Working with Client Matter Codes and Forced Authorization Codes

Forced Authorization Codes (FAC) and Client Matter Codes (CMC) allow you to manage call access and accounting. CMC assists with call accounting and billing for billable clients, while Forced Authorization Codes regulate the types of calls that certain users can place.

Client Matter Codes force the user to enter a code to specify that the call relates to a specific client matter. You can assign client matter codes to customers, students, or other populations for call accounting and billing purposes. The Forced Authorization Codes feature forces the user to enter a valid authorization code before the call completes.

The CMC and FAC features require that you make changes to route patterns and update your dial plan documents to reflect that you enabled or disabled FAC and/or CMC for each route pattern.

This chapter contains information on the following topics:

- CMC and FAC Configuration Checklist, page 47-1
- Important BAT Considerations, page 47-2
- Creating a CSV File by Using BAT.xlt, page 47-3
- Using a Text Editor to Create the CSV Data File for Client Matter Codes and Forced Authorization Codes, page 47-4
- Editing an Existing CMC or FAC CSV File, page 47-4
- Deleting Code Settings, page 48-1
- CMC and FAC CSV File Settings, page 47-5
- Using BAT to Update the Cisco Unified CallManager Database, page 47-6

CMC and FAC Configuration Checklist

Table 47-1 provides steps in the order in which you should use Cisco Unified CallManager Bulk Administration (BAT) to implement CMC and FAC. For more information about related procedures, see the "Related Topics" section on page 47-7.

Table 47-1   Cisco CMC and FAC Configuration Checklist

Configuration Steps		Related Procedures and Topics
Step 1	Review important BAT information and general information about the CMC and FAC features.	• Important BAT Considerations, page 47-2 • *Cisco Unified CallManager Features and Services Guide*
Step 2	Create a CSV file for CMC or FAC and enter the CMC and FAC configuration information.	• Creating a CSV File by Using BAT.xlt, page 47-3 • Using a Text Editor to Create the CSV Data File for Client Matter Codes and Forced Authorization Codes, page 47-4 • CMC and FAC CSV File Settings, page 47-5
Step 3	To update the Cisco Unified CallManager database, insert the CSV file in BAT.	• Using BAT to Update the Cisco Unified CallManager Database, page 47-6 • BAT Settings for Updating the Cisco Unified CallManager Database, page 47-7
Step 4	Enable FAC or CMC by adding or updating route patterns in Cisco Unified CallManager Administration.	• *Cisco Unified CallManager Administration Guide* • *Cisco Unified CallManager Features and Services Guide*
Step 5	Update your dial plan documents or keep a printout of the BAT CSV file with your dial plan documents.	Refer to your dial plan documents.
Step 6	Provide all necessary information, for example, codes, to users and explain how the features work.	*Cisco Unified CallManager Features and Services Guide*

Important BAT Considerations

Before you use BAT to configure CMC or FAC, review the following information:

- Create separate CSV files for CMC and FAC. Do not mix the two features in a single CSV file.
- When you add CMC or FAC settings for the first time, you can create a CSV file through BAT.xlt or create a custom text-based CSV file.
- To update, delete, or add more CMC or FAC settings (not first time), you can edit an existing CSV file or create a custom text-based CSV file.
- In the file/spreadsheet, do not enter two or more codes (and corresponding settings) on a single line. Designate a single line for each code (and corresponding setting). For example, use the following format when you enter codes for Forced Authorization Codes:

  (Authorization Code, Authorization Code Name, Authorization Level)

  1234,John Smith,20

1235,Lisa Mendez,10

5551,Debbie Dunn,30

- Deleting information from a file and leaving the information blank does not remove the information from the Cisco Unified CallManager database; in other words, a blank value does not overwrite an existing value in the database. Updating the values overwrites the existing value in the database.

- Make sure that you upload the appropriate CSV files to the first node of the Cisco Unified CallManager server. For more information, see the"Uploading a File" section on page 2-3.

- Any time that you create or change a CSV file, you must insert the CSV file in BAT, as described in "Using BAT to Update the Cisco Unified CallManager Database" section on page 47-6.

Creating a CSV File by Using BAT.xlt

To create a CSV file for CMC or FAC by using BAT.xlt, perform the following procedure:

Procedure

Step 1   The BAT.xlt file exists on the first node of the Cisco Unified CallManager server; however, you normally do not have Microsoft Excel installed on the server. In that case, you must copy the file from the first node and move it to the local machine, which must have Microsoft Excel installed.

Step 2   Download **BAT.xlt** file from the server. See the "Downloading a File" section on page 2-2 to a local machine where Microsoft Excel is installed.

Step 3   In Microsoft Excel, open **BAT.xlt**. When, prompted, click **Enable Macros**.

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Tip   Remember that you must create two separate CSV files, one for CMC and one for FAC.

Step 4   Click one of the following tabs:

- **Insert** CMC—If you are creating a CMC CSV file

- **Insert FAC**—If you are creating a FAC CSV file

Step 5   Use Table 47-2 to enter CMC or FAC settings in the columns.

Step 6   Repeat Step 5 until you enter all codes.

Step 7   To transfer the Excel spreadsheet format to a CSV file, click **Export to BAT Format**.

The system automatically saves CSV files to C:\XlsDatafiles on the local machine. Click **Browse** to choose a different location.

Step 8   Upload the CSV files to the first node of the Cisco Unified CallManager server. For more information, see "Uploading a File" section on page 2-3.

Step 9   You must add the CSV file to BAT. To insert the CSV file in BAT, see the "Using BAT to Update the Cisco Unified CallManager Database" section on page 47-6.

Additional Topics

See the "Related Topics" section on page 47-7.

Using a Text Editor to Create the CSV Data File for Client Matter Codes and Forced Authorization Codes

You can create the CSV data file by using lines of ASCII text with values separated by commas. The comma separated values (CSV) file provides textual information in tabular form. For more information about text-based CSV files for client matter codes and forced authorization codes, see the "Creating a Custom Text-Based CSV Files for Client Matter Codes and Forced Authorized Codes" section on page A-16.

Additional Topics

See the "Related Topics" section on page 47-7.

Editing an Existing CMC or FAC CSV File

You update existing codes by manually updating an existing CSV file in Notepad or by creating a new file in Notepad.

Perform the following procedure:

Procedure

Step 1 To edit an existing CSV file where you previously inserted codes, download the CSV files from the first node of the Cisco Unified CallManager server. For more information, see "Uploading a File" section on page 2-3.

Step 2 In Notepad, open and edit the existing CSV file; delete existing settings, add new codes, or update existing settings by using the text-based representation in Table 47-2.

If you are updating a CMC CSV file, for example, you may enter 5555,Acme Toys, where 5555 equals the mandatory client matter code, and Acme Toys equals the description.

If you are updating a FAC CSV file, for example, you may enter 1234,John Smith,20, where 1234 equals the forced authorization code, John Smith equals the authorization code name, and 20 equals the authorization level.

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Caution If you add new codes at the same time that you update them, make sure that you enter all required information. You can change any part of an existing record, but you must include the code; for example, the forced authorization code or client matter code. Deleting information and leaving it blank does not remove the information from the database; a blank value does not overwrite an existing value in the database, but, updating the value, for example, to Acme Toys, Inc. or John L. Smith from the preceding examples, overwrites the existing value in the database.

Step 3 Upload the CSV files to the first node of the Cisco Unified CallManager server. For more information, see "Uploading a File" section on page 2-3.

Step 4 You must add the CSV file to BAT. To insert the CSV file in BAT, see the "Using BAT to Update the Cisco Unified CallManager Database" section on page 47-6.

Additional Topics

See the "Related Topics" section on page 47-7.

CMC and FAC CSV File Settings

Use Table 47-2 in conjunction with the following sections:

- Creating a CSV File by Using BAT.xlt, page 47-3
- Using a Text Editor to Create the CSV Data File for Client Matter Codes and Forced Authorization Codes, page 47-4
- Editing an Existing CMC or FAC CSV File, page 47-4
- Deleting Code Settings, page 48-1

For more information about related procedures, see the "Related Topics" section on page 47-7.

Table 47-2   Configuration Settings for CMC and FAC

Setting/Column	Description
For CMC CSV file	
Client Matter Code	Enter a unique code of no more than 16 digits that the user will enter when placing a call. The client matter code displays in the CDRs for calls that use this code.
Description	Enter a name of no more than 50 characters. This optional field helps you associate a client code with a client.
For FAC CSV File	
Authorization Code	Enter a unique authorization code that is no more than 16 digits. The user enters this code when the user places a call through a FAC-enabled route pattern.

Table 47-2   Configuration Settings for CMC and FAC

Setting/Column	Description
Authorization Code Name	Enter a unique name that is no more than 50 characters. The authorization code name ties the authorization code to a specific user or group of users; this name displays in the CDRs for calls that use this code.
	Tip If you plan to assign an authorization code to every user in the system, make sure that the code name includes an identifier for the user, such as the user name or another unique, non-sensitive identifier; for example, an email alias or employee/student number. Do not use identifiers such as a social security number because the authorization code name writes to CDRs, which are not secure.
Authorization Level	Enter a three-digit authorization level that exists within the range of 0 to 255; the default equals 0. The level that you assign to the authorization code determines whether the user can route calls through FAC-enabled route patterns. To successfully route a call, the user authorization level must equal or be greater than the authorization level that is specified for the route pattern for the call.

Using BAT to Update the Cisco Unified CallManager Database

To update the Cisco Unified CallManager database, you must insert the CMC or FAC CSV file in BAT. To update the database, perform the following procedure:

Before You Begin

Before you can update Cisco Unified CallManager, you must create or edit a CMC or FAC CSV file.

Procedure

Step 1   In Cisco Unified CallManager Administration, choose one of the following options, depending on whether you use a CMC or FAC CSV file:

- For CMC—**Bulk Administration> Client Matter Codes > Insert Client Matter Codes**

- For FAC—**Bulk Administration> Forced Authorization Codes > Insert Forced Authorization Codes**

Step 2   In the **File Name** drop-down list box, choose the CSV file that contains the updated codes.

Tip   To view the contents of the file that you want to insert, click **View File**.

Step 3   If you updated an existing list of codes, check the **Override the existing configuration** check box, as described in Table 47-3.

Step 4   In the Job Information area, enter the Job description.

Step 5   Click the Run Immediately radio button to generate a report immediately or, click Run Later to generate reports at a later time.

Step 6   Click **Submit** to create a job for inserting FAC and CMC.

For more information on jobs, see the Chapter 51, "Scheduling Jobs."

For information on log files, see "BAT Log Files" section on page 54-3.

Additional Topics

See the "Related Topics" section on page 47-7.

BAT Settings for Updating the Cisco Unified CallManager Database

Use Table 47-3 in conjunction with the "Using BAT to Update the Cisco Unified CallManager Database" section on page 47-6. For more information about related procedures, see the "Related Topics" section on page 47-7.

Table 47-3   Settings in BAT for Inserting CSV Files

Setting in BAT	Description
File Name	From the drop-down list box, choose the CMC or FAC file that you want to insert.
Override the existing configuration	This check box applies if you are updating code for existing settings.
	Checking this check box overwrites the existing authorization code name (FAC), authorization level (FAC), or description (CMC) with the information that is contained in the file that you want to insert (existing authorization and client matter codes do not change). If you do not check the check box, an error, which writes to the log file, indicates that the authorization or client matter code already exists; therefore, no updates occur.

Related Topics

- CMC and FAC Configuration Checklist, page 47-1

- Important BAT Considerations, page 47-2

- Creating a CSV File by Using BAT.xlt, page 47-3

- Using a Text Editor to Create the CSV Data File for Client Matter Codes and Forced Authorization Codes, page 47-4

- Editing an Existing CMC or FAC CSV File, page 47-4

- Deleting Code Settings, page 48-1
- CMC and FAC CSV File Settings, page 47-5
- Using BAT to Update the Cisco Unified CallManager Database, page 47-6
- BAT Settings for Updating the Cisco Unified CallManager Database, page 47-7
- Creating a Custom Text-Based CSV Files for Client Matter Codes and Forced Authorized Codes, page A-16