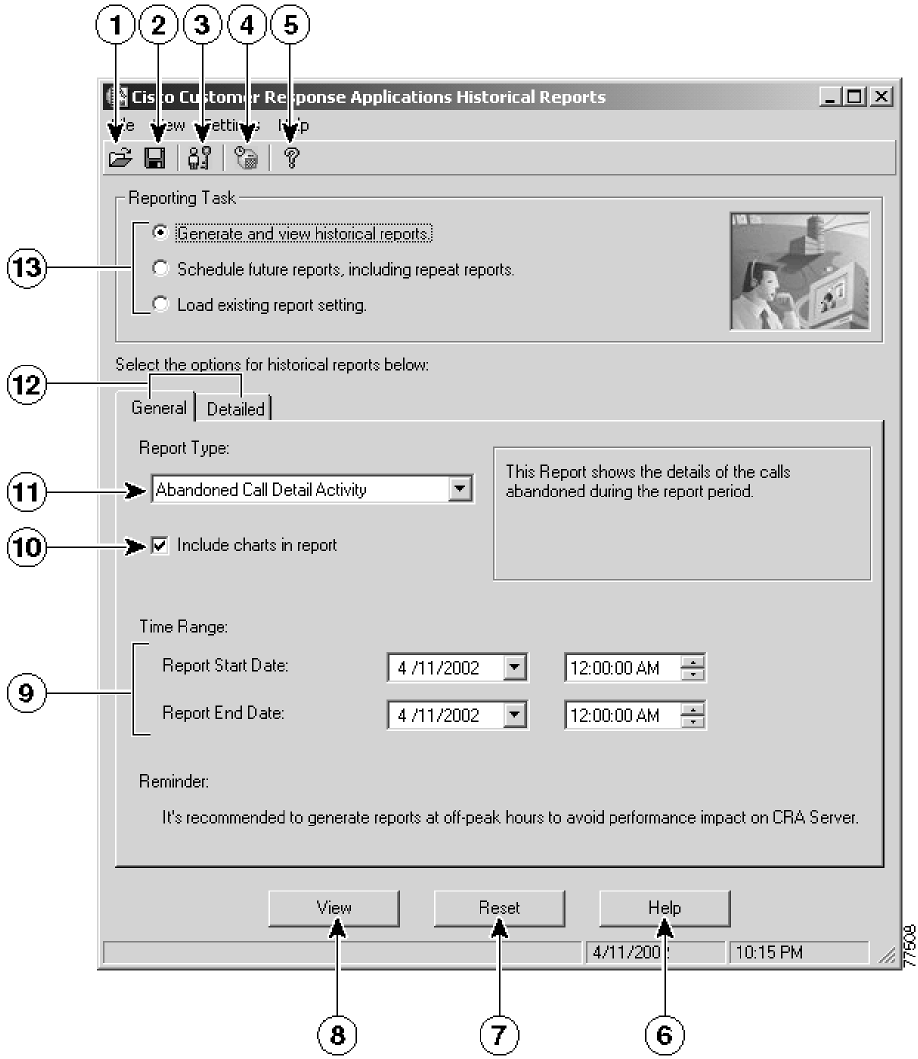
As the Cisco CRA system runs, it stores call activity data in databases on the Cisco CRA server. You use the Cisco Historical Reports client to create historical reports based on this data.

For more information about the Cisco CRA system databases, refer to the *Cisco Customer Response Applications Administrator Guide*.

The Cisco CRA Historical Reports Client Interface

You perform most Cisco CRA Historical Reports client activities from an easy-to-use set of menus on the client computer. Figure 1-1 shows the Cisco CRA Historical Reports main window.

Figure 1-1 Cisco CRA Historical Reports Main Window



	Item	Reference
1	**Open** tool	Saving Report Settings, page 4-9
2	**Save** tool	Saving Report Settings, page 4-9

	Item (continued)	Reference (continued)
3	**Login** tool	Changing Login and Server Information from the Client Main Window, page 1-6
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13	Reporting tasks	General Report Settings, page 4-1 Loading Report Settings, page 4-10 Choosing the Report to Schedule, page 5-6

1. This button changes depending on the reporting task selected

Starting the Cisco CRA Historical Reports Client

When you start the Cisco CRA Historical Reports client, the client logs in to the Cisco CRA server, giving you access to the historical data on the server. To start the Cisco CRA Historical Reports client, perform the following steps.

Note If you try to start the Cisco CRA Historical Reports client but you have not been given access to historical reports, the system will display the User Privileges Missing dialog box. In this case, your system administrator can click **Yes** and set up access. If you click **No**, you will not have access to any reports. Your system administrator can give you access later. See the "Giving Users Access to Cisco CRA Historical Reports" section on page 2-6 for more information.

Procedure

Step 1 Double-click the Cisco Historical Reports icon on your Windows desktop. Or, choose **Start > Programs > Cisco CRA Historical Reports > Cisco CRA Historical Reports**.

The Login dialog box appears.

Step 2 Enter your user name and your password.

If the client does not have information about the server to log in to, the Server field appears in the Login dialog box. Enter the IP address or the host name of the Cisco CRA server in the Server field.

If the client does have information about the server to log in to but you want to specify a different server, click **Server** and enter the IP address or the host name of the server in the Server field.

Step 3 Click **OK**.

The system displays the Cisco CRA Historical Reports main window.

Related Topics

- Changing Login and Server Information from the Client Main Window, page 1-6
- Exiting the Cisco CRA Historical Reports Client, page 1-6

Changing Login and Server Information from the Client Main Window

From the Cisco CRA Historical Reports main window, you can change current login information or change the server that you are logged in to.

To log in as a different user or to change the server to which the Cisco CRA Historical Reports client is connected, follow these steps:

Procedure

Step 1 Click the **Login** tool in the Cisco CRA Historical Reports main window. Or, choose **Settings > Login**.

The Login dialog box appears.

Step 2 If you want to log in under a different name, enter the user name and password. If you want to log in to a different server, click **Server** and enter the IP address or the host name of the server.

You can log in as a different user and change the server at the same time.

Step 3 Click **OK**.

Exiting the Cisco CRA Historical Reports Client

To exit the Cisco CRA Historical Reports client, choose **File > Exit** from the Cisco CRA Historical Reports main window.

Getting Online Help

The Cisco CRA Historical Reports client provides help throughout the system. Depending on the window that is showing, you can get help by performing one of the following actions:

- Clicking the **Help** button
- Clicking the **Help** tool
- Choosing **Help > Contents** or **Help > Search for Help On** from the menu bar
- Pressing the **F1** key

CHAPTER 2

Installation and Configuration

The following sections include these topics:

- Installing, Reinstalling, or Upgrading the Cisco CRA Historical Reports Client, page 2-1
- Giving Users Access to Cisco CRA Historical Reports, page 2-6
- Configuration Files, page 2-9
- Changing the Client Language, page 2-16

Installing, Reinstalling, or Upgrading the Cisco CRA Historical Reports Client

The Cisco Customer Response Applications (CRA) Historical Reports client runs under the following operating systems:

- Windows 98 Second Edition (SE)
- Windows 2000 Professional
- Windows XP Professional

Before you can install the Cisco CRA Historical Reports client,

- The Cisco CRA system must be installed on the server.
- The computer on which you will install the Cisco CRA Historical Reports client must have access to the Cisco CRA server.

To help keep the Cisco CRA server running most efficiently, it is recommended that you do not install the Cisco CRA Historical Reports client on the server. You can install the client software on as many client computers as licensed.

The Cisco CRA Historical Reports client installation procedure performs several operations on the client computer, including

- Installing the Cisco CRA Historical Reports client
- Creating directories in which the computer stores required files
- Installing the Scheduler (the part of CRA Historical Reports that manages and generates scheduled reports)

To install, reinstall, or upgrade the CRA Historical Reports client, perform the following steps. You perform this procedure on the client computer.

Note If you are reinstalling or upgrading the CRA Historical Reports client, exit the client application and exit the Scheduler on the client computer before proceeding. For instructions, see the "Exiting the Cisco CRA Historical Reports Client" section on page 1-6 and see "The Scheduler" section on page 5-3.

If you are reinstalling the CRA Historical Reports client, and if the Cisco CRA Historical Reports Client installation program (CiscoAppReportsInstall.exe) exists on your computer, you can start the reinstallation procedure by running this installation program. When the CRA Historical Reports Setup window appears, proceed as follows:

- If the Cisco CRA Historical Reports client software exists on your computer, you will see a dialog box asking whether you want to upgrade/reinstall the client or uninstall the client. Click the **Upgrade/Reinstall** radio button, click **Next**, and then go to Step 12 in the following procedure to complete the reinstallation.
- If the Cisco CRA Historical Reports client software does not exist on your computer, go to Step 5 in the following procedure.

Procedure

Step 1 From the client computer, log in to the Cisco CRA Administration web page or log in to the CRA Supervision web page.

For information about logging in to the Cisco CRA Administration or the CRA Supervision web pages, refer to the *Cisco Customer Response Applications Administrator Guide*.

Step 2 Perform one of the following actions:

- From the Cisco CRA Administration web page menu bar, choose **Tools > Plug-ins**. When the Plug-ins web page appears, click the **Cisco CRA Historical Reports** hyperlink.
- From the CRA Supervision Download web page, click the **Cisco CRA Historical Reports** hyperlink.

The File Download dialog box appears.

Step 3 Click one of the following radio buttons:

- **Run this program from its current location**—With this option, the client computer does not retain the Cisco CRA Historical Reports installation file after installation.
- **Save this program to disk**—With this option, the client computer retains the Cisco CRA Historical Reports installation file after installation. In this case, you can reinstall Cisco CRA Historical Reports without having to log in to the Cisco CRA server.

Step 4 Click **OK** in the File Download dialog box.

- If you clicked the **Run this program from its current location** radio button, the computer opens the installation program, and then it extracts the files that it needs for the installation. When this process completes, the Cisco CRA Historical Reports Setup window appears. If you are installing the Cisco CRA Historical Reports client for the first time on this computer, continue to Step 5.

  If the Cisco CRA Historical Reports client exists on your computer, a dialog box appears asking whether you want to upgrade/reinstall the client or uninstall the client. To upgrade or reinstall the current version of the client, click the **Upgrade/Reinstall** radio button, click **Next**, and then go to Step 12.

- If you clicked the **Save this program to disk** radio button, the Save As dialog box appears. Perform the following steps:
  - Specify the directory in which you want to save the installation program (CiscoAppReportsInstall.exe) and click **Save**. If you have previously saved the installation program in the same directory, a dialog box appears asking whether you want to replace the existing installation program file. Click **Yes** to continue.
  - When the installation file completes downloading, click **Open** in the Download Complete dialog box. The computer prepares to install the application, and then it extracts the files that it needs for the installation. When this process completes, the Cisco CRA Historical Reports Setup window appears. If you are installing the Cisco CRA Historical Reports client for the first time on this computer, continue to Step 5.
  - If the Cisco CRA Historical Reports client exists on your computer, a dialog box appears asking whether you want to upgrade/reinstall the client or uninstall the client. To upgrade or reinstall the current version of the client, click the **Upgrade/Reinstall** radio button, click **Next**, and then go to Step 12.

Step 5 Click **Next** in the Cisco CRA Historical Reports Setup window.

The Cisco CRA Historical Reports Setup window displays the License Agreement.

Step 6 Read the License Agreement, and then click **Yes**.

The Cisco CRA Historical Reports Setup window prompts you to choose an installation folder.

Step 7 To install the Historical Reports files in the Program Files directory on your computer, click **Next**.

If you want to install the files in another directory, click **Browse**, choose the directory, click **OK**, and then click **Next**.

The Cisco CRA Historical Reports Setup window prompts you to select a program folder.

Step 8 To use the Cisco CRA Historical Reports program folder to hold program icons, click Next.

To use another folder to hold program icons, enter the folder name or choose it from the list of existing folders, and then click **Next**.

The Cisco CRA Historical Reports Setup window prompts you to identify the Cisco CRA server.

Step 9 Enter the host name or IP address of the Cisco CRA server, and then click **Next**.

If you do not enter this information now, you can enter it later when you start Cisco CRA Historical Reports.

The Cisco CRA Historical Reports Setup window prompts you for permission to start copying files.

Step 10 Click **Next** to continue with the installation.

After the files are copied, the Desktop Shortcut dialog box appears.

Step 11 Click **Yes** to create a shortcut for Cisco CRA Historical Reports on your Windows desktop.

Step 12 Click **Finish**.

The installation is complete. The computer restarts, if necessary.

Related Topics

- Giving Users Access to Cisco CRA Historical Reports, page 2-6
- Configuration Files, page 2-9
- Changing the Client Language, page 2-16

Giving Users Access to Cisco CRA Historical Reports

Before a user can generate a historical report from the CRA Historical Reports client, you must specify the Cisco CRA applications for which the user can generate reports.

To give a user access to historical reports, you must first set up the user in Cisco CRA Administration. You can set up users from any computer that has access to the Cisco CRA Administration web pages. For more information about Cisco CRA Administration and setting up users, refer to *Cisco Customer Response Applications Administrator Guide*.

Table 2-1 shows the historical reports that are available for each Cisco CRA application package. In this table, “Yes” means that a report is available, and “—” means that a report is not available. If you give a user access to an application, the user will be able to generate all the reports available for that application.

Table 2-1 Historical Reports Available for Cisco CRA Application Packages

Report Name	Cisco IP Queue Manager	Cisco IP IVR[1]	Cisco ICD Std[2] + HR ICD Std[3]	Cisco ICD Std + HR ICD Enh[4]	Cisco ICD Std	Cisco ICD Enh[5] + HR ICD Std	Cisco ICD Enh + HR ICD Enh	Cisco ICD Enh
IVR Traffic Analysis	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
IVR Application Performance Analysis	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Abandoned Call Detail Activity	—	—	Yes	Yes	—	Yes	Yes	—
Agent Detail	—	—	Yes	Yes	—	Yes	Yes	—
Agent Login Logout Activity	—	—	Yes	Yes	—	Yes	Yes	—
Agent State Summary (by Agent)[6]	—	—	Yes	Yes	—	Yes	Yes	—

Table 2-1 Historical Reports Available for Cisco CRA Application Packages (continued)

Report Name	Cisco IP Queue Manager	Cisco IP IVR[1]	Cisco ICD Std[2] + HR ICD Std[3]	Cisco ICD Std + HR ICD Enh[4]	Cisco ICD Std	Cisco ICD Enh[5] + HR ICD Std	Cisco ICD Enh + HR ICD Enh	Cisco ICD Enh
Agent State Summary (by Time)[6]	—	—	Yes	Yes	—	Yes	Yes	—
Agent Summary	—	—	Yes	Yes	—	Yes	Yes	—
Call Custom Variables[6]	—	—	Yes	Yes	—	Yes	Yes	—
Called Number Summary Activity	—	—	Yes	Yes	—	Yes	Yes	—
Contact Service Queue Activity	—	—	Yes	Yes	—	Yes	Yes	—
Contact Service Queue Activity (by CSQ)[6]	—	—	Yes	Yes	—	Yes	Yes	—
Contact Service Queue Activity (by Time)[6]	—	—	Yes	Yes	—	Yes	Yes	—
Contact Service Queue Service Level	—	—	Yes	Yes	—	Yes	Yes	—
Detailed Call by Call CCDR[7]	—	—	Yes	Yes	—	Yes	Yes	—
Priority Summary Activity	—	—	—	—	—	—	Yes	—
Skill Routing Activity	—	—	—	—	—	—	Yes	—

1. IVR = Interactive Voice Response
2. Cisco ICD Std = Cisco Integrated Contact Distribution (ICD) Standard
3. HR ICD Std = Historical Reports for Cisco ICD Standard

4. HR ICD Enh = Historical Reports for Cisco ICD Enhanced
5. Cisco ICD Enh = Cisco ICD Enhanced
6. Available with Cisco CRA 3.0(2) and later and available in English only
7. CCDR = contact call detail record

To specify the historical reports that a user can generate, perform these steps:

Procedure

Step 1 Log in to the Cisco CRA Administration web page.

For information about logging in to Cisco CRA Administration, refer to *Cisco Customer Response Applications Administrator Guide*.

Step 2 From the Cisco CRA Administration web page, choose **Tools > Historical Reporting**.

The Historical Reporting Configuration web page appears.

Step 3 In the navigation bar, click the **User Configuration** hyperlink.

Step 4 Click the Select User drop-down arrow to view a list of users, and then choose the user that you want.

Step 5 Click **Next**.

The following panes appear:

- Installed Reporting Package—This pane contains a list of applications that are installed in Cisco CRA Applications Administrator. Applications can include ICD Standard, ICD Enhanced, and IVR.
- Selected Reporting Package—This pane shows the applications, if any, that the user can access to generate historical reports.

Step 6 To select one or more applications for which the user will be able to generate historical reports, click the reporting package name in the Installed Reporting Package pane, and then click **>**.

The reporting package name moves to the Selected Reporting Package pane.

To unselect a name that appears in the Selected Reporting Package pane, choose that application name, and then click **<**.

The reporting package name moves to the Installed Reporting Packages pane.

Step 7 Click **Update** to give the user access to historical reports for the selected applications.

To configure another user, repeat Steps 4 through 7.

Configuration Files

The CRA Historical Reports client maintains two configuration files on each client computer. The following sections explain each file in detail. The configuration files are:

- hrcConfig.ini—This file is stored in the Cisco CRA Historical Reports directory, which is under the directory in which you installed the Cisco CRA Historical Reports client system. (By default, the system installs in the Program Files directory.) This file contains general instructions for the Cisco CRA Historical Reports client system.
- SCH.ini—This file is stored in the Cisco CRA Historical Reports\Scheduler directory, which is under the directory in which you installed the Cisco CRA Historical Reports client system. (By default, the system installs in the Program Files directory.) This file contains instructions regarding the Scheduler.

You can edit either of these configuration files and make changes, if you want. To edit a configuration file, perform these steps:

Procedure

Step 1 Use any text editor to open the configuration file.

Step 2 Make changes to parameters as desired.

Step 3 Save the file and exit the editor.

Step 4 If you edit the hrcConfig.ini file while the Cisco CRA Historical Reports client is running, exit and restart the client program to cause your changes to take effect.

If you edit the SCH.ini file, right-click the Scheduler icon that appears in the status area on your Windows taskbar and choose **Stop Scheduler**. Then right-click the Scheduler icon again and choose **Run Scheduler** to cause your changes to take effect.

Related Topics

- The hrcConfig.ini Configuration File, page 2-10
- The SCH.ini Configuration File, page 2-13

The hrcConfig.ini Configuration File

The hrcConfig.ini file contains general instructions for the Cisco CRA Historical Reports client system. Table 2-2 shows the parameters in this file.

Table 2-2 Parameters in the hrcConfig.ini Configuration File

Parameter	Explanation
defaultHost	IP address or host name that appears in the Server field in the Cisco CRA Historical Reports Login dialog box. **Default value:** IP address or host name of the server most recently logged in to.
defaultExportPath	Path name of the default directory in which the Cisco CRA Historical Reports system stores scheduled reports that are exported to a file. **Default value:** Cisco CRA Historical Reports\reports directory, which is under the directory in which you installed the Cisco CRA Historical Reports client.

Table 2-2 Parameters in the hrcConfig.ini Configuration File (continued)

Parameter	Explanation
showUserNameOnReport	Specifies whether the username of the user who is logged in when a report is generated appears on the report. **Valid values:** • 0—Name does not appear • 1—Name appears **Default value:** 1
logLevel	Level of detail in which the system records events in the Historical Reports Client log file. **Valid values:** • 1—Record errors only • 2—Record errors and warnings • 3—Record errors, warnings, and debugging messages **Default value:** 1
NumOfLogFiles	Number of Historical Reports Client log files the system maintains. The system creates a new Historical Reports Client log file whenever the current Historical Reports Client log file reaches the size specified by MaxSizeOfLogFiles. (See the next parameter.) **Valid values:** Integers 1 or greater **Default value:** 10
MaxSizeOfLogFiles	Specifies that the system should create a new Historical Reports Client log file when the current log file reaches this size in KB. **Valid values:** Integers 1 or greater **Default value:** 1000 **Note** 1000 KB is the recommended value for this parameter because a log file that is much larger than 1000 KB can be difficult to read, and several large log files can take up significant disk space.

Table 2-2 Parameters in the hrcConfig.ini Configuration File (continued)

Parameter	Explanation
database (under [SCH])	Database file in the Cisco CRA Historical Reports\Scheduler directory in which scheduling information is stored. If you change this parameter, you must also change the database parameter in the SCH.ini configuration file to the same value. **Valid value:** HistoricalReportsScheduler.mdb
DRIVER (under [CRA_DATABASE])	*Display only.* Name of the database driver.
SERVER (under [CRA_DATABASE])	*Display only.* IP address or host name of the Cisco CRA server on which the Cisco CRA databases reside.
DATABASE (under [CRA_DATABASE])	*Display only.* Name of the main Cisco CRA database on the Cisco CRA server.
UID (under [CRA_DATABASE])	*Display only.* User identification used to log in to the Cisco CRA database on the Cisco CRA server.
NETWORK (under [CRA_DATABASE])	*Display only.* Network library used by the Cisco CRA Historical Reports client when connecting to the Cisco CRA database.
DRIVER (under [CRA_DATABASE_ALTERNATIVE])	If you want the Cisco CRA Historical Reports client to access databases on a computer other than the Cisco CRA server, specify the name of the alternative database driver here. **Valid value:** Name of the alternative database driver
SERVER (under [CRA_DATABASE_ALTERNATIVE])	If you want the Cisco CRA Historical Reports client to access databases on a computer other than the Cisco CRA server, specify the IP address of host name of the alternative computer here. **Valid value:** IP address or host name of the alternative server on which the Cisco CRA databases are duplicated

Table 2-2 Parameters in the hrcConfig.ini Configuration File (continued)

Parameter	Explanation
DATABASE (under [CRA_DATABASE_ALTERNATIVE])	If you want the Cisco CRA Historical Reports client to access databases with names other than the default Cisco CRA database names, specify the alternative name of the main database here. **Valid value:** Name of the alternative main database
NETWORK (under [CRA_DATABASE_ALTERNATIVE])	If you want the Cisco CRA Historical Reports client to access databases using a network library other than the default network library (dbmssocn for TCP/IP), specify the name of the alternative network library here. **Valid value:** Name of the alternative network library (for example, dbnmpntw for named pipes)

Related Topic

- Historical Reports Client Log Files, page 6-3

The SCH.ini Configuration File

The SCH.ini file contains general instructions for the Scheduler, including the location of the Scheduler database, the level of detail in which to record log file information, and how to handle missed schedules. Table 2-3 shows the parameters in this file.

Table 2-3 Parameters in the SCH.ini Configuration File

Parameter	Explanation
database	Database file in the Cisco CRA Historical Reports\Scheduler directory in which scheduling information is stored. If you change this parameter, you must also change the database parameter in the hrcConfig.ini configuration file to the same value. **Valid value:** HistoricalReportsScheduler.mdb
NumOfMissedScheduleRuns	If one scheduled report is missed because the Scheduler is not running, or if several consecutive occurrences of a report are missed because the Scheduler is not running, specifies up to how many of the missed reports should be generated if you choose to execute missed schedules. **Valid values:** Zero or greater **Default value:** 1
Missed_daily	For reports that are scheduled to run daily, specifies whether the reports should be generated if they are missed and you choose to execute missed schedules. **Valid values:** • 1—Generate the report • 0—Do not generate the report **Default value:** 1
Missed_weekly	For reports that are scheduled to run weekly, specifies whether the reports should be generated if they are missed and you choose to execute missed schedules. **Valid values:** • 1—Generate the report • 0—Do not generate the report **Default value:** 1

Table 2-3 Parameters in the SCH.ini Configuration File (continued)

Parameter	Explanation
Missed_monthly	For reports that are scheduled to run monthly, specifies whether the reports should be generated if they are missed and you choose to execute missed schedules. **Valid values:** • 1 —Generate the report • 0—Do not generate the report **Default value:** 1
Missed_once	For reports that are scheduled to run once, specifies whether the reports should be generated if they are missed and you choose to execute missed schedules. **Valid values:** • 1—Generate the report • 0—Do not generate the report **Default value:** 1
logLevel	Level of detail in which the system records events in the Scheduler log files. **Valid values:** • 1—Record Scheduler errors only • 2—Record Scheduler errors and Scheduler warnings • 3—Record Scheduler errors, Scheduler warnings, and schedule information • 4—Record Scheduler errors, Scheduler warnings, and detailed schedule information **Default value:** 3

Related Topics

- Handling Missed Schedules, page 5-17
- Scheduler Log Files, page 6-3

Changing the Client Language

You can use the Windows Regional Options settings to set the language for the Cisco CRA Historical Reports client. You can set any of the languages that are supported by your Cisco CRA system. If you set a language that is not supported by your Cisco CRA system, the client system will default to English.

When you set a language, the Cisco CRA Historical Reports client displays the following information in that language:

- Information displayed in windows and dialog boxes, including field names and button names
- Menu names and menu options
- Field names, headings, and other static items in reports

The client language does not affect the language of the data in reports.

To set the language for the Cisco CRA Historical Reports client, perform the following steps if your computer is running Microsoft Windows 2000 Professional. If your computer is running another version of Windows, the procedure will be slightly different. Refer to your Windows documentation for more information.

Note Setting the language may affect the display language of other applications that are running on the client computer.

Procedure:

Step 1 Choose **Start > Settings > Control Panel**.

The Windows Control Panel appears.

Step 2 Double-click **Regional Options**.

The Regional Options dialog box appears.

Step 3 Click the Your Locale drop-down arrow and choose a language.

This choice specifies how numbers, times, and dates appear. You can choose any language that is supported by your Cisco CRA system.

Step 4 Click **Set Default**.

The Select System Locale dialog box appears.

Step 5 Click the drop-down arrow and choose a language.

This choice specifies the language for windows, menus, and fields. Choose the same language that you chose in Step 3.

Step 6 Click **OK** in the Select System Locale dialog box.

Step 7 Click **OK** in the Regional Options dialog box.

Step 8 If necessary, follow the prompts to install the required files.

Step 9 Click **OK** to restart the computer.

When the computer restarts, the new language is set.

Descriptions of Historical Reports

The Cisco Customer Response Applications (CRA) Historical Reports system provides a set of formatted reports that are designed to provide you with information about the operations and activities of your system and the agents using your system. Reports present information in a tabular form and, unless you specify otherwise, include charts that highlight important information.

If you require reports other than the system-formatted reports, you can create custom reports using any generally available third-party report-generation application that is designed to create reports from databases. To create custom reports, refer to the *Cisco CRA Database Schema Guide* for descriptions of the CRA database tables.

The following sections include these topics:

- Overview of Reports, page 3-2
- Report Details, page 3-4

Overview of Reports

The Cisco CRA Historical Reports system can generate a variety of historical reports. Table 3-1 shows the following information for each report:

- Report Name—Name of the historical report
- Application Package—Cisco CRA Application packages for which the report is available
- Description—Brief description of the content of the report

Each report is described in the "Report Details" section on page 3-4.

Table 3-1 Summary of Historical Reports

Report Name	Application Package	Description
Abandoned Call Detail Activity Report	• Historical Reports ICD[1] Enhanced • Historical Reports ICD Standard	Detailed information about each abandoned call
Agent Detail Report	• Historical Reports ICD Enhanced • Historical Reports ICD Standard	Detailed information about each call received or made by each agent
Agent Login Logout Activity Report	• Historical Reports ICD Enhanced • Historical Reports ICD Standard	Detailed information about the login and logout activities of each agent
Agent State Summary Report (by Agent)[2]	• Historical Reports ICD Enhanced • Historical Reports ICD Standard	Information about the length and percentage of time that agents spent in each agent state, grouped by agent name
Agent State Summary Report (by Interval)[2]	• Historical Reports ICD Enhanced • Historical Reports ICD Standard	Information about the length and percentage of time that agents spent in each agent state, grouped by 30- or 60-minute intervals within the report period

Table 3-1 Summary of Historical Reports (continued)

Report Name	Application Package	Description
Agent Summary Report	• Historical Reports ICD Enhanced • Historical Reports ICD Standard	Summary statistics about the activities of each agent
Call Custom Variables Report[2]	• Historical Reports ICD Enhanced • Historical Reports ICD Standard	Information about custom variables, if any, that are set by the Set Session Info step in the workflow associated with a call or leg
Called Number Summary Activity Report	• Historical Reports ICD Enhanced • Historical Reports ICD Standard	Summary information for each number dialed by callers
Contact Service Queue Activity Report	• Historical Reports ICD Enhanced • Historical Reports ICD Standard	Summary information about calls to each contact service queue
Contact Service Queue Activity Report (by CSQ)[2]	• Historical Reports ICD Enhanced • Historical Reports ICD Standard	Information about calls routed to contact service queues and information about service level, grouped by contact service queue
Contact Service Queue Activity Report (by Interval)[2]	• Historical Reports ICD Enhanced • Historical Reports ICD Standard	Information about calls routed to contact service queues and information about service level, grouped by 30- or 60-minute intervals within the report period
Contact Service Queue Service Level Report	• Historical Reports ICD Enhanced • Historical Reports ICD Standard	Service level information for each call contact service queue

Table 3-1 Summary of Historical Reports (continued)

Report Name	Application Package	Description
Detailed Call by Call CCDR[3] Report	• Historical Reports ICD Enhanced • Historical Reports ICD Standard	Detailed information about each call received by the Cisco CRA system
IVR[4] Application Performance Analysis Report	• IP IVR	Summary information about calls received by each Cisco ICD or IVR application
IVR Traffic Analysis Report	• IP IVR	Summary information about calls received by each Cisco CRA system during each day in the report range
Priority Summary Activity Report	• Historical Reports ICD Enhanced	Summary information about the priority levels of each call received
Skill Routing Activity Report	• Historical Reports ICD Enhanced	Summary information about calls to each contact service queue that is configured based on resource skills

1. ICD = Integrated Contact Distribution
2. Available with Cisco CRA 3.0(2) and later and available in English only
3. CCDR = Contact Call Detail Record
4. IVR = Interactive Voice Response

Report Details

This section provides the following information for each historical report:

- A description of the report.
- A table describing the information that is displayed in each chart produced with the report.
- A table describing each field in the tabular section of the report.
- A table describing each sort criterion that is available for the report. For more information about sorting a report, see the "Detailed Report Settings" section on page 4-4.

- A table describing each filter parameter, if any, that is available for the report. You can use a filter parameter to limit information that appears in a report. For more information about filtering a report, see the "Detailed Report Settings" section on page 4-4.

Note When a report shows date and time information for an event or an activity, that date and time is the Cisco CRA server date and time.

Abandoned Call Detail Activity Report

The Abandoned Call Detail Activity Report contains information about calls that are abandoned. For ICD calls, a call is abandoned if it is not answered by an agent and the caller hangs up or is disconnected. For IVR calls, a call is abandoned if it does not get past the workflow step that sets the handled flag. If a call has more than one leg that is abandoned (for example, an IVR call that is processed by different applications), each abandoned leg is displayed in this report.

The Abandoned Call Detail Activity Report can include this chart:

Chart Name	Description
Calls Abandoned Each Day by Final Call Priority	For each day in the date range, displays the total number of calls abandoned and the final priority of the calls.

The Abandoned Call Detail Activity Report includes a table that shows the following information for each abandoned call:

Field	Description
Call Start Time	Date and time that this call leg started.
Called Number	Telephone number that the caller dialed.
Call ANI[1]	Telephone number of the originator of the call. If originated by an agent, the ICD extension of the agent. If originated by a caller other than an agent, the telephone number of the caller.

Field (continued)	Description (continued)
Initial Call Priority	Priority that the Cisco ICD workflow assigned to the call when the call was received, from 1 (lowest) to 10 (highest). All calls start with a default priority of 1, unless a different priority is set in the workflow.
Call Routed CSQ[2]	Names of up to the first three contact service queues to which the call was queued. Multiple contact service queue names are separated by commas.
Agent Name	Name of the agent, if any, who was presented with the call before the call was abandoned.
Call Skills	Call skills associated with the contact service queue to which the call was routed. Multiple skills are separated by commas.
Final Call Priority	Priority of the call when it was abandoned, from 1 (lowest) to 10 (highest).
Call Abandon Time	Date and time that the call was abandoned.

1. ANI = automatic number identification
2. CSQ = contact service queue

You can sort the Abandoned Call Detail Activity Report by any of these criteria:

Sort Criterion	Result
Call Start Time	Displays the report in order of the date and time that the call started.
Call ANI	Displays the report in order of the telephone number that the caller is calling from.
Call Abandon Time	Displays the report in order of the date and time that the call was abandoned.

Agent Detail Report

The Agent Detail Report contains detailed information about each ICD call that was handled by an agent and each call that was made by an agent. It also includes information about non-ICD calls. An ICD call is defined as handled when an agent picks up the call. A non-ICD call is any call that is not dialed to a route point number, for example, an internal call between agents or an outbound call.

The Agent Detail Report can include this chart:

Chart Name	Description
Total Talk Time, Hold Time, Work Time by Agent	For each agent, displays the total talk time, the total hold time, and the total work time spent on all calls during the report period.

The Agent Detail Report includes a table that shows the following information for every call received or made by each agent:

Field	Description
Agent Name	First and last name of the agent.
Extension	Cisco ICD extension that the Cisco CallManager assigned to the agent.
Call Start Time, Call End Time	Date and time that the leg started, and date and time that the leg was disconnected or transferred.
Duration	Elapsed time between call start time and call end time.
Called Number	Telephone number that the caller dialed.
Call ANI	Telephone number of the originator of the call. If originated by an agent, the ICD extension of the agent. If originated by a caller other than an agent, the telephone number of the caller.
Call Routed CSQ	Contact service queue that handled the call. A call is handled if a caller is connected to an agent while queued for this contact service queue.
First 3 CSQs	Names of up to the first three contact service queues to which the call was queued. Multiple contact service queue names are separated by commas.
Call Skills	Call skills associated with the contact service queue that handled the call. A call is handled if a caller is connected to an agent.
Talk Time	For ICD calls, elapsed time between the time an agent connected to the call and the time the call was disconnected or transferred, not including hold time. For non-ICD calls, the duration of the entire call, if the call was answered.

Field (continued)	Description (continued)
Hold Time	For ICD calls only, elapsed time between the first time that an agent put the call on hold and the last time the agent took the call off of hold, not including talk time. Not applicable to non-ICD calls.
Work Time	For ICD calls only, the amount of time that an agent spent in Work State after the call. Not applicable to non-ICD calls.

You can sort the Agent Detail Report by any of these criteria:

Sort Criterion	Result
Agent Name	Displays the report in alphabetical order by the names of agents.
Call Start Time	Displays the report in order of call start times.
Call ANI	Displays the report in order of the telephone number that the caller was calling from.

You can filter the Agent Detail Report by any of these parameters:

Filter Parameter	Result
Resource Group Names	Displays information for agents that belong to the specified resource group or groups.
Agent Names	Displays information for the specified agents.
Skill Names	Displays information for agents that possess the specified skills.

Agent Login Logout Activity Report

The Agent Login Logout Activity Report contains detailed information about the login and logout activities of agents.

The Agent Login Logout Activity Report can include this chart:

Chart Name	Description
Total Logged-In Time for Each Agent	For each agent, displays the total time logged in to the Cisco ICD system.

The Agent Login Logout Activity Report includes a table that shows the following information for each agent:

Field	Description
Agent Name	First and last name of the agent.
Login Time	Date and time that the agent logged in to the Cisco ICD system. If this information is preceded by a left angle bracket (<), the agent logged in before the start time of the data in the report.
Logout Time	Date and time that the agent logged out of the Cisco ICD system. If this information is preceded by a right angle bracket (>), the agent was still logged in at the end time of the data in the report.
Logged-In Duration	Elapsed time between the Login Time and the Logout Time.

You can sort the Agent Login Logout Activity Report by any of these criteria:

Sort Criterion	Result
Agent Name	Displays the report in alphabetical order by the names of agents.
Login Time	Displays the report in order of the time that agents logged in to the system.
Logged-in Duration	Displays the report in order of the length of time that agents were logged in to the system.

You can filter the Agent Login Logout Activity Report by any of these parameters:

Filter Parameter	Result
Resource Group Names	Displays information for agents that belong to the specified resource group or groups.
Agent Names	Displays information for the specified agents.
Skill Names	Displays information for agents that possess the specified skills.

Agent State Summary Report (by Agent)

Note This report is available in Cisco CRA 3.0(2) and later and is available in English only.

The Agent State Summary Report (by Agent) shows, for each agent specified, the length and percentage of time that the agent spent in each of the following agent states: Not Ready, Ready, Reserved, Talk, and Work. This report also shows the total length of time that each agent was logged in. The Agent State Summary Report (by Agent) can show information for each 30-minute or 60-minute interval within the report period. In this case, the report will include a summary line for each agent that shows the length and percentage of time that the agent spent in each of the agent states during the report period.

The information in the Agent State Summary Report (by Agent) is grouped by agent. The Agent State Summary Report (by Interval) displays the same information grouped by interval. For more information, see the “Agent State Summary Report (by Interval)” section on page 3-12.

The Agent State Summary Report (by Agent) can include this chart:

Chart Name	Description
Time Spent in Agent State by Agent	For each agent, displays the length of time spent in each agent state.

The Agent State Summary Report (by Agent) includes a table that shows the following information for each agent:

Field	Description
Agent Name	First name and last name of the agent.
Extension	Cisco ICD extension that the Cisco CallManager assigned to the agent.
Interval Start Time, Interval End Time	Beginning date and time and ending date and time of each 30- or 60-minute interval within the report period, if you specify an interval with the Interval Length filter parameter. Otherwise, the beginning date and time and ending date and time of the report range.
Total Logged-in Time	Total time that the agent was logged in to the Cisco ICD system during the report period.
Not Ready Time	Length and percentage of time that an agent spent in Not Ready State.
Ready Time	Length and percentage of time that an agent spent in Ready State.
Reserved Time	Length and percentage of time that an agent spent in Reserved State.
Talk Time	Length and percentage of time that an agent spent in Talk State.
Work Time	Length and percentage of time that an agent spent in Work State.

You can sort the Agent State Summary Report (by Agent) by this criterion:

Sort Criterion	Result
Agent Name	Displays the report in alphabetical order by the names of agents.

You can filter the Agent State Summary Report (by Agent) by any of these parameters:

Filter Parameter	Result
Interval Length	**Entire report range**—Displays information from the report start time through the report end time, but does not display information for specific intervals within the report period. **Thirty (30) minute intervals**—Displays information for 30-minute intervals within the report period. The first interval begins at the report start time, the next interval begins 30 minutes after the report start time, and so on. **Sixty (60) minute intervals**—Displays information for 60-minute intervals within the report period. The first interval begins at the report start time, the next interval begins 60 minutes after the report start time, and so on.
Resource Group Names	Displays information for agents who belong to the specified resource group or groups.
Agent Names	Displays information for the specified agents.
Skill Names	Displays information for agents who possess the specified skills.

Agent State Summary Report (by Interval)

Note This report is available in Cisco CRA 3.0(2) and later and is available in English only.

The Agent State Summary Report (by Interval) shows, for each agent specified, the length and percentage of time that the agent spent in each of the following agent states: Not Ready, Ready, Reserved, Talk, and Work. This report also shows the total length of time that each agent was logged in. The Agent State Summary Report (by Interval) can show information for each 30-minute or 60-minute interval within the report period. In this case, the report will include a summary line for each interval that shows the length and percentage of time that all agents spent in each of the agent states during the interval.

The information in the Agent State Summary Report (by Interval) is grouped by 30- or 60-minute intervals within the report period. The Agent State Summary Report (by Agent) displays the same information grouped by agent. For more information, see the “Agent State Summary Report (by Agent)” section on page 3-10.

The Agent State Summary Report (by Interval) can include this chart:

Chart Name	Description
Time Spent in Agent State by Interval	For each time interval, displays the length of time spent in each agent state by all agents.

The Agent State Summary Report (by Interval) includes a table that shows the following information for each agent:

Field	Description
Interval Start Time, Interval End Time	Beginning date and time and ending date and time of each 30- or 60-minute interval within the report period, if you specify an interval with the Interval Length filter parameter. Otherwise, the beginning date and time and ending date and time of the report range
Agent Name	First name and last name of the agent.
Extension	Cisco ICD extension that the Cisco CallManager assigned to the agent.
Total Logged-in Time	Total time that the agent was logged in to the Cisco ICD system during the report period.
Not Ready Time	Length and percentage of time that an agent spent in Not Ready State.
Ready Time	Length and percentage of time that an agent spent in Ready State.
Reserved Time	Length and percentage of time that an agent spent in Reserved State.
Talk Time	Length and percentage of time that an agent spent in Talk State.
Work Time	Length and percentage of time that an agent spent in Work State.

You can sort the Agent State Interval Summary (by Interval) by this criterion:

Sort Criterion	Result
Interval Start Time	Displays the report in order of the start times of the 30- or 60-minute intervals, if you specify an interval with the Interval Length filter parameter.

You can filter the Agent State Summary Report (by Interval) by any of these parameters:

Filter Parameter	Result
Interval Length	**Entire report range**—Displays information from the report start time through the report end time, but does not display information for specific intervals within the report period. **Thirty (30) minute intervals**—Displays information for 30-minute intervals within the report period. The first interval begins at the report start time, the next interval begins 30 minutes after the report start time, and so on. **Sixty (60) minute intervals**—Displays information for 60-minute intervals within the report period. The first interval begins at the report start time, the next interval begins 60 minutes after the report start time, and so on.
Resource Group Names	Displays information for agents that belong to the specified resource group or groups.
Agent Names	Displays information for the specified agents.
Skill Names	Displays information for agents who possess the specified skills.

Agent Summary Report

The Agent Summary Report contains a summary of the activities of agents.

The Agent Summary Report can include these charts:

Chart Name	Description
Call Handle Ratio by Agent	For each agent, displays the number of calls handled by the agent divided by the number of calls presented to that agent.
Total Calls Handled by Agent	For each agent, displays the total number of calls handled.
Average Talk Time, Hold Time, Work Time by Agent	For each agent, displays the average time spent talking, on hold, and in Work State.

The Agent Summary Report includes a table that shows the following information for each agent:

Field	Description
Agent Name	First name and last name of the agent.
Extension	Cisco ICD extension that the Cisco CallManager assigned to the agent.
Avg Logged-In Time	Total login time of the agent divided by the number of login sessions of the agent.
Calls Handled	Number of calls that have been connected to the agent. If the agent establishes a conference with another agent, this value increases by 1 for the conferenced agent. If the agent transfers a call and later receives the call back as a transfer, this value increases by 2.
Calls Presented	Number of calls that have been sent to the agent, whether or not the agent picked up the call. If a call is connected to an agent, transferred to another agent, and then transferred back to the original agent, the value for the original agent increases by 2 (once for each time the call was presented).

Field (continued)	Description (continued)
Handle Ratio	Number of calls that the agent handled divided by the number of calls that were presented to the agent.
Handle Time—Avg	Average handle time for all calls that the agent handled. Handle time is talk time + hold time + work time.
Handle Time—Max	Longest handle time of any one call that the agent handled. Handle time is talk time + hold time + work time.
Talk Time—Avg	Average talk time for all calls that the agent handled. Talk time is the elapsed time between the time that an agent connects to a call and when the call is disconnected or transferred, not including hold time.
Talk Time—Max	Longest talk time of any one call that the agent handled. Talk time is the elapsed time between the time that an agent connects to a call and when the call is disconnected or transferred, not including hold time.
Hold Time—Avg	Average hold time for all calls that the agent handled. Hold time is the elapsed time between the time that an agent first puts a call on hold and when the agent last takes the call off of hold, not including talk time.
Hold Time—Max	Longest hold time of any one call that the agent handled. Hold time is the elapsed time between the time that an agent first puts a call on hold and when the agent last takes the call off of hold, not including talk time.
Work Time—Avg	Average amount of time that an agent spent in Work State after calls.
Work Time—Max	Longest amount of time that an agent spent in Work State after any one call.
Idle Time—Avg	Average amount of time that an agent spent in Not Ready State.
Idle Time—Max	Longest single amount of time that an agent spent in Not Ready State.

You can sort the Agent Summary Report by any of these criteria:

Sort Criterion	Result
Agent Name	Displays the report in alphabetical order by the names of agents.
Avg Logged-In Time	Displays the report in order of the average time that agents were logged in to the system.
Total Calls Presented	Displays the report in order of the number of calls presented to agents.
Total Calls Handled	Displays the report in order of the number of calls handled by agents.

You can filter the Agent Summary Report by any of the following parameters. For the Top N and the Bottom N parameters, you specify the number (N) of agents that you want the report to show. For example, if you specify 3 for the Top N Calls Handled/Presented Ratio parameter, the report will show the three agents with the largest ratios. If more than *n* agents, where *n* is the number that you specify, tie for the largest or the smallest values, the report shows the first *n* agents in alphabetical order.

Filter Parameter	Result
Resource Group Names	Displays information for agents that belong to the specified resource group or groups.
Agent Names	Displays information for the specified agents.
Skill Names	Displays information for agents who possess the specified skills.
Top N Calls Handled/Presented Ratio	Displays information for the *n* agents with the largest ratios of calls handled to calls presented.
Bottom N Calls Handled/Presented Ratio	Displays information for the *n* agents with the smallest ratios of calls handled to calls presented.
Top N Avg Hold Time	Displays information for the *n* agents with the longest average hold times.
Bottom N Avg Hold Time	Displays information for the *n* agents with the shortest average hold times.
Top N Avg Talk Time	Displays information for the *n* agents with the longest average talk times.
Bottom N Avg Talk Time	Displays information for the *n* agents with the shortest average talk times.
Top N Avg Work Time	Displays information for the *n* agents with the longest average work times.
Bottom N Avg Work Time	Displays information for the *n* agents with the shortest average work times.

Filter Parameter	Result (continued)
Top N Avg Handle Time	Displays information for the *n* agents with the longest average handle times.
Bottom N Avg Handle Time	Displays information for the *n* agents with the shortest average handle times.

Call Custom Variables Report

Note This report is available in Cisco CRA 3.0(2) and later and is available in English only.

The Call Custom Variables Report shows information about any custom variables that are set by the Set Session Info step in the workflow that the Cisco ICD or IVR application associated with this call or this leg invoked.

The Call Custom Variables Report includes a table that shows the following information:

Field	Description
Session ID – Sequence No.	Session ID is the unique session identification number that the system assigned to a call. Sequence No. is the session sequence number that the system assigned to each call leg. The session sequence number increases by 1 for each leg of a call.
Start Time, End Time	Date and time that the call started, and date and time that the call was disconnected or transferred.
Contact Disposition	Disposition of a call (abandoned or handled). For an ICD call, the call is abandoned if the call disconnects before connecting to an agent. The call is handled when the call is connected to an agent. For an IVR call, the call is abandoned if it does not reach the workflow step that defines the call as handled. The call is handled when it reaches this step.
Agent Name	For an ICD call, the name of the agent who handled this call.
Application Name	Name of the ICD or IVR application associated with the route point.

Field (continued)	Description (continued)
Custom Variable 1	The contents of the variable _ccdrVar1, if this variable is set by the Set Session Info step in the workflow that the Cisco ICD or IVR application associated with this call or this leg invoked.
Custom Variable 2	The contents of the variable _ccdrVar2, if this variable is set by the Set Session Info step in the workflow that the Cisco ICD or IVR application associated with this call or this leg invoked.
Custom Variable 3	The contents of the variable _ccdrVar3, if this variable is set by the Set Session Info step in the workflow that the Cisco ICD or IVR application associated with this call or this leg invoked.
Custom Variable 4	The contents of the variable _ccdrVar4, if this variable is set by the Set Session Info step in the workflow that the Cisco ICD or IVR application associated with this call or this leg invoked.
Custom Variable 5	The contents of the variable _ccdrVar5, if this variable is set by the Set Session Info step in the workflow that the Cisco ICD or IVR application associated with this call or this leg invoked.

You can sort the Call Custom Variables Report by either of these criteria:

Sort Criterion	Result
Session ID	Displays the report in order of the unique session identification number that the system assigned to a call.
Call Start Time	Displays the report in order of call start times.

Called Number Summary Activity Report

The Called Number Summary Activity Report shows information about each number dialed by an inside or outside caller. This report includes information for calls to Cisco ICD and IVR applications and for calls to agents.

The Called Number Summary Activity Report can include these charts:

Chart Name	Description
Total Calls by Called Number	Displays the total number of calls to each number, including calls to applications and calls to agents.
Average Call Duration by Called Number	Displays the average time that each call lasted for each number dialed.

The Called Number Summary Activity Report includes a table that shows the following information for each number called:

Field	Description
Called Number	For a call to a Cisco ICD or IVR application, the route point number associated with the application. For a call to an agent, the extension of the destination agent.
Call Type	Call to an application or call to an agent.
Total Calls	Total number of calls to each number.
Avg Calls	Average number of calls per day.
Avg Call Duration	Average duration of calls to each number.

You can sort the Called Number Summary Activity Report by any of these criteria:

Sort Criterion	Result
Called Number	Displays the report in order of the number called. For calls to an application, this number is the route point number. For calls to an agent, this number is the extension of the agent.
Total Calls	Displays the report in order of the total number of calls that were originally dialed to each number.
Avg Call Duration	Displays the report in order of the average duration of calls to each number.

Contact Service Queue Activity Report

The Contact Service Queue Activity Report shows a summary of the activities of contact service queues.

The Contact Service Queue Activity Report can include these charts:

Chart Name	Description
Calls Handled and Calls Abandoned by Contact Service Queues	For each contact service queue, displays the number of calls handled by an agent in that contact service queue, and the number of calls abandoned while queued for that contact service queue.
Total Calls by Call Priority and Resource Group	Displays the total number of calls of each priority that were presented to each contact service queue.

The Contact Service Queue Activity Report includes a table that shows the following information for each contact service queue:

Field	Description
CSQ Name	Name of the contact service queue, and call skills associated with the contact service queue, if the contact service queue is configured based on resource skills. Multiple skills are separated by commas.
Calls Presented	Number of calls that were routed to the contact service queue, whether or not an agent picked up the call.
Wait Time—Avg	Average wait time for calls routed to the contact service queue. Wait time is the time that elapsed between the time a call entered the queue and the time the call was answered by an agent or was disconnected.
Wait Time—Max	Longest wait time for any one call routed to the contact service queue. Wait time is the time that elapsed between the time a call entered the queue and the time the call was answered by an agent or was disconnected.
Calls Handled	Number of calls handled by this contact service queue. A call is handled if a caller is connected to an agent while queued for this contact service queue.
Handle Time—Avg	Average handle time for all calls that the contact service queue handled. Handle time is talk time + hold time + work time.
Handle Time—Max	Longest handle time of any one call that the contact service queue handled. Handle time is talk time + hold time + work time.
Calls Abandoned—Total	Number of calls that were routed to the contact service queue but were not answered by an agent because the caller hung up or was disconnected.
Calls Abandoned—Avg	Average number of calls per day that were abandoned while queued for each contact service queue.
Calls Abandoned—Max	Largest number of calls in a day that were abandoned while queued for each contact service queue.
Calls Abandoned—AW	Average wait time for abandoned calls.
Total and Average Number of Calls by Priority (Pri. 1 through Pri. 10)	Total number of calls, by priority, that were routed to each contact service queue, and the average number of calls per day, by priority, that were presented to each contact service queue.

You can sort the Contact Service Queue Activity Report by any of these criteria:

Sort Criterion	Result
Contact Service Queue	Displays the report in order of the name of the contact service queue.
Total Calls Presented	Displays the report in order of the number of calls that were routed to the contact service queue, whether or not an agent picked up the call.
Total Calls Handled	Displays the report in order of the number of calls that were handled by the contact service queue.
Total Calls Abandoned	Displays the report in order of the number of calls that were routed to the contact service queue but were not answered because the caller hung up or was disconnected.

You can filter the Contact Service Queue Activity Report by this parameter:

Filter Parameter	Result
Contact Service Queue	Displays information for the specified contact service queues.

Contact Service Queue Activity Report (by CSQ)

Note This report is available in Cisco CRA 3.0(2) and later and is available in English only.

The Contact Service Queue Activity Report (by CSQ) shows information about service levels, and about the number and percentage of calls presented, handled, abandoned, and dequeued. This report can show information for each 30-minute or 60-minute interval within the report period. In this case, the report will include a summary of information for each contact service queue.

The information in the Contact Service Queue Activity Report (by CSQ) is grouped by contact service queue. The Contact Service Queue Activity Report (by Interval) displays the same information grouped by interval. For more information, see the "Contact Service Queue Activity Report (by Interval)" section on page 3-27.

The Contact Service Queue Activity Report (by CSQ) can include these charts:

Chart Name	Description
Calls Handled, Abandoned, and Dequeued by CSQ	For each contact service queue, displays the number of calls handled, abandoned, and dequeued. A call is considered to be handled when an agent picks up the call. A call is considered to be abandoned if the call disconnects before connecting to an agent. A call is considered to be dequeued from a particular contact service queue if the call is handled by an agent in another contact service queue. This situation can occur when a call is queued for more than one contact service queue.
Total Calls that Met Service Level by CSQ	For each contact service queue, displays the total number of calls handled and the number of calls handled within the time entered in the Service Level field when the contact service queue was set up in Cisco CRA Administration.

The Contact Service Queue Activity Report (by CSQ) includes a table that shows the following information for each contact service queue:

Field	Description
CSQ Name (Call Skills)	Name of the contact service queue, and call skills associated with the contact service queue, if the contact service queue is configured based on resource skills. Multiple skills are separated by commas.
Interval Start Time, Interval End Time	Beginning date and time and ending date and time of each 30- or 60-minute interval within the report period, if you specify an interval with the Interval Length filter parameter. Otherwise, the beginning date and time and ending date and time of the report range.
Service Level (sec)	Value entered in the Service Level field when the contact service queue was set up in Cisco CRA Administration.
Calls Hand < SL	Number of calls that were handled within the time shown in the Service Level field. A call is considered to be handled when an agent picks up the call.

Field (continued)	Description (continued)
Calls Aband < SL	Number of calls that were abandoned within the time shown in the Service Level field. A call is considered to be abandoned if the call disconnects before connecting to an agent.
Percentage of Service Level Met—Only Handled	Percentage of handled calls that were handled within the time shown in the Service Level field. A call is considered to be handled when an agent picks up the call. This value is calculated as follows: (Number of calls handled within service level / Number of calls handled) * 100%
Percentage of Service Level Met—Without Abandon	Percentage of presented calls, not counting abandoned calls, that were handled within the time shown in the Service Level field. This value is calculated as follows: (Number of calls handled within service level / (Number of calls presented – Number of calls abandoned within service level)) * 100%
Percentage of Service Level Met—Positive Abandon	Percentage of presented calls that were handled or abandoned within the time shown in the Service Level field. For this value, calls abandoned within the time shown in the Service Level field are considered to have met that service level. This value is calculated as follows: ((Number of calls handled within service level + Number of calls abandoned within service level) / Number of calls presented) * 100%
Percentage of Service Level Met—Negative Abandon	Percentage of presented calls that were handled within the time shown in the Service Level field. For this value, calls abandoned within the time shown in the Service Level field are considered to have not met that service level. This value is calculated as follows: (Number of calls handled within service level / Number of calls presented) * 100%
Calls Presented	Number of calls that were routed to the contact service queue, whether or not an agent picked up the call.
Calls Handled	Number and percentage of calls handled by the contact service queue. A call is considered to be handled when an agent picks up the call. The percentage of calls handled is the number of calls handled divided by the number of calls presented.

Field (continued)	Description (continued)
Calls Abandoned	Number and percentage of calls that were routed to the contact service queue but were not answered by an agent because the caller hung up or was disconnected. The percentage is calculated as follows: (Number of calls abandoned / Number of calls presented) * 100%
Calls Dequeued	Number and percentage of calls that were dequeued. A call is considered to be dequeued from a particular contact service queue if the call is handled by an agent in another contact service queue. This situation can occur when a call is queued for more than one contact service queue. The percentage is calculated as follows: (Number of calls dequeued / Number of calls presented) * 100%

You can sort the Contact Service Queue Activity Report (by CSQ) by this criterion:

Sort Criterion	Result
CSQ Name	Displays the report in alphabetical order by the names of contact service queues.

You can filter the Contact Service Queue Activity Report (by CSQ) by any of these parameters:

Filter Parameter	Result
Interval Length	**Entire report range**—Displays information from the report start time through the report end time, but does not display information for specific intervals within the report period. **Thirty (30) minute intervals**—Displays information for 30-minute intervals within the report period. The first interval begins at the report start time, the next interval begins 30 minutes after the report start time, and so on. **Sixty (60) minute intervals**—Displays information for 60-minute intervals within the report period. The first interval begins at the report start time, the next interval begins 60 minutes after the report start time, and so on.
CSQ Name	Displays information for the contact service queues selected.

Contact Service Queue Activity Report (by Interval)

Note This report is available in Cisco CRA 3.0(2) and later and is available in English only.

The Contact Service Queue Activity Report (by Interval) shows information about service levels, and about the number and percentage of calls presented, handled, abandoned, and dequeued. This report can show information for each 30-minute or 60-minute interval within the report period. In this case, the report will include a summary of information for each interval.

The information in the Contact Service Queue Activity Report (by Interval) is grouped by interval. The Contact Service Queue Activity Report (by CSQ) displays the same information grouped by contact service queue. For more information, see the "Contact Service Queue Activity Report (by CSQ)" section on page 3-23.

The Contact Service Queue Activity Report (by Interval) can include this chart:

Chart Name	Description
Calls Handled, Abandoned, and Dequeued by Interval	For each time interval, displays the number of calls handled, abandoned, and dequeued. A call is considered to be handled when an agent picks up the call. A call is considered to be abandoned if the call disconnects before connecting to an agent. A call is considered to be dequeued from a particular contact service queue if the call is handled by an agent in another contact service queue. This situation can occur when a call is queued for more than one contact service queue.

The Contact Service Queue Activity Report (by Interval) includes a table that shows the following information for each contact service queue:

Field	Description
Interval Start Time, Interval End Time	Beginning date and time and ending date and time of each 30- or 60-minute interval within the report period, if you specify an interval with the Interval Length filter parameter. Otherwise, the beginning date and time and ending date and time of the report range.
CSQ Name (Call Skills)	Name of the contact service queue, and call skills associated with the contact service queue, if the contact service queue is configured based on resource skills. Multiple skills are separated by commas.
Service Level (sec)	Value entered in the Service Level field when the contact service queue was set up in Cisco CRA Administration.
Calls Hand < SL	Number of calls that were handled within the time shown in the Service Level field. A call is considered to be handled when an agent picks up the call.
Calls Aband < SL	Number of calls that were abandoned within the time shown in the Service Level field. A call is considered to be abandoned if the call disconnects before connecting to an agent.
Percentage of Service Level Met—Only Handled	Percentage of handled calls that were handled within the time shown in the Service Level field. A call is considered to be handled when an agent picks up the call. This value is calculated as follows: (Number of calls handled within service level / Number of calls handled) * 100%
Percentage of Service Level Met—Without Abandon	Percentage of presented calls, not counting abandoned calls, that were handled within the time shown in the Service Level field. This value is calculated as follows: (Number of calls handled within service level / (Number of calls presented – Number of calls abandoned within service level)) * 100%
Percentage of Service Level Met—Positive Abandon	Percentage of presented calls that were handled or abandoned within the time shown in the Service Level field. For this value, calls abandoned within the time shown in the Service Level field are considered to have met that service level. This value is calculated as follows: ((Number of calls handled within service level + Number of calls abandoned within service level) / Number of calls presented) * 100%

Field (continued)	Description (continued)
Percentage of Service Level Met—Negative Abandon	Percentage of presented calls that were handled within the time shown in the Service Level field. For this value, calls abandoned within the time shown in the Service Level field are considered to have not met that service level. This value is calculated as follows: (Number of calls handled within service level / Number of calls presented) * 100%
Calls Presented	Number of calls that were routed to the contact service queue, whether or not an agent picked up the call.
Calls Handled	Number and percentage of calls handled by the contact service queue. A call is considered to be handled when an agent picks up the call. The percentage of calls handled is the number of calls handled divided by the number of calls presented.
Calls Abandoned	Number and percentage of calls that were routed to the contact service queue but were not answered by an agent because the caller hung up or was disconnected. The percentage is calculated as follows: (Number of calls abandoned / Number of calls presented) * 100%
Calls Dequeued	Number and percentage of calls that were dequeued. A call is considered to be dequeued from a particular contact service queue if the call is handled by an agent in another contact service queue. This situation can occur when a call is queued for more than one contact service queue. The percentage is calculated as follows: (Number of calls dequeued / Number of calls presented) * 100%

You can sort the Contact Service Queue Activity Report (by Interval) by this criterion:

Sort Criterion	Result
Interval Start Time	Displays the report in order of the start times of the 30- or 60-minute intervals, if you specify an interval with the Interval Length filter parameter.

You can filter the Contact Service Queue Activity Report (by Interval) by any of these parameters:

Filter Parameter	Result
Interval Length	**Entire report range**—Displays information from the report start time through the report end time, but does not display information for specific intervals within the report period. **Thirty (30) minute intervals**—Displays information for 30-minute intervals within the report period. The first interval begins at the report start time, the next interval begins 30 minutes after the report start time, and so on. **Sixty (60) minute intervals**—Displays information for 60-minute intervals within the report period. The first interval begins at the report start time, the next interval begins 60 minutes after the report start time, and so on.
CSQ Name	Displays information for the contact service queues selected.

Contact Service Queue Service Level Report

The Contact Service Queue Service Level Report shows information about the service level provided to calls handled by each contact service queue.

The Contact Service Queue Service Level Report can include this chart:

Chart Name	Description
Percentage of Calls that Met Service Level	For each contact service queue, displays the percentage of the handled calls that were answered within the number of seconds specified in the Service Level field when the contact service queue was set up in Cisco CRA Administration.

The Contact Service Queue Service Level Report includes a table that shows the following information for each contact service queue:

Field	Description
Contact Service Queue Name	Name of the contact service queue, and call skills associated with the contact service queue, if the contact service queue is configured based on resource skills. Multiple skills are separated by commas.
Calls Handled	Number of calls handled by the contact service queue, and percentage of calls handled by the contact service queue. A call is considered to be handled when an agent picks up the call. The percentage of calls handled is the number of calls handled divided by the number of calls presented.
Avg Wait	Average wait time for calls handled by this contact service queue. Wait time is the time that elapsed between the time a call entered this contact service queue and the time the call was answered by an agent.
Max Wait	Longest wait time for any one call handled by this contact service queue. Wait time is the time that elapsed between the time a call entered this contact service queue and the time the call was answered by an agent.
Avg Speed to Answer	Average time that elapsed between the time a call rang at an agent extension and the agent picked up the call.
Service Level	Value entered in the Service Level field when the contact service queue was set up in Cisco CRA Administration.
Met Service Level	Number and percentage of handled calls that were answered within the time shown in the Service Level field.
Pri. 1 through Pri. 10	Number and percentage of handled calls with each priority level that were answered within the time shown in the Service Level field.
<=*n* sec	Time interval showing the number and percentage of handled calls with a queue time that is less than or equal to *n* seconds. You can specify the value for *n* in the Filter Parameter field in the Report Detail area. The default value for *n* is 15 seconds, and in this case, this field shows as <=15 seconds.
(*n* + 1) through (2*n*) sec	Time interval showing the number and percentage of handled calls with a queue time that is between *n* + 1 seconds and 2*n* seconds. You can specify the value for *n* in the Filter Parameter field in the Report Detail area. The default value for *n* is 15 seconds, and in this case, this field shows as 16 – 30 seconds.

Field (continued)	Description (continued)
(2*n* + 1) through (3*n*) sec	Time interval showing the number and percentage of handled calls with a queue time that is between 2*n* + 1 seconds and 3*n* seconds. You can specify the value for *n* in the Filter Parameter field in the Report Detail area. The default value for *n* is 15 seconds, and in this case, this field shows as 31 – 45 seconds.
>3*n* sec	Time interval showing the number and percentage of handled calls with a queue time that is greater than 3*n* seconds. You can specify the value for *n* in the Filter Parameter field in the Report Detail area. The default value for *n* is 15 seconds, and in this case, this field shows as >45 seconds.

You can sort the Contact Service Queue Service Level Report by any of these criteria:

Sort Criterion	Result
Contact Service Queue	Displays the report in order of the names of contact service queues.
Average Speed to Answer	Displays the report in the order of the average time that elapsed between the time a call rang at an agent extension and the agent picked up the call.
Percentage of Calls that Met Service Level	Displays the report in order of the percentage of handled calls that were answered within the time shown in the Service Level field.

You can filter the Contact Service Queue Service Level Report by either of these parameters:

Filter Parameter	Result
Contact Service Queue Names	Displays information for the specified contact service queues.
Time Interval for Service Level Metric	Lets you specify the number of seconds, *n*, that the report uses for the four time interval fields.

Detailed Call by Call CCDR Report

The Detailed Call by Call CCDR Report shows most of the information that is contained in the contact call detail record (CCDR), which is stored in the Cisco CRA db_cra_ccdr database. This report also includes information from the contact routing detail record and the agent connection detail record, which are stored in the Cisco db_cra database. The information in this report is for each leg of a call. (A call transfer initiates a new leg.)

The Detailed Call by Call CCDR Report can include these charts:

Chart Name	Description
Number of Calls by Contact Disposition	Displays the percentage of calls that were handled and percentage of calls that were abandoned.
Number of Calls by Originator Type	Displays the percentage of calls that were originated by an agent, percentage of calls that were originated by a device (for example, a test call), and percentage of calls with an unknown origin (for example, calls received through a gateway).

The Detailed Call by Call CCDR Report includes a table that shows the following information:

Field	Description
Session ID – Sequence No.	Session ID is the unique session identification number that the system assigned to a call. Sequence No. is the session sequence number that the system assigned to each call leg. The session sequence number increases by 1 for each leg of a call.
Start Time, End Time	Date and time that the call started, and date and time that the call was disconnected or transferred.
Contact Type	Contact type of a call (incoming, outgoing, or internal).
Contact Disposition	Disposition of a call (abandoned or handled). For an ICD call, the call is abandoned if the call disconnects before connecting to an agent. The call is handled when the call is connected to an agent. For an IVR call, the call is abandoned if it does not reach the workflow step that defines the call as handled. The call is handled when it reaches this step.

Field (continued)	Description (continued)
Originator Type	Originator of the call: 1—Agent. Call originated by an agent. 2—Device. Call originated by a simulated caller. (Used for testing.) 3—Unknown. Call originated by an outside caller through a gateway or by an unknown device.
Originator ID	Login identification of the agent who originated the call. Used only if Originator Type is 1.
Originator DN[1]	If Originator Type is 1, this field shows the ICD extension of the agent. If Originator Type is 2, this field shows the CTI[2] port number. If Originator Type is 3, this field shows the telephone number of the caller.
Destination Type	Destination of the call: 1—Agent. Call presented to an agent. 2—Device. Call presented to a route point. 3—Unknown. Call presented to an outside destination through a gateway or to an unknown device.
Destination ID	Login identification of the agent who received the call. Used only if Destination Type is 1.
Destination DN	If Destination Type is 1, this field shows the ICD extension of the agent. If Destination Type is 2, this field shows the CTI port number. If Destination Type is 3, this field shows the telephone number called.
Called Number	If the call was a transfer, the number that the call was transferred to. In other cases, this information is the same as the Original Called Number.
Original Called No.	Number originally dialed by the caller. Can be either a route point number or an agent extension.
Application Name	Name of the Cisco ICD or IVR application associated with the route point.
Queue Time	Time that elapsed between the time a call entered the contact service queue and the time the call was answered by an agent or disconnected.
Talk Time	Elapsed time between the time that an agent answered the call and when the call was disconnected or transferred, not including hold time.

Field (continued)	Description (continued)
Hold Time	Elapsed time between the time that an agent first put the call on hold and when the agent last took the call off of hold, not including talk time.
Work Time	Amount of time that an agent spent in Work State after the call.

1. DN = directory number
2. CTI = computer telephony interface

You can sort the Detailed Call by Call CCDR Report by any or these criteria:

Sort Criterion	Result
Session ID	Displays the report in order of the unique session identification number that the system assigned to a call.
Call Start Time	Displays the report in order of the date and time that the call started.
Called Number	Displays the report in order of the number called.

IVR Application Performance Analysis Report

The IVR Application Performance Analysis Report shows information about calls received by each Cisco ICD or IVR application.

The IVR Application Performance Analysis Report can include these charts:

Chart Name	Description
Total Incoming Calls by Application	Displays the total number of calls that each application received.
Calls Handled vs. Calls Abandoned by Application	Displays the total number of calls handled by each application and total number of calls abandoned while in each application.
Average Call Duration by Application	Displays the average length of calls that each application received.

The IVR Application Performance Analysis Report includes a table that shows the following information for each Cisco ICD or IVR application:

Field	Description
Application ID	Identification number that the Cisco CRA system assigned to the application.
Application Name	Name of the Cisco ICD or IVR application.
Total Incoming Calls	Number of calls received by the application. This number is equal to the number of calls handled by the application + the number of calls abandoned while in the application.
Calls Handled	Number of calls handled by the application. A call is handled when it reaches the workflow step that defines the call as handled.
Calls Abandoned	Number of calls abandoned while in the application. A call is abandoned if it does not reach the workflow step that defines the call as handled.
Abandon Rate	Average number of calls that were abandoned in each hour while in the application.
Avg Call Duration	Average time that elapsed from the time that the call entered this workflow until the call exited this workflow by hanging up or entering another workflow.

You can sort the IVR Application Analysis Performance Report by any of these criteria:

Sort Criterion	Result
Application ID	Displays the report in order of the identification number that the system assigned to each application.
Total Incoming Calls	Displays the report in order of the number of calls that were received by each application.
Call Abandon Rate	Displays the report in order of average number of calls abandoned per hour while in each application.

IVR Traffic Analysis Report

The IVR Traffic Analysis Report shows information about incoming calls to the Cisco CRA system.

The IVR Traffic Analysis Report can include these charts:

Chart Name	Description
Total Incoming Calls by Date	Displays the total number of calls received by the Cisco CRA system for each day in the report range.
Peak Calls by Date	For each date, displays the number of calls received in the hour with the most calls.
Average Call Duration by Date	Displays the average length of calls for each day in the report range.

The IVR Traffic Analysis Report includes a table that shows the following information for each date in the report range:

Field	Description
Date	Date for which information is provided.
Total Incoming Calls	Total number of calls received by the Cisco CRA system.
Avg Calls	Average number of calls received during each hour.
Peak Calls	Number of calls received during the peak hour. (See the next field.)
Peak Hour Start, Peak Hour End	Start and end time of the hour during which the largest number of calls were received. This hour is defined as the peak hour.
Avg Call Duration	Average call length.
Min Call Duration	Length of the shortest call.
Max Call Duration	Length of the longest call.

You can sort the IVR Traffic Analysis Report by this criterion:

Sort Criterion	Result
Date	Displays the report in order of the date for which information is provided.

Priority Summary Activity Report

The Priority Summary Activity Report shows information about the call priorities of calls received.

The Priority Summary Activity Report can include this chart:

Chart Name	Description
Total Calls by Call Priority	For each priority level that was assigned, displays the percentage of calls that received that priority.

The Priority Summary Activity Report includes a table that shows the following information:

Field	Description
Call Priority	Final priority level assigned to each call, from 1 (lowest) to 10 (highest).
Total Calls	Number of calls that were assigned a particular priority level as their final priority level.
Avg Calls	For each day in the report period, the average number of calls that received a particular priority level as their final priority level.
Total Number of Calls with Different Original and Final Priorities	Number of calls that ended with a priority level other than the priority that was assigned when the call was received.
Average Number of Calls (Per Day) with Different Original and Final Priorities	Average number of calls per day that ended with a priority level other than the priority that was assigned when the call was received.

Field (continued)	Description (continued)
Maximum Difference Between Original and Final Priorities Experienced by All Calls	Largest difference between a priority level assigned to any one call when it was received and the priority level the call had when it ended.
Average Difference (Per Call) Between Original and Final Priorities Experienced by All Calls	Average difference between a priority level assigned to a call when it was received and the priority level the call had when it ended.

You can sort the Priority Summary Activity Report by either of these criteria:

Sort Criterion	Result
Call Priority	Displays the report in order of the final priority level assigned to each call.
Total Calls	Displays the report in order of the number of calls that were assigned a particular priority level as their final priority level.

You can filter the Priority Summary Activity Report by this parameter:

Filter Parameter	Result
Call Priority Levels	Displays information for the calls that were assigned the specified priority level as their final priority level. Priority levels range from 1 (lowest) to 10 (highest).

Skill Routing Activity Report

The Skill Routing Activity Report shows call activities for each skill group. A skill group is a contact service queue (CSQ) that is configured based upon resource skills.

The Skill Routing Activity Report can include these charts:

Chart Name	Description
Calls Handled and Calls Abandoned by Skill Groups	For each skill group, displays the number of calls handled by that skill group, and the number of calls abandoned while queued for that skill group.
Total Calls by Call Priority and Skill Group	For each skill group, displays the total number of calls of each priority that were routed to the skill group.

The Skill Routing Activity Report includes a table that shows the following information for each skill group:

Field	Description
Skill Group	Name of the skill group and skills belonging to that skill group. Multiple skills are separated by commas.
Calls Presented	Number of calls that were routed to the skill group, whether or not an agent picked up the call.
Wait Time—Avg	Average wait time for calls routed to this skill group. Wait time is the time that elapsed between the time a call entered this queue and the time the call was answered by an agent or was disconnected.
Max Wait Time—Max	Longest wait time for any one call routed to this skill group. Wait time is the time that elapsed between the time a call entered this queue and the time the call was answered by an agent or was disconnected.
Calls Handled	Number of calls handled by this skill group. A call is handled if a caller is connected to an agent while queued for this skill group.
Handle Time—Avg	Average handle time for all calls that the skill group handled. Handle time is talk time + hold time + work time.

Field (continued)	Description (continued)
Handle Time—Max	Longest handle time of any one call that the skill group handled. Handle time is talk time + hold time + work time.
Calls Abandoned—Total	Number of calls that were routed to the skill group but were not answered by an agent because the caller hung up or was disconnected.
Calls Abandoned—Avg	Average number of calls per day that were abandoned while queued for each skill group.
Calls Abandoned—Max	Largest number of calls in a day that were abandoned while queued for each skill group.
Calls Abandoned—AW	Average wait time for abandoned calls.
Total and Average Number of Calls by Priority (Pri. 1 through Pri. 10)	Total number of calls, by priority, that were routed to each skill group, and the average number of calls per day, by priority, that were routed to each skill group.

You can sort the Skill Routing Activity Report by any of these criteria:

Sort Criterion	Result
Skill Group	Displays the report in order of the name of the skill group.
Total Calls Presented	Displays the report in order of the number of calls that were routed to the skill group, whether or not an agent picked up the call.
Total Calls Handled	Displays the report in order of the number of calls that were handled by the skill group.
Total Calls Abandoned	Displays the report in order of the number of calls that were routed to the skill group but were not answered because the caller hung up or was disconnected.

You can filter the Skill Routing Activity Report by this parameter:

Filter Parameter	Result
Skill Names	Displays information for skill groups that have the specified skills. If you specify more than one skill, you can choose the operator AND or OR. If you choose AND, the report will display information for the skill groups that include all the skills that you specified. If you choose OR, the report will display information for the skill groups that include any of the skills that you specified.

CHAPTER 4

Generating Historical Reports

When you generate a report with the Cisco Customer Response Applications (CRA) Historical Reports client, you perform the following general steps:

1. Choose general report settings, including the name of the report, whether to include charts, and the date and time range for which you want information.
2. Choose detailed report settings, if you want, including a sort method and a filter parameter.
3. Use the Report Viewer to view, print, or save (export) the report.

The following sections explain these steps in detail, and include these topics:

- General Report Settings, page 4-1
- Detailed Report Settings, page 4-4
- Saving and Loading Report Settings, page 4-8
- The Report Viewer, page 4-12

General Report Settings

General report settings include:

- Name of the report to generate
- Whether to include charts with the report
- Date and time range of the information contained in the report

You can return report settings to their default values at any time by clicking **Reset** in the CRA Historical Reports main window. This action resets both general report settings and detailed report settings.

If a Report Settings file is loaded, clicking **Reset** returns both general report settings and detailed report settings to the values specified in that file.

You choose general report settings in the General Report Settings area, shown in the Historical Reports Main window in Figure 1-1.

Related Topics

- Choosing the Report to Generate, page 4-2
- Including Charts with a Report, page 4-3
- Choosing the Date and Time Range for a Report, page 4-4
- Saving and Loading Report Settings, page 4-8

Choosing the Report to Generate

To choose the report that you want to generate, follow these steps:

Procedure

Step 1 In the Reporting Task area of the Cisco CRA Historical Reports main window, click the **Generate and View Historical Reports** radio button.

The window displays tabs for general and detailed report settings.

Step 2 Click the **General** tab, if it is not selected already.

The General Report Settings area appears.

Step 3 Click the Report Type drop-down arrow to view a list of available reports, and choose the report that you want to generate.

If you have already generated this report in this Cisco CRA Historical Reports session, any information that you previously entered in the general or detailed fields for this report appears in these fields again.

Now you can choose additional general report settings and choose detailed report settings. You also must specify a date and time range for the report before you can view it.

Related Topics

- Including Charts with a Report, page 4-3
- Choosing the Date and Time Range for a Report, page 4-4
- Detailed Report Settings, page 4-4
- Viewing Reports, page 4-14

Including Charts with a Report

By default, each historical report contains one or more charts that display specific information in the report. You can choose whether to include or omit charts.

If you want to include charts with the report that you have chosen as explained in the "Choosing the Report to Generate" section on page 4-2, check the Include Charts in Report check box in the General Report Settings area. If you do not want to include charts, uncheck this check box.

After choosing this setting, you must choose a date and time range for the report before you can view it. You also can choose detailed report settings.

Related Topics

- Choosing the Report to Generate, page 4-2
- Choosing the Date and Time Range for a Report, page 4-4
- Detailed Report Settings, page 4-4
- Viewing Reports, page 4-14

Choosing the Date and Time Range for a Report

You must choose the date and time range for the data in the report that you have chosen as explained in the "Choosing the Report to Generate" section on page 4-2. In the Date and Time fields next to Report Start Date and Report End Date in the General Report Settings area, enter the beginning and ending dates and times of the time range for which you want to generate information.

You can now choose additional general report settings, choose detailed report settings, or click **View** to view the report.

Related Topics

- Choosing the Report to Generate, page 4-2
- Including Charts with a Report, page 4-3
- Detailed Report Settings, page 4-4
- Viewing Reports, page 4-14

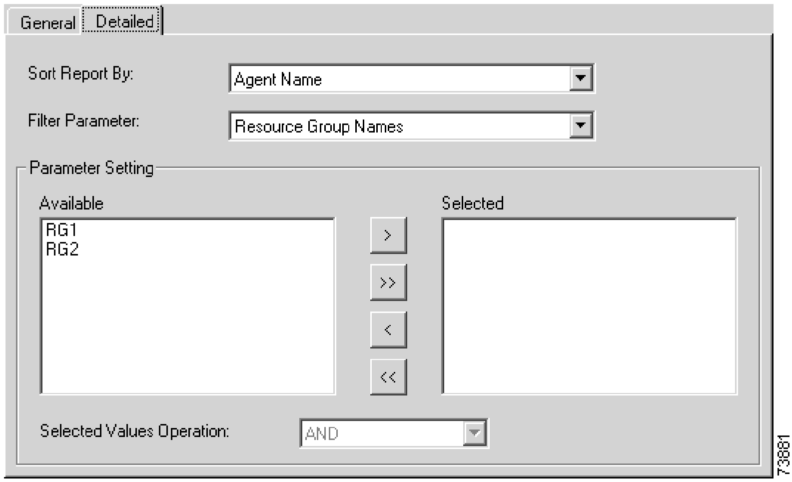
Detailed Report Settings

Detailed report settings allow you to cause reports to present information in a particular order and to include only specific information. Detailed report settings include:

- Sorting method—Order in which information in a report appears
- Filter parameter—Specific information that a report includes

You choose detailed report settings in the Detailed Report Settings area of the Cisco CRA Historical Reports main window, shown in Figure 4-1.

Figure 4-1 Detailed Report Settings Area



Choosing detailed report settings is optional. If you do not choose one or more settings, the report will contain all relevant information presented in the default order. This default order appears in the Sort Report By field.

You can return report settings to their default values at any time by clicking **Reset** in the CRA Historical Reports main window. This action resets both detailed report settings and general report settings.

If a Report Settings file is loaded, clicking **Reset** returns both detailed report settings and general report settings to the values specified in that file.

Related Topics

- Specifying a Sorting Method, page 4-6
- Specifying a Filter Parameter, page 4-6
- Saving and Loading Report Settings, page 4-8

Specifying a Sorting Method

You can specify a sorting method to display the information in reports in a particular order. For detailed information about the sorting methods available for a particular report, see the description of that report in the "Report Details" section on page 3-4.

To specify a sorting method for the report that you have chosen as explained in the "Choosing the Report to Generate" section on page 4-2, follow these steps:

Procedure

Step 1 In the Reporting Task area of the Cisco CRA Historical Reports main window, click the **Generate and View Historical Reports** radio button.

The window displays tabs for general and detailed report settings.

Step 2 Click the **Detailed** tab.

The Detailed Report Settings area appears.

Step 3 Click the Sort Report By drop-down arrow to view a list of available sort methods, and then choose the sort method that you want to use.

After specifying a sorting method, you can choose additional detailed report settings, or click **View** to view the report.

Related Topics

- Specifying a Filter Parameter, page 4-6
- Viewing Reports, page 4-14

Specifying a Filter Parameter

A filter parameter lets you limit the information that a report includes by selecting only the information that you want. For example, if you are generating an Agent Summary Report, you can use a filter parameter to include information for specific agents only.

For detailed information about the filter parameters available for a particular report, see the description of the report in the "Report Details" section on page 3-4.

If no filter parameter is available for the report that you are generating, the Parameter Setting area displays No Parameter Detailed Settings Available.

To specify a filter parameter for the report that you have chosen as explained in the "Choosing the Report to Generate" section on page 4-2, follow these steps:

Procedure

Step 1 In the Reporting Task area of the Cisco CRA Historical Reports main window, click the **Generate and View Historical Reports** radio button.

The window displays tabs for general and detailed report settings.

Step 2 Click the **Detailed** tab.

The Detailed Report Settings area appears.

Step 3 Click the Filter Parameter drop-down arrow to view a list of available filter parameters, and then choose the filter parameter that you want to use.

Depending on the filter parameter you choose, the Available pane of the Parameter Setting area displays either a list of available parameter settings or the Enter Parameter Value field. If you have previously chosen parameter settings for this report and this parameter during this session, the settings you chose before appear in the Selected pane.

Step 4 If a list of available parameter settings appears, choose the parameter setting or settings that you want to use as follows:

- To choose specific settings that appear in the Available pane, click the settings and then click **>**. The settings move to the Selected pane. To select all of the settings, click >> without choosing any settings.
- To unselect specific settings that appears in the Selected pane, choose that setting, and then click **<**. To unselect all settings, click **<<** without choosing any settings.

If the Enter Parameter Value field appears, enter the value that you want to use as *n* in the filter parameter.

Step 5 If operators are available for the parameter setting that you have selected, click the Selected Values Operation drop-down arrow, and then choose the operator that you want.

Operators are AND and OR. If you choose AND, the report will show information that includes all of the filter parameters shown in the Selected field. If you choose OR, the report will show information that includes any of the filter parameters shown in the Selected field.

If operators are not available for the parameter setting that you have selected, the Selected Values Operation drop-down arrow appears dimmed.

After specifying a filter parameters and its settings, you can choose additional detailed report settings, or click **View** to view the report.

Related Topics

- Specifying a Sorting Method, page 4-6
- Viewing Reports, page 4-14

Saving and Loading Report Settings

If you often generate particular reports, you may find that it is convenient to save the general and detailed report settings that you choose for these reports. You can recall these settings and make adjustments to them each time that you generate the report. You can also recall these settings and use them as a basis for a scheduled report.

You save report settings in a file called a Report Settings file. When you load a Report Settings file, the report settings saved in that file appear in the CRA Historical Reports main window.

Related Topics

- Saving Report Settings, page 4-9
- Loading Report Settings, page 4-10
- Changing and Saving Report Settings, page 4-11

Saving Report Settings

By default, the Cisco CRA Historical Reports client saves Report Settings files on your computer in the Cisco CRA Historical Reports\Reports directory, which is under the directory in which you installed the Cisco CRA Historical Reports system. (By default, the system installs in the Program Files directory.) The client gives a Report Settings file the name *report*.chc, where *report* is the name of the report for which you are saving settings. You can change the default directory and the base file name for a Report Settings file. The file name must have the extension .chc.

To save report settings in a new Report Settings file, follow these steps:

Procedure

Step 1 In the CRA Historical Reports main window, choose the general report settings and detailed report settings that you want to save.

Step 2 Choose **File > Save**, or choose **File > Save As**, or click the **Save** tool.

The Save As dialog box appears.

Step 3 If you want, make changes in the Save As dialog box as follows:

- To save Report Settings files in a directory other than the default directory, use the Save In drop-down arrow, the Folder Name pane, or the Save In tools to specify the directory.
- To change the file name that appears in the File Name field, enter the file name that you want. To choose a file that already exists, you can use the File Name drop-down arrow to display a list of file names, and then choose the file name that you want. A message appears asking if you want to replace the existing file. Click **Yes** to continue.

Note A report settings file name must have the extension .chc. The system adds this extension to the name in the File Name field automatically.

Step 4 Click **Save**.

The Cisco CRA Historical Reports client saves the Reports Settings file. You can load this file whenever you need it.

Related Topics

- General Report Settings, page 4-1
- Detailed Report Settings, page 4-4
- Loading Report Settings, page 4-10
- Changing and Saving Report Settings, page 4-11

Loading Report Settings

When you load report settings, you specify the name of the Report Settings file in which the settings that you want are saved. When the report loads, these settings appear in the various fields in the CRA Historical Reports main window.

To load report settings from the Cisco CRA Historical Reports client main window, perform the following steps. If the client software is stopped, you can start the client software and load a Report Settings file in one step by choosing the Report Settings file in the directory in which it is stored.

Note You cannot load a report settings file that contains settings for a report for which you do not have access. You also cannot load a report settings file if the file was created when the client language was different than the current language.

Procedure

Step 1 In the Reporting Task area of the CRA Historical Reports main window, click **Load Existing Report Setting**.

You may also click the **Open** tool or choose **File > Open**.

The Open dialog box appears, showing the File List pane.

Step 2 If the Report Settings file that you want appears in the File List pane, double-click the name of the file, or click the name of the file and then click **Open**.

If the Report Settings file does not appear, use the Look In drop-down arrow, the Folder Name pane, or the Save In tools to specify the directory. Then double-click the name of the file, or click the name of the file and then click **Open**.

The Cisco CRA Historical Reports main window appears. The General and Detailed report settings fields contain settings from the Report Settings file.

Related Topic

- Saving and Loading Report Settings, page 4-8

Changing and Saving Report Settings

You can load a Report Settings file, make changes to any or all of the settings, and save the changes in the original Report Settings file or in a new file.

To change report settings, follow these steps:

Procedure

Step 1 Load a Report Settings file as described in the "Loading Report Settings" section on page 4-10.

Step 2 Make changes to the report settings as needed.

Step 3 If you want to save the changes in the Report Settings file that is currently loaded, choose **File > Save**.

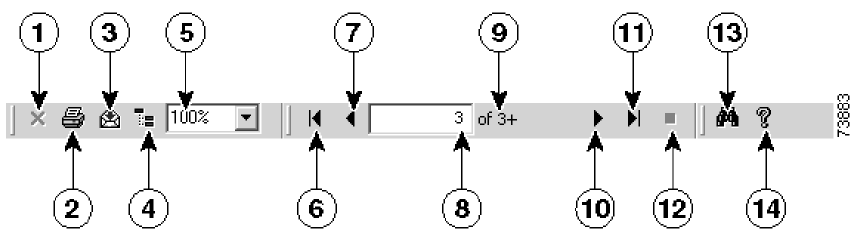
If you want to save the changes in a new Report Settings file, choose **File > Save As**. Enter the new file name in the Save As dialog box, and then click **Save**.

Note If you load and make changes to a Report Settings file without saving the file, and you then try to choose a new report type or exit Cisco CRA Historical Reports, the computer displays a dialog box asking if you first want to save the changes that you made to the Report Settings file. Click **Yes** to save the changes in the original Report Settings file or click **No** to continue without saving the changes.

The Report Viewer

The Report Viewer window appears automatically when you click **View** in the CRA Historical Reports main window to generate a report. The Report Viewer window contains the report you have generated. It also contains a toolbar, shown in Figure 4-2, which provides tools for moving through the report, printing the report, exporting the report, finding text in the report, and viewing information about groups.

Figure 4-2 Report Viewer Toolbar



	Item	Reference
1	**Close Current View** tool	Displaying Group Information Using the Group Tree, page 4-18
2	**Print Report** tool	Printing Reports, page 4-19
3	**Export Report** tool	Exporting Reports, page 4-20
4	**Toggle Group Tree** tool	Displaying Group Information Using the Group Tree, page 4-18
5	Display Size field	Changing the Display Size, page 4-15

6	**Go to First Page** tool	Moving Through the Report, page 4-15
7	**Go to Previous Page** tool	Moving Through the Report, page 4-15
8	Page Number field	Moving Through the Report, page 4-15
9	Page count display	Moving Through the Report, page 4-15
10	**Go to Next Page** tool	Moving Through the Report, page 4-15
11	**Go to Last Page** tool	Moving Through the Report, page 4-15
12	**Stop Loading** tool	Moving Through the Report, page 4-15
13	**Search Text** tool	Finding and Moving to Specific Text, page 4-16
14	**Help** tool	Getting Online Help, page 1-7

Related Topics

- Viewing Reports, page 4-14
- Changing the Display Size, page 4-15
- Moving Through the Report, page 4-15
- Finding and Moving to Specific Text, page 4-16
- Displaying Information About Groups, page 4-17
- Printing Reports, page 4-19
- Exporting Reports, page 4-20

Viewing Reports

To view a report, follow these steps:

Procedure

Step 1 In the CRA Historical Reports main window, choose the report settings that you want.

Step 2 Click **View**.

The report generates and appears in the Report Viewer window.

Some reports can take a few minutes to generate and another few minutes to load into the Report Viewer window. To cancel a report while it is generating, click **Cancel** in the CRA Historical Reports main window or click the **Stop Loading** tool in the Report Viewer window.

When a report appears in the Report Viewer window, you can:

- Change the size of the display
- Move to different parts of the report
- Find specific text in the report
- Display information about particular groups

To exit the Report Viewer window, click the **Close** button on the title bar.

Related Topics

- Changing the Display Size, page 4-15
- Moving Through the Report, page 4-15
- Finding and Moving to Specific Text, page 4-16
- Displaying Information About Groups, page 4-17

Changing the Display Size

To change the size of the report display, click the Display Size drop-down arrow and choose the value that you want.

You can also select the value that appears in this field, enter a value between 25% and 400%, and press the **Enter** key.

Moving Through the Report

To make the most efficient use of system resources, the Cisco CRA Historical Reports client loads pages on demand as you move through the report. The Page Number field in the Report Viewer window shows the number of the currently displayed page. To its right, the Page Count field shows how many pages the report contains.

The Page Count field does not show the total number of pages until all pages of a report have been loaded. Instead, it shows the number of the currently displayed page followed by a plus sign (+) to indicate that the report contains additional pages.

You can move through a report one page at a time or jump to any specific page. Table 4-1 shows how to move through a report:

Table 4-1 Moving through a Report

To Make This Move When Viewing a Report	Perform This Action in the Report Viewer Window
Move forward one page	Click the **Go To Next Page** tool.
Move backward one page	Click the **Go To Previous Page** tool.
Move to the last page	Click the **Go To Last Page** tool.
Move to the first page	Click the **Go To First Page** tool.
Move to a specific page	Select the number that appears in the Page Number field, enter the page number that you want, and then press the **Enter** key.

Note Moving directly to the first page or last page in a long report can take a few minutes. To stop these move actions, click the **Stop Loading** tool in the Report Viewer window.

Related Topic

- Finding and Moving to Specific Text, page 4-16

Finding and Moving to Specific Text

To find and move to specific text in a report that appears in the Report Viewer window, follow these steps:

Procedure

Step 1 On the Report Viewer toolbar, click the **Search Text** tool.

The Search dialog box appears.

Step 2 In the Find What field, enter the text that you want to find, and then click **Find Next**.

The display moves to the next occurrence of the text that you entered.

You can continue to click **Find Next** to display subsequent occurrences of the same text.

Step 3 Click **Cancel** to close the Search dialog box.

Displaying Information About Groups

Most historical reports have a specific set of information that has been designated as a *group*. For example, a group may contain the names of agents, or a group may contain dates. A report displays information arranged by its group.

Table 4-2 shows the name of the group for each report.

Table 4-2 Historical Reports Group Names

Report Name	Group
Abandoned Call Detail Activity Report	Call Start Time
Agent Detail Report	Agent Name
Agent Login Logout Activity Report	Agent Name
Agent State Summary Report (by Agent)	Agent Name
Agent State Summary Report (by Interval)	Interval Start Time
Agent Summary Report	Agent Name
Call Custom Variables Report	—
Called Number Summary Activity Report	Called Number
Contact Service Queue Activity Report	Contact Service Queue Name
Contact Service Queue Activity Report (by CSQ)	Contact Service Queue Name
Contact Service Queue Activity Report (by Interval)	Interval Start Time
Contact Service Queue Service Level Report	—
Detailed Call by Call CCDR[1] Report	—
IVR[2] Application Performance Analysis Report	Application ID
IVR Traffic Analysis Report	Date
Priority Summary Activity Report	Call Priority
Skill Routing Activity Report	Skill Group

1. CCDR = Contact Call Detail Record
2. IVR = Interactive Voice Response

When you view a report, you can display information for any particular item in its group. For example, in the Agent Detail Report, you can display information for any single agent.

You display group information using the Group Tree. For many reports, you can also display group information directly from the charts that appear with the reports.

Related Topics

- Displaying Group Information Using the Group Tree, page 4-18
- Displaying Group Information from a Report Chart, page 4-19

Displaying Group Information Using the Group Tree

A Group Tree is a list of all group names available for a particular report. Most reports have a Group Tree.

To display the group tree for a report, follow these steps:

Procedure:

Step 1 Click the **Toggle Group Tree** tool on the Report Viewer toolbar.

The Preview pane appears, displaying a list of groups.

Step 2 To display information for a group in the Preview pane, click the name of the group.

The group information appears in a new pane called a Group Information pane. This pane has a tab that shows the name of the group.

If several Group Pane tabs appear, you can display the information that you want by clicking its tab.

To display the Group Tree when you are viewing information in a Group Information Pane, click the **Preview** tab.

Step 3 To close the Preview pane any time it is displayed, click the **Toggle Group Tree** tool.

To close a Group Information pane when it is displayed, click the **Close Current View** tool.

Displaying Group Information from a Report Chart

In many reports, moving the mouse pointer over information displayed in the charts generated with the reports causes the pointer to change to a magnifying glass. The magnifying glass indicates that you can display group information from that chart.

To display group information from a chart, follow these steps:

Procedure:

Step 1 Make sure that the mouse pointer has changed to a magnifying glass, and then double-click the group name or its associated data.

The Group Information pane appears, displaying information for the group.

Step 2 To return to the chart, click the **Preview** tab.

Step 3 To close a Group Information pane when it is displayed, click the **Close Current View** tool.

Printing Reports

You can print a report while viewing any part of the report. If you are viewing information in a Group Information Pane, only that information prints. The report prints on the default printer that has been designated for your computer.

To print a report, follow these steps:

Procedure

Step 1 In the CRA Historical Reports main window, choose the report settings that you want, and then click **View**.

The report appears in the Report Viewer window.

Step 2 Click the **Print** tool.

The Print dialog box appears.

Step 3 In the Print dialog box, choose the settings that you want.

Step 4 Click **OK**.

The Printing Records dialog box appears while the file is being printed and shows the progress of printing.

Exporting Reports

Exporting a report means saving the report in a file. You can specify the name and location of the file and the format in which the report is saved. After a report is exported to a file, you can view, print, and manipulate the data in the file with another program.

When you export a report, you can save it in any of the formats shown in Table 4-3.

Table 4-3 Formats for Exported Historical Reports

Format	Extension that the System Adds to the File Name	Description
Acrobat Format (PDF)	.pdf	Portable Document Format file that can be read with Adobe Acrobat Reader
Comma-separated values (CSV)	.csv	Comma-separated text file
Excel (XLS)	.xls	Microsoft Excel file
Rich Text (Exact) Format	.rtf	RTF file that can be opened with Microsoft Word
XML	.xml	Extensible Markup Language file

To export a report, follow these steps:

Procedure

Step 1 In the CRA Historical Reports main window, choose the report settings that you want, and then click **View**.

The report appears in the Report Viewer window.

Step 2 Click the **Export Report** tool.

The Export dialog box appears.

Step 3 Click the Format drop-down arrow, and then choose the format in which you want to save the report.

A series of dialog boxes appear. The specific dialog boxes depend on the format that you chose.

Step 4 Set the desired exporting options and specify the name and location for the export file by enter information in the dialog boxes that appear.

When you are finished, the system exports the report and displays the Exporting Records dialog box, which shows the progress of the export operation.

To cancel the export operation at any time, click **Cancel Exporting**.

CHAPTER 5

Scheduling Historical Reports

Scheduling a historical report means instructing the Cisco Customer Response Applications (CRA) Historical Reports client to automatically generate the report at some time in the future. Although you can schedule a report to generate once, the report scheduling function is particularly useful for preparing reports that you require regularly. For example, you can schedule an Agent Detail Report to generate every Monday at midnight and an Agent Summary Report to generate on the first Sunday of every month at noon.

When you schedule a report, you perform these general steps:

1. Choose general settings for the report, including the name of the report, whether to include charts, and whether to save (export) or print the report.
2. Choose detailed settings for the report, if necessary, including a sort method and a filter parameters.
3. Choose scheduling settings, including how often and when the report is generated.
4. Save the scheduling information.

The following sections include these topics:

Information in Scheduled Reports

Table 5-1 shows the types of schedules that you can specify for historical reports and the information that is contained in each type of report.

The time and date for data in scheduled reports is always the time and date of the Cisco CRA server.

Table 5-1 Historical Reports Schedules and Data

Schedule Type	Recurrence Options	Information Contained in the Report
Daily	• Every day (Sunday through Saturday) • Every weekday (Monday through Friday) • Every *n* days (for example, every 3 days) **Note** A report that is scheduled to recur every weekday will run every Tuesday through Saturday so that it can include information for Monday through Friday.	A daily report always contains data from 12:00 midnight (0000) to 11:59:59 p.m. (1159:59) for the day *before* the report runs. For example, a daily report that runs on Tuesday will contain data for the preceding Monday.
Weekly	• Every week on a certain day (for example, every Monday) • Every *n* weeks on a specific day (for example, every two weeks on Friday)	A weekly report always contains data from Sunday at 12:00 midnight (0000) to Saturday at 11:59:59 p.m. (1159:59) for the week before the report runs, regardless of the day of the week on which the report runs. For example, a weekly report that runs on Monday, on Wednesday, or on Friday will contain data for Sunday through Saturday of the previous week.

Table 5-1 Historical Reports Schedules and Data (continued)

Schedule Type	Recurrence Options	Information Contained in the Report
Monthly	• Every month on a specific date (for example, the 15th of every month) • Every month on a certain day (for example, the first Friday of every month) **Note** If a monthly report is scheduled to run on a date that does not occur in some months, for example the 30th or 31st, the report will run on the last day of a month that does not contain the date.	A monthly report always contains data from the first day of the previous month at 12:00 midnight (0000) to the last day of the previous month at 11:59:59 p.m. (1159:59). For example, a monthly report that runs on any day in February will contain data for all of January.
Once	Any single date and time that you specify	A report that runs once contains data for the date and time range that you specify.

Recommendations for Scheduling

When a scheduled report generates, it can use significant resources on the Cisco CRA server. To help keep the server running most efficiently, schedule reports to generate at times when the Cisco CRA server is least busy, for example, late at night or early in the morning.

The Scheduler

The CRA Historical Reports client includes a program called the Scheduler. A Scheduler resides on each client computer and performs these functions:

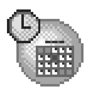
- Maintains information about each schedule, including when each schedule should execute and what information the scheduled report should contain
- Executes schedules at their scheduled times, based on the time and date of the CRA Historical Reports client computer

The Scheduler runs automatically and unattended in the background on the Cisco CRA Historical Reports client computer. It will not affect other activities that you perform on the client computer. The Scheduler should always be left running, even when you exit the CRA Historical Reports main window. If the Scheduler is not running when a schedule should execute, the schedule will not execute.

If a schedule does not execute because the Scheduler is not running, the Missed Report dialog box appears when the Scheduler restarts. For more information, see the "Handling Missed Schedules" section on page 5-17.

You can control the Scheduler using the Scheduler icon, shown in Figure 5-1. This icon appears in the status area on your Windows taskbar.

Figure 5-1 Scheduler Icon



To verify that the Scheduler is running, right-click the Scheduler icon and look at the Run Scheduler option in the Scheduler menu. If Run Scheduler is dimmed (that is, unavailable), the Scheduler is running.

To start the Scheduler, right-click the Scheduler icon and choose **Run Scheduler**. Or, choose **Start > Programs > Cisco CRA Historical Reports > Cisco CRA Historical Reports Scheduler.**

To stop the Scheduler, right-click the Scheduler icon and choose **Stop Scheduler**. The Scheduler remains loaded, but it will not execute schedules.

To exit the Scheduler, right-click the Scheduler icon and choose **Exit**. The scheduler unloads and will not execute schedules.

Note If you change the system time on the Cisco CRA Historical Reports client computer, stop and then restart the Scheduler that is running on that computer.

General Settings for Scheduled Reports

General settings for scheduled reports include:

- Name of the report to schedule
- Whether to include charts with the report
- Whether to print the report or export it to a file

You can return the report settings you choose for a scheduled report to their default values at any time by clicking **Reset** in the CRA Historical Reports main window.

If you have saved report settings in a Report Settings file, you can load the Report Settings file and use it as a basis for a scheduled report. See the "Saving and Loading Report Settings" section on page 4-8 for information about saving and loading a Report Settings file.

If you have already made settings for a report in this Cisco CRA Historical Reports session, any information that you entered in the general or detailed fields for that report appears in those areas when you schedule reports. In addition, if the report is set to occur once, date and time information that you entered when you set up the report appears in the Cisco CRA Historical Reports Schedule menu. You can use the information that appears in the general and detailed fields and in the Schedule menu as a basis for your scheduled report, or you can click **Reset** to return the report settings their default values.

Related Topics

- Choosing the Report to Schedule, page 5-6
- Including Charts with a Scheduled Report, page 5-6
- Choosing Whether to Print or Export a Scheduled Report, page 5-7

Choosing the Report to Schedule

To choose the report that you want to schedule, follow these steps:

Procedure

Step 1 In the Cisco CRA Historical Reports main window, click the **Schedule Future Reports, Including Repeat Reports** radio button.

Step 2 Click the **General** tab, if it is not selected already.

Step 3 Click the Report Type drop-down arrow to view a list of available reports, and then choose the report that you want to generate.

Now you can specify whether to include charts with the report, choose whether to print or export the report, and choose detailed report settings. You also must choose schedule settings before the schedule will execute.

Related Topics

- Including Charts with a Scheduled Report, page 5-6
- Choosing Whether to Print or Export a Scheduled Report, page 5-7
- Detailed Settings for Scheduled Reports, page 5-10
- Choosing Schedule Settings, page 5-11

Including Charts with a Scheduled Report

Each historical report can contain one or more charts that summarize information in the report. If you want to include charts with a scheduled report, follow these steps:

Procedure

Step 1 In the CRA Historical Reports main window, click the **Schedule Future Reports, Including Repeat Reports** radio button.

Step 2 Click the **General** tab, if it is not selected already.

Step 3 Check the **Include Charts in Report** check box.

If you do not want to include charts, uncheck this check box.

Now you can choose whether to print or export the report, and choose detailed report settings. You also must choose schedule settings before the schedule will execute.

Related Topics

- Choosing the Report to Schedule, page 5-6
- Choosing Whether to Print or Export a Scheduled Report, page 5-7
- Detailed Settings for Scheduled Reports, page 5-10
- Choosing Schedule Settings, page 5-11

Choosing Whether to Print or Export a Scheduled Report

When a schedule executes, the Cisco CRA Historical Reports client either prints the report or exports it (saves it in a file). After choosing this setting, you can choose detailed report settings. You also must choose schedule settings before the schedule will execute.

Related Topics

- Printing a Scheduled Report, page 5-7
- Exporting a Scheduled Report, page 5-8
- Detailed Settings for Scheduled Reports, page 5-10
- Choosing Schedule Settings, page 5-11

Printing a Scheduled Report

Scheduled reports print on the default printer that has been designated for your computer. To print a scheduled report when it generates, click the Export Type drop-down arrow in the CRA Historical Reports main window and choose Export to Printer.

Now you can choose detailed report settings. You also must choose schedule settings before the schedule will execute.

Related Topics

- Exporting a Scheduled Report, page 5-8
- Detailed Settings for Scheduled Reports, page 5-10
- Choosing Schedule Settings, page 5-11

Exporting a Scheduled Report

The Cisco CRA Historical Reports client saves scheduled reports in files. You can view, print, and manipulate the data in these files with other programs. Unless you have changed the defaultExportPath parameter in the hrcConfig.ini file, the Cisco CRA Historical Reports client stores these files on the client computer in the Cisco CRA Historical Reports\Reports directory, which is under the directory in which you installed the Cisco CRA Historical Reports system. (By default, the system installs in the Program Files directory.) By default, the client saves scheduled reports in a PDF (Portable Data Format) file. Also by default, the client gives saved reports a descriptive file name that indicates the name of the report, its language, its date and time of creation, the login identification of the user who scheduled it, its scheduled recurrence, its date range, and the format of the file. If desired, you can specify another format, location, and file name. (If you change the file name, the client automatically adds descriptive information to the new file name when it creates the file.)

When you specify that a generated report is to be saved, you can designate any of the formats shown in Table 5-2.

Table 5-2 Formats for Exported Historical Reports

Format	Extension that the System Adds to the File Name	Description
Acrobat Format (PDF)	.pdf	Portable Document Format file that can be read with Adobe Acrobat Reader
Comma-separated values (CSV)	.csv	Comma-separated text file
Excel (XLS)	.xls	Microsoft Excel file

Table 5-2 Formats for Exported Historical Reports (continued)

Format	Extension that the System Adds to the File Name	Description
Rich Text (Exact) Format	.rtf	RTF file that can be opened with Microsoft Word
XML	.xml	Extensible Markup Language file

To save a scheduled report in a file when the report runs, follow these steps:

Procedure

Step 1 Make sure that Export to File appears in the Export Type field in the CRA Historical Reports main window. If Export to File does not appear, click the Export Type drop-down arrow, and then choose Export to File from the list that appears.

Step 2 If you want to change the default format, location, or file name for exported files, click **Export Location**.

(The **Export Location** button appears as "**...**" in the window.)

The Save As dialog box appears. The Cisco CRA Historical Reports client will add information to the default file name shown in the File Name field when the report is generated.

Step 3 If you want, make changes in the Save As dialog box as follows:

- To change the location, use the Save In drop-down arrow, the Folder Name pane, or the Save In tools to specify the directory in which to save the exported report.
- To change the file name, enter the new name in the File Name field, or click the drop-down arrow and then choose it from the list of existing names. If you specify a file name that includes an extension shown in Table 5-2, the system will create a file in that format, regardless of the format that you select in the Save As field.
- To change the format, click the Save As Type drop-down arrow, and then choose the format in which you want to save the report.

Step 4 Click **Save**.

Now you can choose detailed report settings. You also must choose schedule settings before the schedule will execute.

Related Topics

- Printing a Scheduled Report, page 5-7
- Detailed Settings for Scheduled Reports, page 5-10
- Choosing Schedule Settings, page 5-11

Detailed Settings for Scheduled Reports

When you use detailed report settings, you can cause scheduled reports to include only specific information or to display information in a particular order. Detailed report settings include a sorting method and a filter parameter.

Detailed settings are optional. If you do not choose a detailed setting, the report will contain all relevant information presented in a default order.

To specify a sorting method and a filter parameter for a scheduled report, follow these steps:

Procedure

Step 1 In the Cisco CRA Historical Reports main window, click the **Generate and View Historical Reports** radio button.

Step 2 Click the **Detailed** tab.

Step 3 Choose detailed settings just as you do when you generate a report. See the "Detailed Report Settings" section on page 4-4 for complete instructions.

After choosing these settings, you must choose schedule settings before the schedule will execute.

Related Topics

- Detailed Report Settings, page 4-4
- Specifying a Sorting Method, page 4-6
- Specifying a Filter Parameter, page 4-6
- Choosing Schedule Settings, page 5-11

Choosing Schedule Settings

After you choose general and detailed settings for a report, you are ready to choose schedule settings. You can make changes to any of the report settings later if you want.

When you choose schedule settings, you specify:

- How often the schedule executes
- Date and time range of schedule recurrences (if the schedule is to execute more than once)

To choose schedule settings, follow these steps:

Procedure

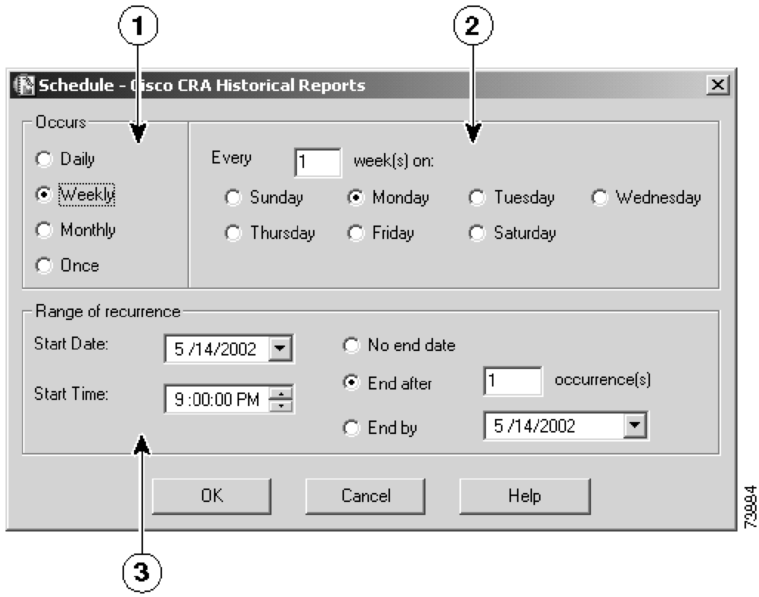
Step 1 In the Cisco CRA Historical Reports main window, click the **Schedule Future Reports**, **Including Repeat Reports** radio button.

Step 2 Click the **General** tab, if it is not selected already.

Step 3 Click **Change**.

The Cisco CRA Historical Reports Schedule window appears, as shown in Figure 5-2.

Figure 5-2 Cisco CRA Historical Reports Schedule Window



1	Occurrence options
2	Occurrence frequency
3	Range of recurrence options

Step 4 In the Occurs area, choose how often the schedule executes, as explained in Table 5-3.

Table 5-3 Scheduling Settings for Historical Reports

If You Want the Schedule to Execute This Often	Click This Radio Button	Then Perform These Actions
Every day	**Daily**	Click the **Every** radio button, and then enter **1** in the Every *n* Day(s) field.
Every specific number of days (for example, every 3 days)	**Daily**	Click the **Every** radio button, and then enter the number of days in the Every *n* Day(s) field.

Table 5-3 Scheduling Settings for Historical Reports (continued)

If You Want the Schedule to Execute This Often	Click This Radio Button	Then Perform These Actions
Every weekday (Monday through Friday) **Note** This report will run every Tuesday through Saturday so that it can include information for Monday through Friday.	**Daily**	Click the **Every weekday** radio button.
Every week on a certain day (for example, every week on Friday)	**Weekly**	Enter **1** in the Every *n* Week(s) On field, and then click the radio button for the desired day.
Every specific number of weeks on a certain day (for example, every 2 weeks on Monday)	**Weekly**	Enter the number of weeks in the Every *n* Weeks(s) On field, and then click the radio button for the desired day.
Every month on a specific date, (for example, the 15th of every month)	**Monthly**	Click the **Day *n* of calendar month** radio button. Then enter the date in this field, or you can click the drop-down arrow and click the scroll arrow to display the date that you want and then click the date. (If you enter a date that does not occur in some months, for example 30 or 31, the system will use the last day of the month for months that do not contain the date.)
Every month on a certain day (for example, the second Friday of every month, or the last Sunday of every month)	**Monthly**	Click the **The *number day* of calendar month** radio button. Click the drop-down arrow in the first field and choose the number of the day. Then click the drop-down arrow in the second field and choose the name of the day.
One time	**Once**	In the Report Start Date and Report End Date fields, specify the dates and times of the first and last data that you want to include in the report.

Step 5 Set Range of Recurrence options as follows:

For a schedule that is set to occur once, choose these settings in the Range of Recurrence area:

- In the Start Date field, specify the date that you want the schedule to execute.
- In the Start Time field, specify the time that you want the schedule to execute.

For a schedule that is set to occur daily, weekly, or monthly, make these settings in the Range of Recurrence area:

- In the Start Date field, specify the first date on or after which you want the schedule to generate.
- In the Start Time field, specify the time at which you want to execute the schedule when the schedule occurs.
- Specify how often you want the schedule to recur:
  - If you want the schedule to recur indefinitely, click the **No end date** radio button.
  - If you want the schedule to recur a specific number of times, click the **End after** radio button and enter the number of occurrences in the End After field.
  - If you want to specify the last date of a range during which you want the schedule to execute, click the **End by** radio button and enter the date in the End By field.

Step 6 Click **OK** to save your schedule settings.

Related Topics

- Information in Scheduled Reports, page 5-2
- General Settings for Scheduled Reports, page 5-5
- Detailed Settings for Scheduled Reports, page 5-10
- Saving a Schedule, page 5-15

Saving a Schedule

After choosing general, detailed, and schedule settings, you are ready to save the scheduling information. When you save scheduling information, the system stores the information you have specified as a schedule in the Scheduler database.

To save a schedule, follow these steps:

Procedure

Step 1 In the Cisco CRA Historical Reports main window, click **Schedule**.

The Report Scheduled Successfully dialog box appears.

Step 2 Click **OK**.

Related Topics

- Information in Scheduled Reports, page 5-2
- General Settings for Scheduled Reports, page 5-5
- Detailed Settings for Scheduled Reports, page 5-10
- Choosing Schedule Settings, page 5-11
- Viewing and Deleting Schedules, page 5-15

Viewing and Deleting Schedules

To see a list of schedules that are stored in the Scheduler, choose **Settings > Scheduler** from the Cisco CRA Historical Reports main window, or click the **Scheduler** tool. The Scheduled Reports window appears.

To exit the Scheduled Reports window, click **Close**.

The Scheduled Reports window lists each schedule stored in the Scheduler. It displays each schedule on a row and arranges information about each schedule in the columns shown in Table 5-4.

Table 5-4 Schedule Information

Column	Description
Report Name	Name of the scheduled report
Date Created	Date and time that the schedule was created
Recurrence Type	How often the schedule executes
Export Type	Printer, or format of the export file
Apps Server	IP address or host name of the Cisco CRA server that contains the Cisco CRA databases
Schedule Description	Detailed description of the schedule

To expand a column if you cannot see its entire contents, drag the left or right border next to its title.

Related Topics

- Arranging the Order of Display, page 5-16
- Deleting Schedules, page 5-17

Arranging the Order of Display

When you open the Scheduled Reports window, the window displays schedules in alphabetical order by Report Name. You can change the display order by arranging the schedules in ascending or descending order by the information displayed in any column.

To change the order of displayed schedules, click the desired column name. The schedule appears in ascending alphabetical or numerical order by the information in that column. Click the same column name again to display the information in descending order.

For example, to display the list of schedules in the order that each schedule was created, click the Date Created column title. Similarly, to display schedules by recurrence type, click the Recurrence Type column title.

Deleting Schedules

When you delete a schedule, the schedule is permanently removed from the Scheduler and will no longer be run.

To delete a schedule, follow these steps:

Procedure

Step 1 From the Scheduled Reports window, click anywhere in the row that contains the schedule you want to delete.

An arrow appears to the left of the name of the report, indicating that the schedule has been selected.

Step 2 Click **Delete**.

The Confirmation dialog box appears.

Step 3 Click **OK** to permanently delete the schedule.

If you decide not to delete the schedule, click **Cancel** instead.

Handling Missed Schedules

In order for a schedule to execute:

- The Cisco CRA server on which the Cisco CRA databases reside must be running.
- The computer on which Cisco CRA Historical Reports is installed must be running, and the Scheduler must be running on that computer.

If schedules do not execute because the server is not running, you can generate the reports manually when the server is running again.

If schedules do not execute because the Scheduler is not running, the Scheduler will identify missed schedules. When the Scheduler restarts, the client computer will display a dialog box that shows the number of missed schedules and asks if you want to execute missed schedules. Click **YES** to execute missed schedules, or click **NO** to continue without executing the schedules. If you click **Yes**, the reports that generate will depend on the parameters specified in the Sch.ini configuration file and the scheduling options for the reports.

For example, assume that you have set up a schedule to run daily, and that the schedule has no end date. In addition, assume that five of these schedules were missed, and that the Sch.ini file instructs the system to execute up to three missed daily schedules. When you execute missed schedules, the system will generate the three most recent daily reports.

As another example, assume that you have set up a schedule to run weekly and to end after four occurrences. In addition, assume that all of these schedules were missed, and that the Sch.ini file instructs the system to execute up to three missed weekly schedules. When you execute missed schedules, the system will generate three of the missed weekly reports. The first report will be the one that was scheduled to be the final report. The other reports will be the two previous reports.

Related Topic

- The SCH.ini Configuration File, page 2-13.

Administration and Troubleshooting

The following sections provide information to help you administrate and troubleshoot the Cisco Customer Response Applications (CRA) Historical Reports system.

The following sections include these topics:

- Log Files, page 6-1
- Troubleshooting, page 6-9

Log Files

The Cisco CRA Historical Reports system uses log files to record information about its activities. You can refer to the appropriate log file to help determine the cause of and solution for an error that occurs when

- You are generating, viewing, printing, or exporting a report
- The Scheduler is running a scheduled report

Some log files reside on the client system, and some log files reside on the Cisco CRA server. Table 6-1 shows general information about the log files.

Table 6-1 Cisco CRA Historical Reports Log Files

Log File	Contents	System Location	Reference
Historical Reports Client Log Files	Information related to generating, viewing, printing, and exporting reports	Client system	Historical Reports Client Log Files, page 6-3
Scheduler Log Files	Information related to Scheduler activities	Client system	Scheduler Log Files, page 6-3
Database Log File	Information related to retrieving information from the Cisco CRA databases	Cisco CRA server	Database Log File, page 6-6
Servlets Log File	Information about users who log in or attempt to log in to the Cisco CRA Historical Reports system	Cisco CRA server	Servlets Log File, page 6-8

Log Files on the Client System

The Cisco CRA Historical Reports client maintains a series of Historical Reports Client log files and two Scheduler log files. These log files reside on the Cisco CRA Historical Reports client system. The log files are:

- *System-name@session-no*_CiscoAppReports*N*.log—Contains information related to generating, viewing, printing, and exporting reports
- CiscoSch.log—Contains information related to activities of the Scheduler other than printing and exporting
- CiscoSchPrintExport.log—Contains information about printing and exporting activities of the Scheduler

Related Topics

- Historical Reports Client Log Files, page 6-3
- Scheduler Log Files, page 6-3
- Opening Log Files on the Client System, page 6-4
- Interpreting Log Files on the Client System, page 6-5

Historical Reports Client Log Files

The Historical Reports Client log files are named *System-name@session-no*_CiscoAppReports*N*.log. These files are stored in the Cisco CRA Historical Reports\logs directory, which is under the directory in which you installed the Cisco CRA Historical Reports client system. (By default, the system installs in the Program Files directory.)

If you are not running the Cisco CRA Historical Reports client under a terminal service session, *System-name* is the name of the system on which the client is installed, and @*session-no* is not included. If you are running the Cisco CRA Historical Reports client under a terminal service session, *System-name* is the name of the system from which you invoked terminal services, and @*session-no* is the session number assigned to the system under the terminal service session.

The system writes information related to generating, viewing, printing, and exporting reports to the current Historical Reports log file. When the system creates the first Historical Reports Client log file, the system replaces *N* in the file name with 0. When this file reaches the size specified in the hrcConfig.ini configuration file, the system creates a new Historical Reports Client log file. The system increases *N* in the new Historical Reports Client log file by 1. This process continues until the system creates as many log files as specified in the hrcConfig.ini configuration file. Then, the system begins overwriting the existing Historical Reports Client log files, starting with the oldest log file.

Related Topics

- The hrcConfig.ini Configuration File, page 2-10
- Opening Log Files on the Client System, page 6-4
- Interpreting Log Files on the Client System, page 6-5

Scheduler Log Files

The Cisco CRA Historical Reports Scheduler maintains two Scheduler log files:

- CiscoSch.log—Maintains information related to all Scheduler activities except printing and exporting
- CiscoSchPrintExport.log—Maintains information related to printing and exporting performed by the Scheduler

The Scheduler log files are stored in the Cisco CRA Historical Reports\Scheduler directory, which is under the directory in which you installed the Cisco CRA Historical Reports system. (By default, the system installs in the Program Files directory.)

Each Scheduler log file has a maximum size of 4 MB. When a Scheduler log file reaches this size, the system copies it to a backup file. The backup file has the same base name as the original file with the extension .bak. The system maintains one such backup file for each Scheduler log file. Each time a Scheduler log file reaches 4 MB in size, the system moves that information to the existing backup file, overwriting the information in the existing backup file.

Related Topics

- Opening Log Files on the Client System, page 6-4
- Interpreting Log Files on the Client System, page 6-5

Opening Log Files on the Client System

You open a Cisco CRA Historical Reports log file on the client system on which the log file is stored.

You can open log files from the Cisco CRA Historical Reports main window or by using a text editor. You can also open Scheduler log files from the Scheduler.

When you open a log file from the Cisco CRA Historical Reports main window or from the Scheduler, log information appears in a Notepad window. You can use the Notepad tools to move through the information in this window, to print the file, or to save it under another name. To exit a Notepad window, click the **Close** button on the Notepad menu bar.

To open a log file using another text editor, start the editor, then open the file. You can use the editor tools to move through the information in this window, to print the file, or to save it under another name.

To open any log file from the Cisco CRA Historical Reports main window, follow these steps:

Procedure

Step 1 Click **Help > Application Logs**.

Step 2 Navigate to the directory containing the log file that you want to open, if necessary, and double-click the file name that you want.

The file appears in a Notepad window.

To open a Scheduler log file from the Scheduler, follow these steps:

Procedure

Step 1 Right-click the Scheduler icon that appears in the status area on your Windows taskbar.

The Scheduler pop-up menu appears.

Step 2 Choose **View CiscoSch.log** or **View CiscoPrintExport.log**.

The file you choose appears in a Notepad window.

Interpreting Log Files on the Client System

Each log file on the Cisco CRA client system contains a series of entries. The entries describe each activity that occurs in the part of the system for which the file is maintaining information. Each entry includes the date and time at which the activity occurred and a description of the activity. This information is arranged in order of occurrence, with the most recent activity shown at the end of the file. The system numbers each line of information sequentially. A new line numbered 1 is created each time the Cisco CRA Historical Reports client is started.

Level of detail in log files depends on values you specify in configuration files. The level of detail of the entries in the Historical Reports client log files depends on the LogLevel value specified in the hrcConfig.ini configuration file. The level of detail of the entries in the Scheduler log files depends on the LogLevel value specified in the SCH.ini configuration file.

The information contained in the log files is designed to help you locate a problem, if one occurs. If the Cisco CRA Historical Reports client experiences an error or a problem, open the appropriate log file and locate the entry that describes the activity that was taking place when the error occurred.

Related Topics

- The hrcConfig.ini Configuration File, page 2-10
- The SCH.ini Configuration File, page 2-13

Log Files on the Cisco CRA Server

The Cisco CRA server contains these log files:

- Database log file—Contains information related to retrieving information from the Cisco CRA database. You create this file as needed, and give it the name of your choice.
- Jvm.stdout—Includes information about every user who logs in, or attempts to log in, to the Cisco CRA Historical Reports client.

Related Topics

- Database Log File, page 6-6
- Servlets Log File, page 6-8

Database Log File

The Database log file resides on the Cisco CRA server. This file logs information related to retrieving information from the Cisco CRA databases. To help the server run most efficiently, the database log is turned off by default. If, when you try to generate a historical report, you receive an error message that is related to a Cisco CRA database, you can turn on the database log to capture information for troubleshooting. Then you can provide that log file to the Cisco Technical Assistance Center for assistance with correcting the problem.

To turn on the database log and capture information in a log file, follow these steps:

Procedure

Step 1 From the Cisco CRA server, choose **Start > Run**.

The Run dialog box appears.

Step 2 In the Open field, enter **cmd**, and then click **OK**.

A Command window appears.

Step 3 At the command prompt, type **cd program files\wfavvid,** and then press the **Enter** key.

(If the CRA system is installed in another directory, replace **program files** with that directory name.)

Step 4 Type the following command to start database logging:

setsqllogging *dbusername dbpassword* **on**

Replace *dbusername* with the login name for the Cisco CRA databases, and replace *dbpassword* with the login password for the databases.

If you want to exit the Command window now, type **exit**. The database log will continue to run.

Step 5 From the Cisco CRA Historical Reports client, try again to generate the report that caused the problem.

Step 6 From the Cisco CRA server, return to the wfavvid directory in a Command window as described in Steps 1 to 3.

Step 7 At the command prompt, type the following command:

getlogging *dbusername dbpassword* **>>** *filename*

Replace *dbusername* with the login name for the Cisco CRA databases, replace *dbpassword* with the login password for the databases, and replace *filename* with the name of a file in which to save the database log information.

Step 8 Type the following command to stop the database log.

setsqllogging *dbusername dbpassword* **off**

Replace *dbusername* with the login name for the Cisco CRA databases, and replace *dbpassword* with the login password for the databases.

Step 9 If you have not yet exited the Command window, type **exit** at the command prompt.

The file with the name you specified in Step 7 is the database log file. You can forward this file to the Cisco Technical Assistance Center for assistance in resolving the problem.

Servlets Log File

The servlets log file, jvm.stdout, resides on the Cisco CRA server in the wfavvid\tomcat directory, which is under the directory in which you installed the Cisco CRA system. (By default, the system installs in the Program Files directory.)

This file logs information from each servlet running on the Cisco CRA server, including the histRepClientsServlet servlet. This servlet provides the following information for every user who attempts to log in to the Cisco CRA Historical Reports system:

- IP address of the client computer from which the login was attempted.
- Date and time of the login attempt.
- Whether the login attempt was successful.

You open the jvm.stdout log file on the Cisco CRA server on which the log file is stored. To open this file in a Notepad window, navigate to the directory containing the file, and then double-click the file name. To open this file using another text editor, start the editor, then open the file. You can use the editor tools to move through the information in this window, to print the file, or to save it under another name.

There is no maximum size for the jvm.stdout file. When new information is generated, it is appended to the existing jfm.stdout file. To find information relating to logging in to the Cisco CRA Historical Reports system, open this file and search for histRepClientsServlet.

Troubleshooting

This section describes errors or unexpected results that you may encounter with the Cisco CRA Historical Reports system. It includes possible causes and recommended actions, where appropriate.

Symptom A report that has been exported in Portable Data Format (PDF) does not print in landscape orientation.

Possible Cause Limitation of PDF viewer.

Recommended Action Print the document in portrait orientation.

Symptom Charts do not appear properly in a report that has been exported in Microsoft Excel format.

Possible Cause Limitation of the export function.

Recommended Action Do not include charts in reports that are exported in Microsoft Excel format.

Symptom Some records are truncated in a report that has been exported in Microsoft Excel format.

Possible Cause Limitation of Microsoft Excel. Excel 7.0 (95) is limited to reports with 16,384 records. Excel 8.0 (97) and Excel 2000 are limited to reports with 65,536 records. Records that exceed these limits are truncated in the Excel file.

Recommended Action Be aware of the size of the report when exporting it in Microsoft Excel format.

Symptom Agent names overwrite each other on charts that appear with the Agent Detail Report, the Agent Login Logout Activity Report, or the Agent Summary Report.

Possible Cause The report contains information for more than 70 agents.

Recommended Action Do not include charts with the report if you are generating information for more than 70 agents, or use filter parameters to limit the report to information for no more than 70 agents.

Symptom A report that has been exported in Rich Text Format (RTF) includes tabular report headings on pages that contain charts.

Possible Cause Limitation of the export function.

Symptom The client system is unable to connect to the Cisco CRA server. The Historical Reports Client log file shows "Not associated with a trusted connection."

Possible Cause SQL server is configured with a Windows NT Only security setting.

Recommended Action Choose **Start > Programs > Microsoft SQL Server** ***N*** **> Enterprise Manager** (where *N* is a version number). Double-click **Microsoft SQL Servers**. Double-click **SQL Server Group**. From the SQL Server group, right-click the name of the server on which the Cisco CRA databases reside. Choose **Properties**. Click the **Security** tab. **Click the SQL Server and Windows NT** radio button. Click **OK**.

Symptom When you try to open the CiscoSch.log log file with the Windows 98 WordPad editor, you receive a message that the file is in use by another application.

Possible Cause You have previously tried to open the file with Notepad, but the file is too large for Notepad. WordPad cannot open a file that has already been opened in Write/Read mode by another application.

Recommended Action Copy the CiscoSch.log file to a new file (for example, CiscoSch_new.log), and use WordPad to open the new file.

Symptom The Scheduler icon does not appear on the terminal service client when you run the Cisco CRA Historical Reports client under a terminal service session.

Possible Cause By design, only one instance of the Scheduler can run on a Cisco CRA Historical Reports client system.

Symptom Schedules for generating reports do not execute at the expected time.

Possible Cause The Cisco CRA Historical Reports client system clock has been changed but the Scheduler has not been restarted.

Recommended Action Stop and restart the Scheduler. (See "The Scheduler" section on page 5-3.)

Symptom When running the Cisco CRA Historical Reports client on a computer with an English version of Windows for which the system locale has been set to German, the Search dialog box and the **Preview** tab on the Report Viewer still appear in English.

Possible Cause Limitation of the Report Viewer.

Recommended Action Install a German version of the operating system.

Symptom The Exporting Records dialog box does not appear as expected when a scheduled report is exported.

Possible Cause This dialog box appears only after the client system fetches the required database records. For a large report, fetching records can take a long time.

Recommended Action Wait for the export operation to complete. Or, check the CiscoSchPrintExport.log log file. If the report is being exported, the following message will appear at or near the end of the file: “Note: Getting report contents may take considerable amount of time based on the size of the contents. . . . Pls wait . . . .”

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