CAR System Parameters

Before you start generating reports with CAR, configure the system. In most cases, CAR provides default values; however, review the topics in this chapter to learn more about customizing CAR.

Unless you want to use the default values, you should customize a number of system parameters before you generate any reports. This section describes the system parameters that affect CAR. Because default values are provided for all system parameters, Cisco recommends customizing but does not require it.

Set Up Mail Server Parameters

To send e-mail alerts and reports by e-mail, you must specify the mail server configuration information. CAR uses the configuration information to successfully connect to the e-mail server.

This section describes how to specify e-mail server information.

Procedure

Step 1 Choose **System** > **System Parameters** > **Mail Parameters**.

The Mail Parameters window displays.

Step 2 In the Mail ID field, only enter the e-mail identifier that will be used in the From field when e-mails are sent (for example, smith1@abc.com, enter **smith1** in the Mail ID field.

Note CAR does not support SMTP authentication. You must disable authentication on the SMTP mail server.

Step 3 In the Mail Server Name field, enter the domain name for the server that runs the e-mail system (that is, **abc.com** from the previous example.

Step 4 To make the changes, click the **Update** button.

Set Up Dial Plan

The default dial plan in CAR specifies the North American numbering plan (NANP). Make sure that the dial plan is properly configured, so call classifications display correctly in the reports.

Note If you have modified the default NANP that is provided in Cisco Unified CM Administration, or if you are outside the NANP, be sure to configure the dial plan in CAR according to your Unified Communications Manager dial plan. At least one condition must exist to configure the Dial Plan.

For more information about dial plan, see the *Cisco Unified Communications Manager Online Help* and the *Cisco Unified Communications Manager System Guide*.

To configure the dial plan, define the parameters for the outgoing call classifications. Call classifications include International, Local, Long Distance, On Net, and so on. For example, if local calls in your area equal six digits in length, you would specify a row in the dial plan as follows:

Condition	No of Digits	Pattern	Call Type
=	6	!	Local

This section describes how to update the CAR dial plan configuration.

Procedure

Step 1 Choose **System** > **System Parameters** > **Dial Plan Configuration**.

The Dial Plan Configuration window displays.

Step 2 In the Toll Free Numbers field, enter the numbers in your dial plan that can be placed without a charge.

Step 3 Update the values in the table by using the following fields:

a) Condition - Select the condition of the rule where > represents greater than, < represents less than, and = represents a value that is equal to the specified value in the No of Digits field.

b) No of Digits - Choose the number of digits in the directory number to which this rule should be applied. If the number of digits does not impact the rule, specify NA.

c) Pattern - Enter the pattern that is used for the call classification, where

- G - Signifies classified as specified in the rule (G equals a wildcard for the gateway area code that is specified.
- K - Signifies classified as specified in the rule (K equals a wildcard for the trunk area code that is specified)
- T - Retrieves the toll-free numbers that are configured in CAR.
- ! - Signifies multiple digits (any number that is more than 1 digit in length, such as 1234 or 5551234).
- X - Signifies a single-digit number (such as 0, 1, or 9).

d) Call Type - Choose the call type if the condition is satisfied.

Step 4 To add more rows, check the check box in the row below where you want to add rows and click the **Add Rows** link. The system adds a row above the row that you chose. To delete a row, check the check box by the row that you want to delete and click the **Delete Rows** link.

Note CAR classifies calls on the basis of the dialed number as stored in the CDRs. If the dialed digits differ from the digits that are written in CDRs (due to number transformations), configure the Dial Plan in CAR on the basis of how the digits show up in CDRs.

Step 5 To make the changes, click the **Update** button.

Restore Default Values

If you have modified the default dial plan in CAR, you can restore the default values that are based on the North American numbering plan (NANP).

The following table provides the default NANP values.

Table 1: Default Values for CAR Dial Plan

Row	Condition	No of Digits	Pattern	Call Type
1	=	5	!	OnNet
2	=	7	!	Local
3	=	10	T!	Others
4	=	10	G!	Local
5	=	10	K!	Local
6	=	10	!	Long Distance
7	=	11	T!	Others
8	=	11	XG!	Local
9	=	11	XK!	Local
10	=	11	!	Long Distance
11	>	3	011!	International

The following information explains the default table values.

- Row 1 - If the number of digits dialed equals 5 and the pattern is! (more than one digit, in this case, 5 digits), the call gets classified as On Net.
- Row 2 - If the number of digits dialed equals 7 and the pattern is ! (more than one digit, in this case, 7 digits), the call gets classified as Local.

- Row 3 - If the number of digits dialed equals 10 and the pattern is T! (more than one digit, in this case a 10-digit number that starts with a Toll Free number code), the call gets classified as Others.
- Row 4 - If the number of digits dialed equals 10 and the pattern is G! (more than one digit, in this case a 10-digit number that starts with a gateway code), the call gets classified as Local.
- Row 5 - If the number of digits dialed equals 10 and the pattern is K! (more than one digit, in this case a 10-digit number that starts with a trunk code), the call gets classified as Local.
- Row 6 - If the number of digits dialed equals 10 and the pattern is! (more than one digit, in this case a 10-digit number), the call gets classified as Long Distance.
- Row 7 - If the number of digits dialed equals 11 and the pattern is T! (more than one digit, in this case an 11-digit number that starts with a toll-free number code), the call gets classified as Others.
- Row 8 - If the number of digits dialed equals 11 and the pattern is XG! (more than one digit, in this case an 11-digit number that starts with any single digit followed by a gateway code), the call gets classified as Local.
- Row 9 - If the number of digits dialed equals 11 and the pattern is XK! (more than one digit, in this case an 11-digit number that starts with any single digit followed by a trunk code), the call gets classified as Local.
- Row 10 - If the number of digits dialed equals 11 and the pattern is! (more than one digit, in this case an 11-digit number), the call gets classified as Long Distance.
- Row 11 - If the number of digits dialed is greater than 3 and starts with 011, the call gets classified as International.

If none of the conditions gets satisfied, the call gets classified as Others. This section describes how to restore the NANP dial plan values in CAR.

Note The combination of characters, such as '!!', 'GG', 'KK', 'TT', 'GK', 'KG' is not allowed in dialplan configuration.

Procedure

Step 1 Choose **System > System Parameters > Dial Plan Configuration**.

The Dial Plan Configuration window displays.

Step 2 Click the **Restore Defaults** button.

The restoration takes effect at midnight. To make changes take effect immediately, restart the Cisco CAR Scheduler service. For information on restarting services, see the Cisco Unified Serviceability Administration Guide.

Set Up Gateway

Tip   Configure the gateways in CAR for existing Unified Communications Manager system gateways. After you add gateways to Cisco Unified CM Administration, configure the new gateways in CAR. When gateways are deleted from the Unified Communications Manager system, the system automatically removes the gateways (and any configuration settings that you specified) from CAR.

CAR uses the area code information to determine whether calls are local or long distance. You must provide the Number of Ports information for each gateway to enable CAR to generate the Utilization reports.

Note   "G" acts as a wildcard for the gateway area codes that are used in Dial Plan configuration.

This section describes how to configure gateways in CAR.

Procedure

Step 1   Choose **System > System Parameters > Gateway Configuration**.

The Gateway Configuration window displays.

Note   If you have not configured gateways in Cisco Unified CM Administration, a message displays that indicates that you have not configured gateways for the system.

Step 2   Perform one of the following tasks:

a)   To update the area code for all gateways, enter the area code in the Area Code field and click the **Set Area Code** button.

A message displays that indicates that you must click Update to save changes. Click **OK**.

b)   To update the area code for specific gateways, enter the area code for each gateway that you want to configure in the area code field for that gateway.

Step 3   In the Max No. of Ports field, enter the number of ports for each gateway that you want to configure. The Max No of Ports range goes from 1 to 999.

Note   CAR uses the values that were provided for the gateway when it was added in Cisco Unified CM Administration. Therefore, some gateways will already have an area code setting or have a zero for maximum number of ports, depending on the details that were specified when the gateway was added in Cisco Unified CM Administration. CAR does not accept 0 as a value for the maximum number of ports; you may be prompted to change the maximum number of ports for all gateways with a value of zero.

Step 4   To make the changes, click the **Update** button.

You can run reports in CAR on any or all of the configured gateways.

Set Up Trunk

Tip Configure the trunks in CAR for existing Unified Communications Manager system trunks. After you add trunks to Cisco Unified CM Administration, configure the new trunks in CAR. When trunks are deleted from the Unified Communications Manager system, the system automatically removes the trunks (and any configuration settings that you specified) from CAR.

CAR uses the area code information to determine whether calls are local or long distance. You must provide the Number of Ports information for each trunk to enable CAR to generate the Utilization reports.

This section describes how to configure trunks in CAR.

Procedure

Step 1 Choose **System** > **System Parameters** > **Trunk Configuration**.

The Trunk Configuration window displays.

Note If you have not configured trunks in Cisco Unified CM Administration, a message displays that indicates that you have not configured trunks for the system.

Step 2 Perform one of the following tasks:

a) To update the area code for all trunks, enter the area code in the Area Code field and click the **Set Area Code** button.

A message displays that indicates that you must click Update to save changes. Click **OK**.

b) To update the area code for specific trunks, enter the area code for each trunk that you want to configure in the area code field for that trunk.

Step 3 In the Max No. of Ports field, enter the number of ports for each trunk that you want to configure. The Max No of Ports range goes from 1 to 999.

Note CAR uses the values that were provided for the trunk when it was added in Cisco Unified CM Administration. Therefore, some trunks will already have a zero for maximum number of ports, depending on the details that were specified when the trunk was added in Cisco Unified CM Administration. CAR does not accept zero as a value for the maximum number of ports; you may be prompted to change the maximum number of ports for all trunks with a value of zero.

Step 4 To make the changes, click the **Update** button.

You can run reports in CAR on any or all of the configured trunks.

Set Up System Preferences

CAR provides default system preferences; however, you may customize the system by specifying values for the system parameters.

This section describes how to specify values for system preferences.

Procedure

Step 1 Choose **System > System Parameters > System Preferences.**

The System Preferences window displays. The list of available system parameters displays in the Parameter Name list.

Step 2 In the Parameter Value field, enter the desired value for the parameter as described in the following table.

Table 2: System Preferences Parameter

Parameter	Description
COMPANY_NAME	Enter the company name that is used as header information in reports. The company name cannot exceed 64 characters in length.

Step 3 Click the **Update** button.

Related Topics

- Generate CDR Analysis and Reporting
- Report Configuration
- CAR Rating Engine
- CAR Reports QoS Values
- CAR Reports Notification Limits

Additional Documentation

- Administration Guide for Cisco Unified Communications Manager
- Cisco Unified Serviceability Administration Guide
- Cisco Unified Communications Manager Call Detail Records Administration Guide