



Release Notes for Administrative Reporting Tool for Release 1.1 (1)

August 2, 2001

These release notes describe the new features for the Cisco Administrative Reporting Tool (ART) Release 1.1(1).

Use these release notes in conjunction with the *Administrative Reporting Tool User Guide for Release 1.1(1)* document, located on Cisco Connection Online (CCO) at

http://www.cisco.com/univercd/cc/td/doc/product/voice/sw_ap_to/admin/index.htm

Access the latest software upgrades and release notes for Administrative Reporting Tool Release 1.1(1) and Cisco CallManager 3.1(1) on Cisco Connection Online (CCO) at

<http://www.cisco.com/cgi-bin/tablebuild.pl/callmgr>

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Introduction

ART 1.1(1), a web-based application, provides information regarding voice quality and generates reports on system performance and reports on utilization such as Gateway, RouteGroup, RouteList, RoutePattern, VoiceMail and ConferenceBridge utilization. ART provides the following reports:

- Quality of service
- Traffic details
- User call details
- Billing details
- Gateway details
- Call detail records
- CTI port reports
- Conference bridge reports
- Voice mail reports
- Device Reports (has all the utilization reports)

System Requirements

The following specifications apply to ART:

- ART Release 1.1(1) is compatible with Cisco CallManager Release 3.1(1).
- Make sure ART is installed on the Cisco CallManager with the primary publisher database.
- The ART application uses approximately 42 MB of disk space for the executable and the online documentation.
- ART is designed to work for an enterprise with a maximum of two million CDRs and a maximum of two million records in the ART database. If the size of the CDR database exceeds the limits, the performance of ART is adversely impacted.
- The peak size of the ART database contains 1.5 GB.
- The ART application requires no maintenance other than possible upgrades when Cisco CallManager is upgraded.
- System administrators, managers, and users have access to ART. The system administrators can also access ART directly from the server machine.
- The system administrators, managers, or users can access ART by typing the URL as: "<server name>/art/Logon.jsp" where server name is the name/ipaddress of the server where ART is installed. The system administrators can also access ART directly from the Server machine
- The client machines can be running Microsoft Windows OS.
- The database is Structured Query Language (SQL) server, Version 7.0.
- ART uses StyleReport Pro for report generation and displays reports in PDF form using Adobe Acrobat Reader.
- The DialPlan for ART can be customized.

Determining the Software Version

If ART Release 1.1(1) is already installed, click **Details** on the main ART window. The following information displays:

- Cisco CallManager Administrative Reporting Tool version
- Database information

If ART is not installed, right click the install executable for ART (AdministrativeReportingTool.exe); choose **Properties > Version >Item Name** and **Product Version** below **Item Name**.

Related Documentation

The following list shows related documentation for ART Release 1.1(1).

- [Administrative Reporting Tool User Guide for Release 1.1\(1\)](#)
- [Cisco CallManager Administration Guide](#)

New and Changed Information

New Software Features for Release 1.1(1)

ART Release 1.1(1) includes the following feature additions or changes:

Call Report by Number of Calls

Use this report to view the users who make the most calls and the destinations called most often.

Managers have access to the details for calls made from their departments while administrators can generate the report for the entire organization. You can schedule the report for auto generation on a daily and monthly basis.

Traffic Report Based on Extension

This report provides the traffic pattern for one or more selected extensions based on call types and the date range. The report shows the details of calls grouped by the selected call types. It generates reports on hourly, day-of-the-week and day-of-the-month basis. When more than one extension is selected, the report shows cumulative sum for all these extensions.

CDR Search on Gateways

This report shows the details of CDR records from the Cisco CallManager database sorted on gateways. The user interface allows the administrator to select the gateways based on the gateway types or on route pattern/list /group to which it belongs.

QoS Detail

QoS detail reports on the voice quality grades achieved for calls. Administrators use this to inspect the performance of the Cisco CallManager for various manager groups or for the entire organization.

Gateway Detail

Gateway details report provides information on the performance of the various gateways in the enterprise. Administrators can select the gateways based on the gateway types or on route pattern /list /group it belongs to.

Gateway Utilization Report

This report allows you to get the gateway utilization information for the gateways selected in the specified date range. The report shows a graphical pattern on gateway utilization. The administrator can generate reports on hourly, day-of-the-week, and day-of-the-month basis. The report can be scheduled for auto generation on a weekly basis.

Route Pattern Utilization Report

This report allows you to get the route pattern utilization information in the specified date range. The report shows a graphical pattern on route pattern utilization. The administrator can generate reports on hourly, day-of-the-week, and day-of-the-month basis. The report can be scheduled for auto generation on a weekly basis.

Route List Utilization Report

This report allows you to get the route list utilization information in the specified date range. The report shows a graphical pattern on list utilization. The administrator can generate reports on hourly, day of the week and day of the month basis. The report can be scheduled for auto generation on a weekly basis.

Route Group Utilization Report

This report allows you to get the route group utilization information in the specified date range. The report shows a graphical pattern on group utilization. The administrator can generate reports on hourly, day of the week, and day of the month basis.

QoS Parameter Report on Gateway

This report allows you to view records based on QoS parameters of jitter, latency, and lost packets. The user can select QoS parameter range, gateways, and date range, and the report contains one graph for each of the gateways selected. Each graph in the report gives statistics on the percentage of the calls that lie within the specified QoS parameter range and date range, which used that gateway. It generates reports on hourly, day-of-the-week and day-of-the-month basis.

QoS Parameter Report on Call Type

This report allows you to view records based on QoS parameters of jitter, latency, and lost packets. The user can select QoS parameter range, call types, and date range, and the report contains one graph for each of the call types selected. Each graph in the report gives statistics on the percentage of the calls of that particular call type, which lie within the specified QoS parameter range and date range. It generates reports on hourly, day-of-the-week and day-of-the-month basis sorted on call types.

Voice Mail Utilization Report

This report provides the functionality to get the voice mail utilization information in the date range specified. The report shows bar chart pattern on voice mail port utilization, and the administrator can generate reports on hourly, day-of-the-week

and day-of-the-month basis. You can schedule this report for generation on weekly basis. ART will do a sampling on the records and estimate the maximum concurrent users using all the voice-mail devices configured. ART will then get the maximum ports available (sum of ports of all voice-mail devices) and provide the percent utilization. The report can be scheduled for auto generation on a weekly basis.

Conference Bridge Utilization Report

This report allows you to get the conference bridge utilization information in the date range specified. The report shows stacked bar chart pattern on conference device utilization, and the administrator can generate reports on hourly, day-of-the-week and day-of-the-month basis.

Erroneous CDR Records Report

This report gives the percentage of erroneous CDR records for the total CDR records processed, the number of CDR records processed, and the number of erroneous CDR records. The report also gives the division of the erroneous CDR records into different error conditions along with the descriptions for the same.

Cisco IP Phone Services Report

The administrator, who is provided with the list of services set up in the system and the administrators can select the services for which the administrator needs to generate this report. The report shows the service name, number of subscribers, and percentage subscription for each selected services.

Loading of CDR

Use the CDR load window to set time for execution of loader process. It also allows the administrator to specify the intervals at which CDR records must be loaded as well as the duration of each loader process. The administrator can also specify the time range for the uninhibited run of the loader. During the uninhibited loading time, the loader loads records irrespective of the duration. This loading process continues until the end of uninhibited time or until no more records need to be loaded. Users can enable or disable CDR loading.

Gateway Configuration

The gateway configuration window allows the user to set the area codes for gateways defined in Cisco CallManager and the max number of ports for each gateway. ART requires this information for classifying calls.

Database Purge

Manual database purge window allows the user to purge records in some tables of CDR and ART database. On this window, the user can specify the database name and the corresponding table name in that database, whose records the user wants to purge. User can delete the records from CDR table in the CDR database and can also delete records from billing data table, error log table, and purge history table of ART database. If the user chooses to delete records from CDR records table in CDR database, ART automatically purges the associated CMR records in CallDetailRecordDiagnostic. The user can view the number of records, as well as the date of the oldest, and latest record in the preceding tables. On the screen, the user can specify the date prior to which all the records are to be purged. According to the user input, ART deletes the records from the respective table. Enabling the ART database purge by age, would delete the billing records loaded into the ART database older than the age specified for the ART purging. Default sets ART purging to disabled and the age to 60 days. Enabling the CDR database purge by age deletes the CDR and CMR records in the CDR database that are older than the age specified for the CDR purging. Default sets the CDR purging to disabled and the age to 180 days.

Automatic Report Generation/ Alert Option

Automatic Report Generation /Alert Option window allows the user to configure pregeneration and mailing of reports. It gives the user the functionality to control the database alerts mailing, QoS notification, and Charge Limit Notifications. This required feature allows the functionality to be customized based on the size of the enterprise.

Dial Plan Support

ART supports all dial plans, but the administrator needs to configure the parameters on the DialPlan Configuration window in case the administrator wants a dial plan other than NANP is desired. The administrator can specify the values

of toll free numbers. ART uses the toll free numbers to classify calls as Others. If the administrator chooses not to update these values after ART installation, ART classifies all calls as per NANP dial plan. Administrator needs to provide the Condition, Number of digits, and Pattern when configuring for a call type. For Pattern, ART identifies some wildcard.

X - For a single numeral value

! - For one or more numeric values

G - For gateway area codes

T - For Toll Free numbers

Restarting Windows Services

The administrator can restart Scheduler Windows Service from the Control Center window. ART provides several system configuration windows to set system parameters. The Scheduler service reads these parameters for loading records and generating reports. If the administrator updates some scheduling parameter (date for generation of monthly reports etc.), the change comes into effect next day at 00:00:00 hrs, but when the administrator wants these changes to reflect with effect immediate, then the administrator can restart Scheduler Windows Service from this window.

Logout

The logout function ends the current session of the logged-in user and shows the Logon screen.

Important Notes for Release 1.1(1)

Installation Notes

The ART application installation occurs on a web server, and ART distribution occurs over the internet. The server installation takes place through an ART install package.

Initial User ID and Password

After you install Release 1.1(1), use the following initial values to access ART.

User ID: **admin**

Password: **admin**

Prerequisites

- ART installation requires that the server machine have the following items:
 - Cisco CallManager (Glasshouse Publisher database)
 - IIS 5.0
 - SQL server 7.0
 - LDAP code

The installation program checks for existence of Cisco CallManager LDAP code. If any of the software does not exist, the installation program gives an appropriate error message and aborts.

No explicit check occurs for the existence of IIS and SQL server because the presence of Cisco CallManager (Glasshouse Publisher) ensures that IIS and SQL server are present.

- The ART package requires approximately 42 MB of disk space (not including space required for storing pregenerated reports or the ART database). A check occurs to see whether the required disk space is available. When the required

disk space is not available, installation gives an error message. It then allows the user either to continue with the installation after freeing the required amount of disk space or to abort the installation.

- If a mail server is available, capability must exist, so reports can be automatically sent to users/administrators.

Installation Processes

The ART installation performs the following processes:

- Checks for an existing installation of ART. If installation of ART already exists, setup prompts the user with a message and choice of aborting the installation or overwriting the existing files.
- Installs the ART files with the appropriate directory structure.
- Displays the setup information to the user.
- Gets the Company information which would be used to display on ART reports
- Creates Administrative Reporting Tool as a program folder under Cisco CallManager.
- Gets the value for SQL server login name and password from the user and uses these values for ART database installation.
- Sets registry keys for ART under Cisco Systems, Inc., in the registry.
- Creates Data Source Name (DSN) for ART and Cisco CallManager, which are required for database connection.
- Gets the value of the LDAP parameters from the registry and stores the same values in the ART initialization file.
- Gets the value of the Cisco CallManager (glasshouse publisher) server and database from the registry and uses these values for ART database population.
- Gets the value of the Mail host IP address, Mail host domain name, ART Mail Id, and Mail password from the user and uses these values for ART database population.
- Installs ART database and populates the default values for various tables. If the ART database installation fails, the user receives an error message, and the installation aborts.
- Creates a new login, CiscoARTUser, for the ART database.

- Creates the ART.ini file.
- Configures Tomcat for ART.
- Creates entries in Tomcat configuration files with information specific to ART.
- Configures IIS and Tomcat.
- Registers and starts Tomcat as a Windows Service named ART Tomcat.
- Creates an ART virtual directory.
- Creates a Jakarta virtual directory and sets the ISAPI filter.
- Sets the Classpath for ART.
- Installs ARTScheduler as a Windows service and starts it.
- Puts ART as a plug in to Cisco CallManager to enable Cisco CallManager to display a link under the Application menu to open ART.
- Restarts IIS admin service and Tomcat after installation.
- If you abort the installation by clicking on **Exit** or **Cancel** on any windows, the installation rolls back, and all the ART files that have been installed are removed.



Note

After you install Release 1.1(1), use the following values to access ART.

User ID: **admin**

Password: **admin**

Uninstall

Uninstall performs the following processes:

- The ART database can be removed by checking the box provided “Remove ART Database” and provide the SQL login and password.
- Removes the ART admins.
- Removes the ART Tomcat Windows service.
- Removes ART files.
- Removes Virtual directory for ART and Jakarta (created for IIS-Tomcat configuration).

- Removes ARTScheduler service.
- Removes plug in and the link for ART under the Cisco CallManager application menu.

Limitations and Restrictions

The following limits and restrictions apply for ART:

- ART does not generate auto generated reports for users whose User IDs include the following special characters: \, /, *, ?, ", <, >, |. This applies because Windows OS does not allow these characters in file names.
- When a child window is opened as in User Search window, Microsoft Internet Explorer 4.0 again prompts when to log on, even though the session is still valid. This error does not occur in Netscape Navigator or in Microsoft Internet Explorer 5.0.

Documentation Updates

The following section provides a documentation change that when unavailable when ART 1.1(1) documentation was released.

Corrections

The following sections contains corrections to ART 1.1(1) documentation.

Factoring Time of Day into Call Cost

Administrative Reporting Tool User Guide for Release 1.1(1) displays incorrect instructions in Factoring Time of Day into Call Cost on page 2-38.

You must use military time, rather than a 12-hour clock like the current instructions suggest.

The following steps display the correct instructions:

To further define the cost of calls, you can specify a multiplication factor for certain times of day. For example, if you want to charge subscribers a premium for daytime calls, you can apply a multiplication factor to the base charge/block that you specified in the Call Duration window. Use the following instructions to establish certain times of day when calls cost more.



Note

If you do not want to increase call cost by time of day, you can use the default values. The default multiplication factor is 1.00, so there is no increase in call cost for time of day.

Procedure

Step 1 Open ART. See the "Opening ART ART Administrators" section for instructions on how to open ART.

Step 2 To apply time of day factors to the cost of calls, click **Report Config > Rating Engine > Time of Day**.

The Time of Day window displays.

Step 3 The default time range is a 24-hour period from 00:00:00 to 23:59:59. If you want to set one time of day range from 8 am to 5 pm, you will actually need to establish three time of day ranges: the first from 00:00:00 to 07:59:59; the second from 08:00:00 to 16:59:59; and the third from 17:00:00.

Click **Add Row** and specify the From and To time ranges, in 24-hour, minute, and second format, for the time of day ranges you want to establish.

To add rows, check the box for the row below which you want to add a new row, and click **Add Rows**.

The new row is added above the row you had checked and the check box is cleared.

To delete rows, check the box for the row you want to delete, and click **Delete Rows**.

The checked row is deleted.

Step 4 In the Multiplication Factor field, enter the number by which you want the base charge / block to be multiplied when a call occurs in the specified time range. For example, if you charge a premium of double the price for calls placed between 8 a.m. and 5 p.m., the multiplication factor would be 2.00. A multiplication factor of 1.00 does not affect the cost of the call.

Step 5 Click **Update**.

The time of day ranges and multiplication factors have been established. Changes take effect at midnight. You can force the change to take effect immediately by stopping and restarting the ART Scheduler service. See *Starting or Stopping the ART Scheduler*, for more information.

Uninhibited Loading of CDR

Administrative Reporting Tool User Guide for Release 1.1(1) displays incorrect instructions in Chapter 2 on page 2-12 in the “Setting the CDR Load Schedule” section.

The correct table information appears below:

Setting the CDR Load Schedule

By default, CDR data is loaded every day from midnight to 5 a.m. You can customize the loading schedule using the following instructions.

Procedure

Step 1 Open ART. .

Step 2 Click **System > Scheduler > CDR Load**.

The Daily CDR Load window displays.

Step 3 In the Load CDR & CMR area, complete the following fields:

- **Time**—Choose the hour and minute that you want ART to begin loading CDR data from the Cisco CallManager CDR Database.
- **Loading Interval**—Choose the interval at which you want records loaded. The range is every 15 minutes to every 24 hours.

- **Duration**—Enter the number of minutes you want to allow CDR data to load. Depending on the size of the CDR database, ART performance may be degraded when CDRs load. You can limit the time allowed for loading but in doing so, it is possible that only a portion of the CDR data will be loaded in the duration you set. Be sure to reconcile the duration limit you place with the interval. For example, if you load CDR data every 15 minutes, the duration of loading cannot exceed 15 minutes.

Step 4 In the Uninhibited Loading of CDR area, complete the following fields:

- **From**—Choose the hour and minute you want continuous loading of CDR data to begin.
- **To**—Choose the hour and minute you want continuous loading of CDR data to end.

Uninhibited loading allows you to set a time during which CDR data will load continuously. It will not load CDR data automatically in the duration specified, it will load CDR data uninhibited in the specified duration only if loading starts at that duration as per settings done in load CDR and CMR area. So if loading starts at uninhibited loading interval, it will continue to the end of uninhibited loading interval plus the duration field set in the load CDR and CMR area. Uninhibited loading takes precedence over any values set for scheduled loading. If you do not want uninhibited loading of CDR data, set the From and To values at 00:00.

Step 5 Click **Update**.

ART will load CDR data based on the time, interval, and duration you have specified. Changes take effect at midnight. You can force the change to take effect immediately by stopping and restarting the ART Scheduler service

Obtaining Documentation

The following sections provides different methods of obtaining documentation.

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You can access the most current Cisco documentation on the World Wide Web at the following sites:

- <http://www.cisco.com>
- <http://www-china.cisco.com>
- <http://www-europe.cisco.com>

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Spanish	tac@cisco.com
Thai	thai-tac@cisco.com

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We appreciate and value your comments.

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