



# Client Matter Codes and Forced Authorization Codes

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This chapter provides information about using BAT to configure Forced Authorization Codes (FAC) and Client Matter Codes (CMC). You can create, update, delete, or add more CMC or FAC settings using either a CSV data file or a custom text-based CSV file.

- [CMC and FAC Setup Using BAT, on page 1](#)
- [Implement CMC and FAC Features, on page 2](#)
- [Create CMC and FAC CSV Data File Using BAT.xlt, on page 3](#)
- [CSV Data File Creation for Client Matter Codes and Forced Authorization Codes Using Text Editor, on page 4](#)
- [Edit Existing CMC or FAC CSV Data File, on page 4](#)
- [CMC and FAC CSV Data File Settings, on page 5](#)
- [Update CMC or FAC in CUCM Database Using BAT, on page 6](#)
- [BAT Settings to Update CMC and FAC in the Database, on page 7](#)
- [Topics Related to CMC and FAC Configuration, on page 7](#)

## CMC and FAC Setup Using BAT

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.

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 Communications Manager 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 Communications Manager server.
- Any time that you create or change a CSV file, you must insert the CSV file in BAT to update the Cisco Unified Communications Manager database.

#### Related Topics

[Topics Related to CMC and FAC Configuration](#), on page 7

[Update CMC or FAC in CUCM Database Using BAT](#), on page 6

[Upload and Download Files](#)

## Implement CMC and FAC Features

You can use Cisco Unified Communications Manager Bulk Administration (BAT) to implement CMC and FAC features.



#### Note

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.

#### Procedure

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- Step 1** Review important BAT information and general information about the CMC and FAC features.
- [CMC and FAC Setup Using BAT](#), on page 1
  - *Feature Configuration Guide for Cisco Unified Communications Manager*
- Step 2** Create a CSV file for CMC or FAC and enter the CMC and FAC configuration information.
- Step 3** To update the Cisco Unified Communications Manager database, insert the CSV file in BAT.

- Step 4** Enable FAC or CMC by adding or updating route patterns in Cisco Unified Communications Manager Administration.
- 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.

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**Related Topics**

[Topics Related to CMC and FAC Configuration](#), on page 7

## Create CMC and FAC CSV Data File Using BAT.xlt

You can create the CSV file for CMC or FAC using the BAT spreadsheet BAT.xlt. You must create two separate CSV files, one for CMC and one for FAC.



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**Note** The BAT.xlt file exists on the first node of the Cisco Unified Communications Manager server; however, you normally do not have Microsoft Excel installed on the server. In that case, copy the file from the first node and move it to a local machine that has Microsoft Excel installed.

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**Before you begin**

Review important considerations in [CMC and FAC Setup Using BAT](#), on page 1 before you use BAT to configure CMC or FAC.

**Procedure**

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- Step 1** Choose **Bulk Administration > Upload/Download Files**.  
The **Find and List Files** window opens.
- Step 2** Click **Find** and download the BAT.xlt file.
- Step 3** Copy BAT.xlt to a local machine where Microsoft Excel is installed.
- Step 4** To open the BAT Spreadsheet, locate and double-click the BAT.xlt file.
- Step 5** When prompted, click **Enable Macros** to use the spreadsheet capabilities.
- Step 6** 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 7** Enter CMC or FAC settings in the columns.  
See [Table 1: Configuration Settings for CMC and FAC](#), on page 5 for descriptions of configuration settings.
- Note** Repeat [Step 7, on page 3](#) until you enter all codes.
- Step 8** 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.

**Tip** Click **Browse** to choose a different location.

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### What to do next

Upload the CSV files to the first node of the Cisco Unified Communications Manager server.

You must add the CSV file to BAT and insert the file to update the Cisco Unified Communications Manager database.

### Related Topics

[Download File Off Server](#)

[Topics Related to CMC and FAC Configuration](#), on page 7

[Update CMC or FAC in CUCM Database Using BAT](#), on page 6

[Upload File to Server](#)

## CSV Data File Creation for Client Matter Codes and Forced Authorization Codes Using Text Editor

You can use a text editor to create the text-based CSV data file for client matter codes and forced authorization codes. The comma separated values (CSV) file provides textual information in tabular form and contains lines of ASCII text with values separated by commas.

### Related Topics

[Create Custom Text-Based CSV Files for Client Matter Codes and Forced Authorized Codes](#)

[Topics Related to CMC and FAC Configuration](#), on page 7

## Edit Existing CMC or FAC CSV Data File

You update existing codes by manually updating an existing CSV file or creating a new CSV file using a text editor.

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.

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.

## Procedure

**Step 1** To edit existing CSV data files, download the CSV files from the first node of the Cisco Unified Communications Manager server to your local workstation.

**Step 2** Open and edit the existing CSV file using a text editor.

Delete existing settings, add new codes, or update existing settings. See [Table 1: Configuration Settings for CMC and FAC, on page 5](#) for descriptions of the CMC and FAC configuration settings.

**Caution** If you add new codes at the same time that you update them, make sure that you enter all required information.

A blank value does not overwrite an existing value in the database, but updating the value overwrites the existing value in the database.

## What to do next

Upload the CSV files to the first node of the Cisco Unified Communications Manager server.

You must add the CSV file to BAT and insert the file to update the Cisco Unified Communications Manager database.

## Related Topics

[Download File Off Server](#)

[Topics Related to CMC and FAC Configuration, on page 7](#)

[Update CMC or FAC in CUCM Database Using BAT, on page 6](#)

[Upload File to Server](#)

# CMC and FAC CSV Data File Settings

The following table provides descriptions of the configuration settings in the CMC and FAC CSV data files.

**Table 1: 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	This optional field helps you associate a client code with a client. The description can include up to 50 characters in any language, but it cannot include double-quotes ("), percentage sign (%), ampersand (&), back-slash (\), or angle brackets (<>).
For FAC CSV File	

Setting/Column	Description
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.
Authorization Code Name	<p>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.</p> <p><b>Tip</b> 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.</p>
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.

## Update CMC or FAC in CUCM Database Using BAT

To update the Cisco Unified Communications Manager database, you must insert the CMC or FAC CSV data file using BAT.

### Before you begin

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

### Procedure

#### Step 1

In Cisco Unified Communications Manager Administration, choose one of the following options:

- a) For CMC, choose **Bulk Administration > Client Matter Codes > Insert Client Matter Codes**.
- b) For FAC, choose **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 are updating an existing list of codes, check the **Override the existing configuration** check box. See [BAT Settings to Update CMC and FAC in the Database, on page 7](#) for configuration details.
- Step 4** In the **Job Information** area, enter the Job description.
- Step 5** Choose an insert method. Do one of the following:
- Click **Run Immediately** to insert FAC and CMC immediately.
  - Click **Run Later** to insert FAC and CMC at a later time.
- Step 6** To create a job for inserting FAC and CMC, click **Submit**. Use the Job Scheduler option in the **Bulk Administration** main menu to schedule and/or activate this job.

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#### Related Topics

[BAT Log Files](#)

[BAT Settings to Update CMC and FAC in the Database, on page 7](#)

[Manage Scheduled Jobs](#)

[Topics Related to CMC and FAC Configuration, on page 7](#)

## BAT Settings to Update CMC and FAC in the Database

The following table provides descriptions of the BAT update configuration settings for CMC and FAC.

*Table 2: 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.

## Topics Related to CMC and FAC Configuration

- [Implement CMC and FAC Features, on page 2](#)
- [CMC and FAC Setup Using BAT, on page 1](#)
- [Create CMC and FAC CSV Data File Using BAT.xlt, on page 3](#)

- [CSV Data File Creation for Client Matter Codes and Forced Authorization Codes Using Text Editor, on page 4](#)
- [Edit Existing CMC or FAC CSV Data File, on page 4](#)
- [Code Setting Deletion Examples](#)
- [CMC and FAC CSV Data File Settings, on page 5](#)
- [Update CMC or FAC in CUCM Database Using BAT, on page 6](#)
- [BAT Settings to Update CMC and FAC in the Database, on page 7](#)
- [Create Custom Text-Based CSV Files for Client Matter Codes and Forced Authorized Codes](#)