Provisioning Users and Devices Using Bulk Administration Tool

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Bulk Administration Tool Overview

The Bulk Administration Tool (BAT) is a web-based application that you can use to perform bulk transactions to the Unified Communications Manager database. You can use BAT to add, update, or delete a large number of similar phones, users, or ports at the same time.

Note The Bulk Administration menu is visible only on the first node of Unified Communications Manager server.

The Cisco Bulk Provisioning Service (BPS) administers and maintains all jobs that are submitted through the Bulk Administration menu of Cisco Unified CM Administration. You can start this service from Cisco Unified Serviceability. You need to activate the Cisco Bulk Provisioning Service only on the first node of Unified Communications Manager.

You can use BAT to perform the following:

- Add, update, or delete large numbers of phones in batches
- Define the common phone attributes to add a group of new phones
- Creates new BAT phone templates
- Adds a group of new users and to associate users to phones and other IP Telephony devices
- Creates User CSV Data File From BAT Spreadsheet
- Creates CSV data file for adding phones and users in batches
- Adds a group of phones and users to the Unified Communications Manager database and directory

Bulk Administration Tool Prerequisites

- Configure User and Service Profiles

Bulk Administration Tool Task Flow

Procedure

	Command or Action	Purpose
Step 1	Add Phones to Database, on page 3	You use BAT to add phones and other IP telephony devices in bulk to the Unified Communications Manager database.
Step 2	Create New BAT Phone Template, on page 3	You can create new BAT phone templates.
Step 3	Create Phone CSV Data File Using BAT Spreadsheet, on page 8	You can add new phones or IP telephony devices to the system using the .xls spreadsheet that was designed for use with BAT.
Step 4	Create Custom Phone File Format Using Text Editor, on page 10	You can use a text editor to create a custom phone file format for the text-based CSV data file.
Step 5	Insert Phones Into Unified Communications Manager, on page 11	You can add phones, Cisco VGC Phones, CTI ports, or H.323 clients into the Unified Communications Manager database.
Step 6	Add Users, on page 13	You can use BAT to add a group of new users and to associate users to phones and other IP Telephony devices.
Step 7	Create User CSV Data File From BAT Spreadsheet, on page 14	You can provide details for adding new users to the Unified Communications Manager database in the BAT spreadsheet and then convert it in to a CSV data file.
Step 8	Insert Users in Unified Communications Manager Database, on page 15	You can add a group of users to the Unified Communications Manager database using a CSV data file.
Step 9	Add Phone and User File Format, on page 16	You can add the phone and user file format with a text-based CSV data file. After the CSV data file is created, you need to associate the file format with the text-based CSV data file.

	Command or Action	Purpose
Step 10	Insert Phones with Users Into Unified Communications Manager, on page 17	You can add a group of phones and users to the Unified Communications Manager database and directory.

Add Phones to Database

When you use BAT to add phones and other IP telephony devices in bulk to the Unified Communications Manager database, you can add multiple lines, services, and speed dials for each phone. You can also add CTI ports and H.323 clients.

You have two options for creating a CSV data file for phones:

- Use the BAT spreadsheet (BAT.xlt) and export the data to the CSV format
- Use a text editor to create a text file in CSV format (for experienced users)

Procedure

Step 1 Choose **Bulk Administration** > **Phones** > **Phone Template**.

The **Find and List Phone Templates** window displays.

Step 2 Create a CSV data file to insert the phone templates.

Perform one of the following options:

a) Create a CSV data file using the BAT spreadsheet.
b) Create a CSV data file using a text editor as follows:

1. Choose **Bulk Administration** > **Phones** > **Phone File Format** > **Create File Format**.
2. Use a text editor and create the CSV data file for phones that follows the file format that you want to use.
3. Choose **Bulk Administration** > **Phones** > **Phone File Format** > **Add File Format** to associate the text-based file format with the CSV data file.

Step 3 Choose **Bulk Administration** > **Phones** > **Validate Phones**.

Step 4 Choose **Bulk Administration** > **phones** > **Insert phones** to insert phone records into the Unified Communications Manager database.

Create New BAT Phone Template

You can create new BAT phone templates. After you create a phone template, you can add lines, services, and speed dials.

Procedure

Step 1 Choose **Bulk Administration** > **Phones** > **Phone Template**.

Step 2 Click **Add New**. The **Add a New Phone Template** window displays.

Step 3 From the **Phone Type** drop-down list, choose the phone model for which you are creating the template. Click **Next**.

Step 4 From the **Select the Device Protocol** drop-down list, choose the device protocol. Click **Next**.

The **Phone Template Configuration** window displays with fields and default entries for the chosen device type.

Step 5 In the **Template Name** field, enter a name for the template.

The name can contain up to 50 alphanumeric characters.

Step 6 In the Device Information area, enter the phone settings that this batch has in common.

Some phone models and device types do not have all the attributes that the table lists. See, the phone model documentation for information on all the attributes.

Step 7 After you have entered all the settings for this BAT phone template, click **Save**.

When the status indicates that the transaction has completed, you can add line attributes.

Add or Update Phone Lines in BAT Template

You can add one or more lines to the BAT template or to update existing lines. The button template in use for the BAT template determines the number of lines that you can add or update. You can create a primary phone template that has multiple lines. Then, you can use the standard template to add phones with a single line or up to the number of lines in the standard template. All phones or user device profiles in this batch will use the settings that you choose.

Cisco recommends that you use alphanumeric characters for the line template value, so if numbers are given, a chance exists of this conflicting with an actual directory number. This would also avoid conflicts with features such as Call Pickup group number and Call Park number.

The maximum number of lines that display for a BAT template depends on the model and button template that you chose when you created the BAT phone template. For some CiscoUnifiedIPPhone models, you can also add CiscoUnifiedIPPhone services and speed dials to the template.

Procedure

Step 1 Find the Phone Template to which you want to add the line.

Step 2 In the **Phone Template Configuration** window, click **Line [1] Add a new DN**, in the **Associated Information** area.

The **Line Template Configuration** window displays.

Step 3 Enter or choose the appropriate values for the line settings.

Step 4 Click **Save**.

Step 5 To add settings for any additional lines, repeat Step 2, on page 4 through Step 4, on page 4.

If you choose Back to Find/List from the **Related Links** drop-down list box in the upper, right, corner of the **Line Template Configuration** window, the **Find and List Line Template** window displays.

a) To find existing line template, enter the appropriate search criteria and click **Find**.
b) To add a new line template, click **Add New**.

Add or Update IP Services in BAT Template

You can subscribe CiscoUnifiedIPPhone services to the CiscoUnifiedIPPhone models that include this feature directly in the BAT template. To bulk subscribe users or phones to IP services, the IP services must have common service parameters and be subscribed through a phone template. You can not bulk subscribe IP services that have unique service parameters. For services with unique parameters, use the CSV file.

Procedure

Step 1 Find the Phone Template to which you want add an IP service.

Step 2 From the **Phone Template Configuration** window, click **Add a new SURL** in the **Associated Information** area.
A popup window displays. In this window, you can subscribe to CiscoUnifiedIPPhone services that are available.

Step 3 In the **Select a Service** drop-down list box, choose a service to which you want all phones to be subscribed. The **Service Description** box displays details about the service that you choose.

Step 4 Click **Next**.

Step 5 In the **Service Name** field, modify the name of the service, if required.

Step 6 Associate the selected services or add more services to the template.

a) To associate these phone services to the phone template, click **Save**.
b) To add more services, repeat Step 3, on page 5 through Step 6, on page 5.
c) To add all the services to the template, click **Update**.

After you are done adding or updating services for the selected template, proceed to the next step.

Step 7 Close the popup window.

Add or Update Speed Dials in BAT Template

You can add and update speed dials in the BAT template for phones and Cisco VGC phones if the Phone Button Template provides speed-dial buttons. The Phone Button Template in use for the BAT template determines the number of available speed-dial buttons.

Procedure

Step 1 Find the Phone Template to which you want to add speed dials.

Step 2 From the **Phone Template Configuration** window, do one of the following:

a) Click **Add a new SD** in the **Associated Information** area.
b) Choose Add/Update Speed Dials from the **Related Links** drop-down list box in the upper, right-hand corner of the window.

A popup window displays. In this window, you can designate speed-dial buttons for CiscoUnifiedIPPhones and expansion modules.

Step 3 In the **Speed Dial Settings** area, enter the phone number, including any access or long-distance codes, in the **Number** field.

Note
When you enter the phone number, it can be followed by Forced Authorized Code (FAC)/Client Matter Code (CMC) if applicable. You can enter the Phone number, FAC, CMC either in sequence or separated by a comma (,). The Speed dial may include any PIN, Password or any other digits to be sent as DTMF digits after the call is connected. If you require a pause while connecting through speed dial, you can enter one or more comma (,) where each comma represents a pause of 2 seconds. DTMF digits will be sent after the call is connected and the appropriate pause duration corresponding to the number of commas is entered.

Step 4 In the **Label** field, enter a label that corresponds to the speed-dial number.

Step 5 In the **Abbreviated Dial Settings** area, you can set abbreviated speed dials for applicable IP phone models. Repeat Step 3, on page 6.

Step 6 Click **Save**.
BAT inserts the speed-dial settings in the template and the popup window closes.

Add or Update Busy Lamp Field in BAT Template

You can add and update busy lamp filed speed dials in the BAT template for phones and Cisco VGC phones if the Phone Button Template provides speed-dial buttons. The Phone Button Template in use for the BAT template determines the number of available BLF SD buttons.

Procedure

Step 1 Find the Phone Template to which you want to add speed dials.

Step 2 In the **Phone Template Configuration** window, do one of the following:

a) Click **Add a new BLF SD** in the **Associated Information** area.
b) Choose Add/Update Busy Lamp Field Speed Dials from the **Related Links** drop-down list in the upper, right-hand corner of the window.

A popup window displays. In this window, you can designate busy lamp field speed-dial (BLF SD) buttons for CiscoUnifiedIPPhones and expansion modules.

Step 3 In the **Speed Dial Settings** area, enter the destination, including any access or long-distance codes, in the **Destination** field.

Step 4 Choose the directory number from the drop-down list. You can click **Find** to search for directory numbers.

Step 5 In the **Label** field, enter a label that corresponds to the BLF SD number.

Step 6 Click **Save**.
BAT inserts the BLF SD settings in the template, and the popup window closes.

Add or Update Busy Lamp Field Directed Call Park in BAT Template

You can add and update busy lamp field (BLF) directed call park in the BAT template for phones and Cisco VGC phones if the Phone Button Template provides speed-dial buttons. The Phone Button Template in use for this BAT template determines the number of available BLF Directed Call Park buttons.

Procedure

Step 1 Find the Phone Template to which you want to add BLF speed directed call park.

Step 2 In the **Phone Template Configuration** window, do one of the following:

a) Click **Add a new BLF Directed Call Park** in the **Associated Information** area.

b) Choose **Add/Update BLF Directed Call Park** from the **Related Links** drop-down list box in the upper, right-hand corner of the window.

A popup window displays. In this window, you can designate BLF Directed Call Park buttons for CiscoUnifiedIPPhones and expansion modules.

Step 3 In the **Unassigned Busy Lamp Field/Directed Call Park Settings** area, choose the directory number from the drop-down list. You can click **Find** to search for directory numbers.

Step 4 In the **Label** field, enter a label that corresponds to the BLF Directed Call Park number.

Step 5 Click **Save**.
BAT inserts the BLF Directed Call Park settings in the template, and the popup window closes.

Add or Update Intercom Template in BAT Template

You can add one or more Intercom templates to the BAT template, or update existing Intercom templates in the BAT template The button template in use for the BAT template determines the number of lines that you can add or update. You can create a standard phone template that has multiple lines. Then, you can use the standard template to add phones with a single line or up to the number of lines in the standard template. All phones or user device profiles in this batch will use the settings that you choose for the intercom template.

We recommend that you use alphanumeric characters for intercom template, so if numbers are given, a chance exists of this conflicting with an actual directory number. This would also avoid conflicts with features such as Call Pickup group number and Call Park number.

The maximum number of lines that display for a BAT template depends on model and button template that you chose when you created the BAT phone template. For some CiscoUnifiedIPPhone models, you can also add CiscoUnifiedIPPhone services and speed dials to the template.

Procedure

Step 1 Find the Phone Template to which you want to add the intercom template.

Step 2 In the **Phone Template Configuration** window, click **Intercom [1] - Add a new Intercom** in the **Associated Information** area.
The **Intercom Template Configuration** window displays.

Step 3 Enter or choose the appropriate values for the intercom template settings.

Step 4 Click **Save**.

BAT adds the intercom template to the phone template configuration.

Step 5 To add settings for any additional intercom templates, repeat Step 2, on page 7 through Step 4, on page 7.

If you choose Back to Find/List from the **Related Links** drop-down list box in the upper, right, corner of the **Intercom Template Configuration** window, the **Find and List Intercom Directory Number** window displays.

Note
If you choose Back to Find/List from the **Related Links** drop-down list box in the upper, right, corner of the **Intercom Template Configuration** window, the **Find and List Intercom Directory Number** window displays.

a) Click **Find** and enter the appropriate search criteria and to find existing Intercom directory numbers.
b) In the **Find and List Intercom Directory Number** window, click **Add New** to add a new intercom directory number.

Create Phone CSV Data File Using BAT Spreadsheet

Use the BAT spreadsheet to create the CSV data file. You can define the file format within the spreadsheet, and the BAT spreadsheet uses the data file formats to display the fields for the CSV data file.

Note If you enter a comma in one of the fields, BAT.xlt encloses that field entry in double quotes when you export to BAT format.

If you enter a blank row in the BAT spreadsheet, the system treats the empty row as the end of the file and does not convert data that is entered after a blank line to the BAT format.

You can use the dummy MAC address option when adding CTI ports. This option gives a unique device name to each CTI port in the form of dummy MAC addresses that you can manually update later using the Cisco Unified Communications Manager Administration or the Unified CM Auto-Register phone Tool. Do not use the dummy MAC address option for H.323 clients, VGC phones, or VGC virtual phones.

The dummy MAC address option automatically generates dummy MAC addresses in the following format:

XXXXXXXXXXXX

where X represents any 12-character, hexadecimal (0-9 and A-F) number.

Attention The number of lines and speed dials that you define for phones in the BAT spreadsheet must not exceed the numbers that are defined in the BAT phone template, otherwise, an error occurs when you attempt to insert the CSV data file and BAT template.

After you have finished editing all the fields in the BAT spreadsheet, you can export the content to a CSV formatted data file. A default filename is assigned to the exported CSV formatted data file:

`<tabname>-<timestamp>.txt`

where `<tabname>` represents the type of input file that you created, such as phones, and `<timestamp>` represents the precise date and time that the file was created.

You can rename the CSV formatted data file after you save the exported file to your local workstation.

Note You cannot upload a CSV filename that contains a comma (for example, abcd,e.txt) to the Unified Communications Manager server.

Procedure

Step 1 To open the BAT spreadsheet, locate and double-click the BAT.xlt file

Step 2 When prompted, click **Enable Macros** to use the spreadsheet capabilities.

Step 3 To display the phones options, click the **Phones** tab at the bottom of the spreadsheet.

Step 4 Choose the radio button for one of the following device types:

The device type that you select determines the validation criteria for data in the BAT spreadsheet.

- Phones
- CTI Port
- H.323 Client
- VGC Phones
- VGC Virtual Phones
- Cisco IP Communicator Phone

The spreadsheet displays options that are available for the chosen device. For example, when you choose phones, fields for the number of phone lines and the number of speed dials display.

Step 5 Choose the device and line fields to appear in the BAT spreadsheet for each phone. Do the following:

a) Click **Create File Format**.

b) To choose the device fields, click a device field name in the **Device Field** box and then click the arrow to move the field to the **Selected Device Fields** box.

A CSV data file must include **MAC Address/Device Name** and **Description**; therefore, these fields always remain selected.

Tip
To select a range of items in the list, hold down the **Shift** key. To select random field names, hold down the **Ctrl** key and click field names.

c) Click a line field name in the **Line Field** box and click the arrow to move the field to the **Selected Line Fields** box.

Tip
To change the order of the items in the **Selected Line** and **Device** boxes, choose an item and use the up and down arrows to move the field up or down in the list.

d) A message asks whether you want to overwrite the existing CSV format. Click **Create** to modify the CSV data file format.

e) Click **OK**.

New columns for the selected fields display in the BAT spreadsheet in the order that you specified.

Step 6 Scroll to the right to locate the **Number of Phone Lines** box and enter the number of lines for the phone.

Note
The number of lines you enter must not exceed the number of lines that are configured in the BAT template.

Step 7 For phones, you must enter the number of speed-dial buttons in the **Maximum Number of Speed Dials** box.

Note
The number of speed dials you enter must not exceed the number of speed dials that are configured in the BAT template.

After you enter the number, columns display for each speed-dial number.

Step 8 Enter the number of Busy Lamp Field (BLF) speed-dial buttons in the **Maximum Number of BLF Speed Dials** box.
After you enter the number, columns display for each BLF speed-dial number.

Step 9 Enter data for an individual phone on each line in the spreadsheet.

Complete all mandatory fields and any relevant, optional fields. Each column heading specifies the length of the field and whether it is required or optional. See online help for phone field descriptions.

Step 10 If you did not enter the MAC address for each phone, check the **Create Dummy MAC Address** check box.

Attention
Do not use the dummy MAC address option for H.323 clients, VGC phones, or VGC virtual phones.

Step 11 To transfer the data from the BAT Excel spreadsheet into a CSV formatted data file, click **Export to BAT Format**.

Tip
For information on how to read the exported CSV data file, click the link to **View Sample File** in the **Insert phones** window in BAT.

The system saves the file with the default filename: `<tabname>-<timestamp>.txt` to your choice of a folder on your local workstation.

Create Custom Phone File Format Using Text Editor

You can use a text editor to create a custom phone file format for the text-based CSV data file.

Procedure

Step 1 Choose **Bulk Administration** > **Phones** > **Phone File Format** > **Create File Format**.

Step 2 Click **Add New**.

Step 3 In the **Format Name** field, enter a name for this custom format.

Step 4 Choose the fields to appear in the custom file format. Do the following:

a) To choose the device fields, click a device field name in the **Device Field** box and then click the arrow to move the field to the **Selected Device Fields** box.

A CSV data file must include **MAC Address/Device Name** and **Description**; therefore, these fields always remain selected.

Tip
To select a range of items in the list, hold down the **Shift** key. To select random field names, hold down the **Ctrl** key and click field names.

b) Click a line field name in the **Line Field** box and click the arrow to move the field to the **Selected Line Fields** box.

c) Click the intercom DN field names in the **Intercom DN Fields** box and click the arrow to move the fields to the **Selected Intercom DN Fields Order** box.

Tip
You can change the order of the items in the **Selected Line Fields**, **Selected Device Fields**, and **Selected Intercom DN Fields Order** boxes. Choose an item and use the up and down arrows to move the field up or down in the list.

Step 5 In the **IP Phone Services Maximums** area, enter the maximum values for the following fields:

- Maximum Number of Speed Dials
- Maximum Number of BLF Speed Dials
- Maximum Number of BLF Directed Call Parks
- Maximum Number of IP Phone Services
- Maximum Number of IP Phone Service Parameters

Step 6 Click **Save**.
The name of the custom file format displays in the **File Format Names** list in the **Find and List Phone File Formats** window.

Insert Phones Into Unified Communications Manager

When you insert phone records into the Unified Communications Manager database, you define the target CSV data file and how the phone records get inserted. Select any combination of the listed actions to overwrite the existing phone records, or you can choose to insert the records during upload:

- Delete all existing Speed Dials before adding new one
- Delete all existing BLF Speed Dials before adding new one
- Delete all existing BLF Directed Call Parks before adding new one
- Delete all existing Subscribed Services before adding new one

Note Phone records must be validated before insertion.

Note BAT expects Directory Number URI fields for directory numbers in the following format:

URI 1 on Directory Number 1, URI 1 Route Partition on Directory Number 1, URI 1 is Primary on Directory Number 1.

You can use the dummy MAC address option. When adding CTI ports, this option gives a unique device name to each CTI port in the form of dummy MAC addresses that you can manually update later using the Unified Communications Manager Administration or the Unified CM Auto-Register Phone Tool. Do not use the dummy MAC address option for H.323 clients, VGC phones, or VGC virtual phones.

The dummy MAC address option automatically generates dummy MAC addresses in the following format:

XXXXXXXXXXXX

where X represents any 12-character, hexadecimal (0-9 and A-F) number.

Before you begin

- You must have a Unified Communications Manager Bulk Administration (BAT) phone template for the devices that you are adding. You can choose the target and method of the data file upload. Phone records must be validated before insertion.
- You must have a data file in comma separated value (CSV) format that contains the unique details for the phones or other IP telephony devices.

Procedure

Step 1 Choose **Bulk Administration** > **Phones** > **Insert Phones**.

Step 2 Specify the file format type for the phone record that you are uploading.

a) To insert phone records that use a customized file format, click **Insert Phones Specific Details** radio button and continue with Step 3, on page 12 and Step 5, on page 13.

b) To insert phone records from an exported phone's file that was generated using the All Details option, click **Insert phones All Details** radio button.

Step 3 In the **File Name** drop-down list box, choose the CSV data file that you created for this specific bulk transaction. Next, check the **Allow Update Phone with Custom File** check box to allow updating the phone with the chosen custom file.

Step 4 Check the **Override the existing configuration** check box to overwrite the existing phone settings with the information that is contained in the file that you want to insert. Next, check the check boxes beside the upload action(s) to perform during the upload.

The following upload actions get enabled for selection after you have checked the **Override the existing configuration** check box.

- Delete all existing Speed Dials before adding new one.
- Delete all existing BLF Speed Dials before adding new one.
- Delete all existing BLF Directed Call Parks before adding new one.
- Delete all existing Subscribed Services before adding new one.

Note
Leave the check boxes clear to append those records to the existing records in the CSV data file during the upload.

Step 5 For the Specific Details option, in the **Phone Template Name** drop-down list, choose the BAT phone template that you created for this type of bulk transaction.

Attention
If you did not enter individual MAC addresses in the CSV data file, you must check the **Create Dummy MAC Address** check box. You can update this information manually later. Skip to Step 8, on page 13. If you supplied MAC addresses or device names in the data input file, do not choose this option.

If you do not know the MAC address of the phone that is assigned to the user, then choose this option. When the phone is plugged in, a MAC address registers for that device.

Step 6 In the **Job Information** area, enter the Job description.

Step 7 Choose an insert method. Do one of the following:

a) Click **Run Immediately** to insert the phone records immediately.
b) Click **Run Later** to insert the phone records later.

Step 8 Click **Submit** to create a job for inserting the phone records.

Use the **Job Configuration** window to schedule or activate this job.

What to do next

If the phones inserted are of the type Cisco Unified Mobile Communicator, then you must reset the devices after the insert job is completed. You can reset the phones using the **Bulk Administration** > **Phones** > **Reset/Restart Phones** option.

Add Users

You must create a CSV data file to add new users in bulk to the Unified Communications Manager database using the BAT spreadsheet. For users who have applications that require a CTI port, such as CiscoIPSoftPhone, BAT can associate CTI ports to existing users.

Procedure

Step 1 Create a comma separated values (CSV) data file to define individual values for each user that you want to add.

Step 2 Use BAT to insert the users in the Unified Communications Manager database.

Create User CSV Data File From BAT Spreadsheet

You can provide details for adding new users to the Unified Communications Manager database in the BAT spreadsheet and then convert it in to a CSV data file.

Note If you enter a blank row in the BAT spreadsheet, the system treats the empty row as the end of the file and does not convert data that is entered after a blank line to the BAT format.

After you have finished editing the fields to add users in the BAT spreadsheet, you can export the content to a CSV formatted data file. A default filename is assigned to the exported CSV formatted data file:

`<tabname>-<timestamp>.txt`

where `<tabname>` represents the type of input file that you created, such as phones, and `<timestamp>` represents the precise date and time that the file was created.

You can rename the CSV formatted data file after you save the exported file to your local workstation. If you enter a comma in one of the fields, BAT.xlt encloses that field entry in double quotes when you export to BAT format.

Note You cannot upload a CSV filename that contains a comma (for example, abcd,e.txt) to the Unified Communications Manager server.

Procedure

Step 1 To open the BAT spreadsheet, locate and double-click BAT.xlt file.

Step 2 When prompted, click **Enable Macros** to use the spreadsheet capabilities.

Step 3 To add users, click the **Users** tab at the bottom of the spreadsheet.

Step 4 Complete all mandatory fields and any relevant optional fields. Each column heading specifies the length of the field and whether it is required or optional.

In each row, provide the information as described in the online help files.

- If a user has multiple devices, the device name field should be repeated, once for each device.
- To enter additional device names that will be associated to a new user, enter a value in the **Number of Controlled Devices** text box.

Note
You can associate all devices, including CTI ports, ATA ports, and H.323 clients, with a user.

Step 5 To enter additional device names that will be associated to a new user, enter a value in the **Number of Controlled Devices** text box.

Step 6 Click **Export to BAT Format** to transfer the data from the BAT Excel spreadsheet into a CSV formatted data file.

The system saves the file to C:\XLSDataFiles with the default file name <tabname>-<timestamp>.txt , or uses **Browse** to save the file to another existing folder.

Tip
For information on how to read the exported CSV data file, click the link to **View Sample File** in the **Insert Users** window in BAT.

What to do next

You must upload the CSV data file to the first node of Unified Communications Manager database server so that BAT can access the data file.

Insert Users in Unified Communications Manager Database

You can add a group of users to the Unified Communications Manager database using a CSV data file. The field values that you enter in the CSV file for inserting users override the values provided in the user template.

Attention If the credential policy has "check for trivial password" enabled, and the password in the user template is the user ID, inserting users through BAT may fail if the user ID does not satisfy the necessary criteria for the trivial password.

Users can be inserted using BAT with primary extension configured without any devices selected for controlled devices. To do so, you must pre-populate the DN in Unified Communications Manager before inserting the users using BAT. The following steps outline the process of pre-populating the DN:

1. Create range of DNs to be associated for primary extension for users in the DN page.
2. Create a BAT template with primary extension configured (which should be the same DN's pre-populated).
3. Insert the users using BAT (as shown in the following procedure)

Before you begin

You must have a CSV data file that is saved in the UTF-8 encoding format and that contains the usernames, controlled device names, and directory numbers. You can create the CSV data file by using one of these methods:

- BAT spreadsheet that is converted to CSV format
- Export utility that produces an export file of user data

Note When you are inserting users by using an exported BAT file, you might get errors stating "User ID already exists" for some users that were exported in more than one file. For example, a list of first line managers and a list of users might both include the same manager user ID.

Procedure

Step 1 Choose **Bulk Administration** > **Users** > **Insert Users**.

Step 2 In the **File Name** field, choose the CSV data file that you created for this bulk transaction.

Step 3 If the CSV data file was created by using the export utility, check the **File created with Export Users** check box.

Step 4 From the **User Template Name** drop-down list, choose the user template you want to use for this insert.

Note
The User Profile, Controlled Device Name, and Directory Number should exist in the Unified Communications Manager database. The controlled device name should be entered in full. If it contains only MAC Address, then BAT displays a non-existing device error.

Step 5 In the **Job Information** area, enter the Job description.

Step 6 Choose an insert method. Do one of the following:

a) Click **Run Immediately** to insert the user records immediately.
b) Click **Run Later** to insert the user records at a later time.

Step 7 To create a job for inserting the user records, click **Submit**.

To schedule and/or activate this job, use the Job Scheduler option in the **Bulk Administration** main menu.

Add Phones with Users Using the BAT Spreadsheet

Create a CSV data file for adding phones and users in bulk.

Procedure

Step 1 To open the BAT spreadsheet, locate and double-click BAT.xlt file.

You can download a BAT.xlt file.

Step 2 When prompted, click **Enable Macros** to use the spreadsheet capabilities.

Step 3 At the bottom of the spreadsheet, click the **Phones-Users** tab.

Step 4 Follow steps 4 through 10 in Create Phone CSV Data File Using BAT Spreadsheet, on page 8.

BAT Spreadsheet Data Collection for CSV Data File Creation
Topics Related to Phones with Users
Upload and Download Files

Add Phone and User File Format

You can add the phone and user file format with a text-based CSV data file. After the CSV data file is created, you need to associate the file format with the text-based CSV data file. After associating the file format with the CSV file, the names for each field display as the first record in the CSV data file. You can use this information to verify that you entered the values for each field in the correct order.

Before you begin

You must create a CSV data file that defines individual values for each user that you want to update.

When you use a text editor to create the CSV data file, you create a file format for entering values in the text-based file. You enter values in the text file in the order that the file format specifies.

Procedure

Step 1 Choose **Bulk Administration** > **Phones and Users** > **Phones & Users File Format** > **Assign File Format**. The **Add File Format Configuration** window displays.

Step 2 In the **File Name** field, choose the text-based CSV file that you created for this transaction.

Step 3 In the **Format File Name** field, choose the file format that you created for this type of bulk transaction.

Step 4 To create a job for associating the matching file format with the CSV data file, click **Submit**.

Step 5 To schedule and/or activate this job, use the Job Scheduler option in the **Bulk Administration** main menu.

Note
The user fields get added automatically when you add the file format.

Insert Phones with Users Into Unified Communications Manager

You can add a group of phones and users to the Unified Communications Manager database and directory.

Note Phone records must be validated before insertion.

You can use the dummy MAC address option. When adding CTI ports, this option gives a unique device name to each CTI port in the form of dummy MAC addresses that you can manually update later using the Unified Communications Manager Administration or the Unified CM Auto-Register phone Tool. Do not use the dummy MAC address option for H.323 clients, VGC phones, or VGC virtual phones.

The dummy MAC address option automatically generates dummy MAC addresses in the following format:

XXXXXXXXXXXX

where X represents any 12-character, hexadecimal (0-9 and A-F) number.

Before you begin

1. Create a comma-separated values (CSV) data file to define individual values for each phone with users that you want to insert. You can create the CSV data file using the BAT spreadsheet (BAT.xlt) to add phones with users, or create a custom text file in CSV format to add phones with users combinations.
2. Associate file format with the CSV data file.
3. Validate phones with users records.

Procedure

Step 1 Choose **Bulk Administration** > **Phones & Users** > **Insert Phones with Users**.

Step 2 In the **File Name** field, choose the CSV data file that you created for this bulk transaction.

Step 3 In the **Phone Template Name** field, choose the BAT phone template that you used for this transaction.

Attention
If you did not enter individual MAC addresses in the CSV data file, you must check the **Create Dummy MAC Address** check box. You can update this information manually later. If you supplied MAC addresses or device names in the data input file, do not choose this option.

If you do not know the MAC address of the phone that is assigned to the user, choose this option. When the phone is plugged in, a MAC address registers for that device.

Step 4 In the **User Template Name** field, choose the BAT user template that you used for this transaction

Step 5 In the **Job Information** area, enter the Job description.

Step 6 Choose an insert method. Do one of the following:

a) Click **Run Immediately** to insert the phones with users immediately.
b) Click **Run Later** to insert the phones with users at a later time.

Step 7 To create a job for inserting the phones and user records, click **Submit**.

To schedule and activate this job, use the Job Scheduler option in the **Bulk Administration** main menu.