



Configuring the System for ART Reports

This chapter provides administrators with procedures on how to configure information that is not in CDRs or CMRs but is required for various reports. The chapter also includes information to help you understand the report output.



Note

The ART administrator sets the parameters for configuring the ART function.



Caution

Use ART only during initial installation or during off-peak hours. Otherwise, data collection and ad-hoc reports could affect the Cisco CallManager performance, and call processing may be adversely affected.

Configuring ART System Parameters

In addition to all reports described in previous chapters, the Administrator can configure the following system parameters for reports:

- Call Duration
- Time of Day
- Voice Quality

- ART Database Alert
- CDR Database Alert
- Manual Database Purge
- Daily Scheduler
- Weekly Scheduler
- Monthly Scheduler
- Admin Rights
- Mail Parameters
- System Preferences
- Pregeneration/Mailing
- Event Log
- Error Log
- Define QOS
- Gateway Configuration
- Notification Limits

Configuring Rating Engine Parameters

Use the following call rating parameters to set the computation of call charges:

- Duration
- Time of Day
- Voice Quality

You can access these screens from the ART main menu by choosing one of the following selections:

- **Rating Engine > Duration**
- **Rating Engine > Time of Day**
- **Rating Engine > Voice Quality**

**Note**

Changes made in these screens reflect what ART loads from the CDRs and CMRs.

Configuring Call Duration Parameters

Use this rating parameter screen to set the charging block and corresponding base charge.

Changes made in this screen reflect what ART loads from the CDRs and CMRs.

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Procedure

Use the following procedure to change the Call Duration parameters.

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- Step 1** Choose **System Configuration > Rating Engine > Duration** from the ART main menu.
- Step 2** The rating table requires the following values:
- From (seconds)—starting value of the block. The default is **0** (the least possible duration).
 - To (seconds)—the end value of the block. The default is **6**.
 - Base charge/block—specifies the rate for the block. The default is **0**.
- Step 3** Click **Update**—to save the values you changed on the screen.
- Step 4** Click **Cancel**—to cancel the current entries and reload the values from the database.
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Configuring Time of Day Parameters

Use this rating parameter screen to set time blocks and corresponding multiplications factors. This screen allows you to add and delete additional time blocks or to change the multiplication factors for rating a call.

Changes made in this screen reflect what ART loads from the CDRs and CMRs.

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Procedure

Use the following procedure to change the Time of Day parameters.

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- Step 1** Choose **System Configuration > Rating Engine > Time of Day** from the ART main menu.
- Step 2** The rating table requires the following values:
- From (hh:mm:ss)—starting value of the time block. The default is **00:00:00**.
 - To (hh:mm:ss)—the end value of the time block. The default is **23:59:59**.
 - Multiplication factor—specifies the factor by which the base charge is multiplied if calls are made during this time block. The default is **0** (range can be from 0.00 to 999.99).
- Step 3** Click **Insert**—to add extra rows.
- Step 4** Click **Update**—to save the values you changed on the screen.
- Step 5** Click **Delete**—to delete rows by checking any of the check boxes from the table.
- Step 6** Click **Cancel**—to cancel the current entries and reload the values from the database.
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Configuring Voice Quality Parameters

This rating parameter screen sets the multiplication factors for various voice quality categories (Good, Acceptable, Fair, and Poor).

Changes made in this screen reflect what ART loads from the CDRs and CMRs.

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Procedure

Use the following procedure to change the Voice Quality parameters. ART requires values be specified for all voice quality categories: Good, Acceptable, Fair, and Poor.

Step 1 Choose **System Configuration > Rating Engine > Voice Quality** from the ART main menu.

Voice Quality Table—contains two columns:

Voice Quality Category—a noneditable field with four predefined QOS values: Good, Acceptable, Fair, and Poor.

Multiplication factor—the factor by which the charge for each call is multiplied for the quality received. Default is **1**.

Step 2 Enter the Multiplication factor.

Step 3 Click **Update**—to save the values you changed.

Step 4 Click **Cancel**—to cancel the current entries and reloads the values from the database.

Configuring ART Database Alerts

Use this procedure to set the conditions for database size alert for the ART database. You must specify the maximum number of records in the billing table. Specify the threshold for database alert as a percentage of the maximum number of records in the billing table.

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Procedure

To configure ART Database Alerts, perform the following steps:

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- Step 1** Choose **System Configuration > Database > ART Database Alert** from the ART main menu.
 - Step 2** Maximum number of records in Billing Table—specify the maximum number of records in the billing table. The default is **2000000**.
 - Step 3** Notify users when number of rows reaches—specify the percentage of the maximum number of records at which alert mails must be sent. The default is **80%**.
 - Step 4** Mail to Administrator—this check box, checked by default, indicates whether the ART administrators must be notified when alerts are generated.
 - Step 5** Click **To**—opens another window from which you can select mail ids. Alternatively, enter mail IDs in the text box next to this button.
 - Step 6** Click **Cc**—opens another window from which you can select mail IDs. Alternatively, enter mail ids in the text box next to this button.
 - Step 7** Enter Mail Subject—to enter the subject of the alert message.
 - Step 8** Mail Message—a multiline text box where you can set the content of the mail.

- Step 9** Click **Update**—to save the values you changed on the screen.
- Step 10** Click **Cancel**—to cancel the current entries and reloads the values from the database.
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Configuring CDR Database Alerts

Use this procedure to set the conditions for database size alert for the CCMdatabase. Specify the threshold for database alert as a percentage of the maximum number of records in the CDR table, which is two million CDR records.



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Procedure

To configure CDR Database Alerts, perform the following procedures:

- Step 1** Choose **System Configuration > Database > CDR Database Alert** from the ART main menu.
- Step 2** Maximum number of records in CDR Table—specify the maximum number of records in the CDR table (the maximum is 2000000).
- Step 3** Notify users when number of rows reaches—specify the percentage of the maximum number of CDR records at which alert mails must be sent. The default is **80%**.
- Step 4** Mail to Administrator—this check box, checked by default, indicates whether the ART administrators must be notified when alerts are generated.
- Step 5** Click **To**—opens another window from which you can select mail ids. Alternatively, a user can enter mail IDs in the text box placed next to this button.
- Step 6** Click **Cc**—opens another window from which you can select mail IDs. Alternatively, a user can enter mail ids in the text box placed next to this button.
- Step 7** Enter Mail Subject—text box for entering the subject of the alert message.

- Step 8** Mail Message—a multiline text box where you can set the content of the mail.
- Step 9** Click **Update**—to save the values you changed on the screen.
- Step 10** Click **Cancel**—to cancel the current entries and reload the values from the database.
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Configuring Manual Database Purge

Use this procedure to specify the purging condition for the billing database.



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Procedure

To configure Manual Database Purge, perform the following steps:

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- Step 1** Choose **System Configuration > Database > Manual Database Purge** from the ART main menu.
- Step 2** Select Database—choose **ART** or **CCM**.
- Step 3** Select Table—choose the table from which the records are to be purged.
- Step 4** Table Information—click this button to open a new screen that shows all the tables for which manual purge is permitted. It shows the number of records and the date of the latest and oldest record in that table.
- Step 5** Delete all the records older than—enter the date prior to which all records are to be purged.

- Step 6** Click **Purge**—to purge all records in the system according to the specifications you set.



Note You receive a warning message telling you that you are about to delete records. You cannot roll back the changes.

- Step 7** Click **Cancel**—to cancel the current entries and reload the values from the database.
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Configuring the Daily Scheduler

Use this procedure to take input for jobs scheduled on a daily basis. You can set the time for generation of daily reports.

Specify all times in hh:mm format.



Caution

Set the Daily Scheduler for off-peak hours. Otherwise, ad-hoc reports could affect the Cisco CallManager performance, and call processing may be adversely affected.

Procedure

To configure the Daily Scheduler, perform the following steps:

- Step 1** Choose **System Configuration > Scheduler > Daily** from the ART main menu.
- Step 2** Choose a Time for each Process (required):

Daily Report Generation—choose a time when auto-generation of reports must occur. The default value is **00:00**. The life of a report specifies the number of days after which a pregenerated report would be deleted.

Step 3 Click **Update**—to save the values you changed.



Note The new parameters take effect at midnight the following day.

Step 4 Click **Cancel**—to cancel the current entries and reload the values from the database.

Configuring the Weekly Scheduler

Use this procedure to set the date and time at which jobs scheduled on a weekly basis execute. The default day is **Sunday**, and the default time is **00:00**.

Specify all times in hh:mm format.



Caution

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Procedure

To configure the Weekly Scheduler, perform the following steps:

Step 1 Choose **System Configuration > Scheduler > Weekly** from the ART main menu.

Step 2 Choose a Day of Week and Time for the following Process (required):

Weekly Report Generation—choose a day and time when auto-generation of weekly reports must occur.

Step 3 Click **Update**—to save the values you changed.



Note The new parameters take effect at midnight the following day.

Step 4 Click **Cancel**—to cancel the current entries and reload the values from the database.

Configuring the Monthly Scheduler

Use this procedure to set the date and time at which monthly jobs execute. If the day is set as 29/30/31 and if the month does not have this day, the report generates on the last day of the month. The default day is the first day of the month, and the default time is **00:00**.

Specify all times in hh:mm format.



Caution

Set the Monthly Scheduler for off-peak hours. Otherwise, data collection and ad-hoc reports could affect the Cisco CallManager performance, and call processing may be adversely affected.

Procedure

To configure the Monthly Scheduler, perform the following steps:

Step 1 Choose **System Configuration > Scheduler > Monthly** from the ART main menu.

Step 2 Choose a Day of Week and Time for the following Process (required):

Monthly Bill Generation—Choose a day and time when auto-generation of monthly bills must occur.

Other Monthly Reports—Choose a day and time when auto-generation of other reports must occur.

Step 3 Click **Update**—to save the values you changed.



Note The new parameters takes effect at midnight the following day.

Step 4 Click **Cancel**—to cancel the current entries and reload the values from the database.

Configuring System Parameters

You can set the following system parameters:

- Admin Rights
- Mail Parameters
- System Preferences
- Pregeneration/Mailing

Configuring Admin Rights

Use this procedure to grant or revoke ART administrator rights.



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Procedure

To configure Admin Rights, perform the following steps:

Step 1 Choose **System > System Parameters > Admin Rights** from the ART main menu.

- Step 2** Type Name or Select From List—enter a name of the user for whom rights are granted or revoked.
Alternatively, choose a name from the List Of Users or List of Admins boxes in Steps 3 and 4.
- Step 3** Click a name in the List of Users—choose from this list of all employees in the organization for whom you can grant admin rights.
- Step 4** Click a name in the List of Admins—choose from this list of all ART Administrators from whom you can revoke admin rights.
- Step 5** Click **Update**—to save the values you changed.
- Step 6** Click **Cancel**—to cancel the current entries and reload the values from the database.
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Configuring Mail Parameters

Use this procedure to specify the mail parameters for the ART administrator.



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Procedure

To configure Mail parameters, perform the following steps:

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- Step 1** Choose **System > System Parameters > Mail Parameters** from the ART main menu.
- Step 2** Type the Mail ID—enter the Mail ID for ARTAdmin.
- Step 3** Type the Password—enter the password for the ARTAdmin Mail ID.



Note ART does not authenticate the user ID and password. Disable authentication on the mail server or enter a valid user ID and password.

- Step 4** Type the Password again—enter the same password from Step 3 to confirm.
- Step 5** Type the Mail ID—enter the Mail ID for ARTAdmin.
- Step 6** Type the Mail Domain—enter the mail domain.
- Step 7** Type the Mail Server IP—enter the Mail Server IP address.
- Step 8** Click **Update**—to save the values you changed on the screen.
- Step 9** Click **Cancel**—to cancel the current entries and reload the values from the database.
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Configuring System Preferences

Use this procedure to specify values for system parameters, including the following parameters:

- ErrorLog file size
- Toll free numbers
- Dial plan
- Session timeout
- Error recycling
- Digits in internal number
- LDAP parameters in the ART ini file



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Procedure

To configure System Preferences, perform the following steps:

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- Step 1** Choose **System > System Parameters > System Preferences** from the ART main menu.
 - Step 2** Choose a parameter from the list.
 - Step 3** Enter a value.
An explanation for each parameter value displays below the value box.
 - Step 4** Click **Update**—to save the values you changed on the screen.
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Configuring Pregeneration/Mailing

Use this procedure to configure pregeneration and mailing of reports. This option gives the user the functionality to control the database alerts mailing, QOS notification, and Charge Limit Notifications.

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Procedure

To configure Pregeneration/Mailing, perform the following steps:

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- Step 1** Choose **System > System Parameters > Pregeneration/Mailing** from the ART main menu.
 - Step 2** Click an option to Enable or Disable.
The value box displays the default.

- Step 3** Choose **Enable** or **Disable** from the drop-down menu, if you want to change the default.
- Step 4** Click **Update**—to save the values you changed on the screen.
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Configuring the Daily CDR Load Process

The CDR Load screen allows you to specify the time for execution of the Loader process. You can specify the following parameters for the loader execution:

- Start time
- Intervals between two loader executions
- Duration

You can also specify the time range for the uninhibited run of the loader. The default time is midnight, frequency is every 24 hours, and duration is 10 minutes.

The default setting for an uninhibited load is midnight to 5:00 a.m.

Procedure

To configure the CDR Load Process time, perform the following steps:

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- Step 1** Load CDR & CMR At—enter the time at which the CDRs and CMRs must be loaded.
- Step 2** Loading Interval—enter the interval in **hh:mm** format.
- Step 3** Loading Duration—enter the duration for each loader run in minutes.
- Step 4** From Time—enter the start time to begin the uninhibited run of the loader.
- Step 5** To Time—enter the stop time to halt the uninhibited run of the loader.
- Step 6** Click **Update**—to save the values you changed on the screen.
- Step 7** Click **Cancel**—to return to the ART main screen.
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Configuring Event Logs

The Event Log is a report on the status of the events initiated by the ART scheduler. The report shows when the task started, completed successfully, or is in progress.

Use this procedure to configure the Event Log report.

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Procedure

To configure the Event Log report, perform the following steps:

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- Step 1** Choose **System > Log Screens > Event Log** from the ART main menu.
 - Step 2** Select Jobs—click Daily, Weekly, or Monthly.
 - Step 3** List of Jobs—click the task on which a report is required.
 - Step 4** Click **Add**—to add a task to the report list.
 - Step 5** Click **Add All**—to receive reports on all the tasks.
 - Step 6** Click **Remove** to remove a task.
 - Step 7** Click **Remove All**—to remove all tasks you placed in the report list.
 - Step 8** Select Status—click on the status of the jobs in the report: Complete, InProgress, or Unsuccessful.
 - Step 9** Choose a From Date and To Date
 - Step 10** Click **OK**—to generate the event log report.
 - Step 11** Click **Close**—to return to the ART main screen.
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Configuring Error Logs

The Error Log report shows the records logged into the Error Log table.

Use this procedure to configure the Error Log report.

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Procedure

To configure the Error Log report, perform the following steps:

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- Step 1** Choose **System > Log Screens > Error Log** from the ART main menu.
 - Step 2** List of Modules—click to choose modules from the list.
 - Step 3** Selected Modules—click a task on which a report is required.
 - Step 4** Click **Add**—to add a module name to the “Selected Modules” list.
 - Step 5** Click **Add All**—to add all module names in the list.
 - Step 6** Click **Remove**—to remove a module name.
 - Step 7** Click **Remove All**—to remove all modules from the “Selected Modules” list.
 - Step 8** List of Users—click **Loader**.
 - Step 9** Choose a date range.
 - Step 10** Click **OK**—to generate the error log report.
 - Step 11** Click **Close**—to return to the ART main screen.
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Configuring QOS Parameters

Use this procedure to specify the rules for classifying a call into the various voice quality categories: Good, Acceptable, Fair, or Poor. You can specify more than one rule for each Voice Quality Category; however, specify at least one rule for each Voice Quality Category.

**Note**

You can enter NA or Infinity to ignore the values of a parameter.

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Procedure

To configure QOS parameters, perform the following steps:

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- Step 1** Choose **System Configuration > Define QOS** from the ART main menu.
 - Step 2** Lost Packets %—(required) enter the lower limit and upper limit for the Lost Packets as a percentage.
 - Step 3** Jitter (ms)—(required) enter the lower and upper limit for Jitter.
 - Step 4** Latency (ms)—enter the lower and upper limit for Jitter (mandatory field).
 - Step 5** Voice Quality—(required) click the drop-down arrow to choose the voice quality category from four predefined QOS values: Good, Acceptable, Fair, and Poor.
 - Step 6** Click **Insert**—to add extra rows.
 - Step 7** Click **Update**—to save the values you changed on the screen.
 - Step 8** Click **Delete**—to delete rows by checking any of the check boxes from the table.
 - Step 9** Click **Cancel**—to cancel the current entries and reload the values from the database.
 - Step 10** Click **Restore Defaults**—to load the default QOS definitions.
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Configuring Gateways

Use this procedure to specify the gateway configurations, such as name, IP address, area codes attached, and location of each gateway. ART uses this information for call classification.



Caution

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Procedure

To configure Gateways, perform the following steps:



Note

All fields require an entry.

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- Step 1** Choose **System Configuration > Gateway Configuration** from the ART main menu.
- Step 2** Gateway Information Table—the table has four columns:
- Name—enter the name of the gateway.
 - IP Address—enter the IP address of the gateway.
 - Area Codes—enter the area codes attached with the gateway (separate multiple values with commas).
 - Location—enter the location of the gateway.
The left side of the table has check boxes attached to each row. Click the box when updating or deleting a gateway.
- Step 3** Click **Insert**—to add extra rows.
- Step 4** Click **Update**—to save the values you changed on the screen.
- Step 5** Click **Delete**—to delete rows by checking any of the check boxes from the table.
- Step 6** Click **Cancel**—to cancel the current entries and reload the values from the database.
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Configuring the Set Limits For Notification Parameters

Use this screen to set the conditions for

- QOS parameters
- Daily charge limit for users

The ART administrator receives notification if

- The percentage of good (QOS) calls falls below the limit specified
- The percentage of poor (QOS) calls is more than the limit specified

ART sends mail to a manager when one of the manager's direct reports exceeds the specified limit for the user's daily charge.



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Procedure

To configure Set Limits for Notification parameters, perform the following steps:

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- Step 1** Choose **System Configuration > Notification Limits >** from the ART main menu.
- Step 2** Daily QOS Parameters
- When Good Calls are less than—(required) enter a percentage or accept the default of **20%**.
- When Poor Calls are greater than—(required) enter a percentage or accept the default of **30%**.
- Step 3** Daily Charge Limit
- For a user—(required) enter the charge limit per day for any user. The default value for the daily charge limit is **200**.

■ Configuring the Set Limits For Notification Parameters

- Step 4** Click **Update**—to save the values you changed.
- Step 5** Click **Cancel**—to cancel the current entries and reload the values from the database.
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