Cisco Unified CallManager Bulk Administration Guide 5.0(4)

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Cisco Unified CallManager Bulk Administration

Preface

This preface describes the purpose, audience, organization, and conventions of this guide, and provides information on how to obtain related documentation.

The preface covers these topics:

Purpose

The *Cisco Unified CallManager Bulk Administration Guide* provides instructions for using the Bulk Administration menu of Cisco Unified CallManager Administration.

Audience

This document provides information for network administrators and engineers who are responsible for managing the Cisco Unified CallManager system. Administering Cisco Unified CallManager Bulk Administration (BAT) requires knowledge of telephony and IP networking technology.

Organization

Table 1 provides the organization of this guide.

Table 1 Layout of BAT Tool User Guide

Chapter	Description
Part 1	Cisco Unified CallManager Bulk Administration Overview Provides an overview of BAT and installation instructions.
Part 2	Upload/Download Files Describes how to upload and download files.
Part 3	Phones Describes how to add phones, phones and users, computer telephony integration (CTI) ports, and CTI ports and users in batches rather than adding each device or combination individually. Also describes how to add or update lines, phone services, and speed dials and how to update and delete phones.
Part 4	Users Describes how to add, update, and delete batches of users.
Part 5	Phones and Users
Part 6	Managers and Assistants Describes how to add, update, or delete Manager Assistant Associations.
Part 7	User Device Profiles Describes how to add, update, or delete User Device Profiles.
Part 8	Gateways Describes how to add, update, or delete Cisco VG200 gateways and ports, and how to add or delete Foreign Exchange Station (FXS) ports for Cisco Catalyst 6000 analog interface modules. Also describes how to create a gateway directory number template for use with FXS ports.
Part 9	Forced Authorization Codes and Client Matter Codes Describes how to add, update, or delete Client Matter Codes and Forced Authorization Codes
Part 10	Pickup Groups Describes how to add, update, or delete call pickup groups.
Part 11	Scheduling Jobs Describes how to schedule and activate jobs
Part 12	Cisco Unified CallManager Tool for Auto Registered Phones Support (TAPS) Describes how to install, configure, and use Unified CM Auto-Register Phone Tool.

Table 1 Layout of BAT Tool User Guide (continued)

Part 13	Troubleshooting BAT and Unified CM Auto-Register Phone Tool Describes some common scenarios for bulk transaction log files and provides an explanation and resolution for various error messages that you may encounter while working with BAT or Unified CM Auto-Register Phone Tool.
Part 14	Appendix Describes how to create text-based files for the devices and users for bulk transactions. Also provides example of file formats for different scenarios.

Related Documentation

Refer to the following documents for further information about related Cisco IP telephony applications and products:

- Cisco Unified CallManager *Administration Guide*
- Cisco Unified CallManager *System Guide*
- *Release Notes for Cisco Unified CallManager*
- *Installing Cisco Unified CallManager*
- *Cisco Unified CallManager Serviceability Administration Guide*
- *Cisco Unified CallManager Serviceability System Guide*
- *Cisco Unified CallManager Security Guide*
- *Hardware Configuration Guide for the Cisco VG200*
- *Software Configuration Guide for the Cisco VG200*
- *Cisco VG248 Analog Phone Gateway Software Configuration Guide*
- *Cisco Unified IP Phone Administration Guide for Cisco Unified CallManager*
- *Cisco Unified CallManager Features and Services Guide*
- *Troubleshooting Guide for Cisco Unified CallManager*
- *Cisco Unified CallManager Assistant User Guide*

Conventions

This document uses the following conventions:

Convention	Description
boldface font	Commands and keywords are in **boldface**.
italic font	Arguments for which you supply values are in *italics*.

Convention	Description
string	A nonquoted set of characters. Do not use quotation marks around the string or the string will include the quotation marks.
`screen` font	Terminal sessions and information the system displays are in `screen` font.
`boldface screen` font	Information you must enter is in **`boldface screen`** font.

Notes use the following conventions:

Note Means *reader take note*. Notes contain helpful suggestions or references to material not covered in the publication.

Timesavers use the following conventions:

Timesaver Means *the described action saves time*. You can save time by performing the action described in the paragraph.

Tips use the following conventions:

Tip Means *the information contains useful tips.*

Cautions use the following conventions:

Caution Means *reader be careful*. In this situation, you might do something that could result in equipment damage or loss of data.

Warnings use the following conventions:

Warning **This warning symbol means danger. You are in a situation that could cause bodily injury. Before you work on any equipment, you must be aware of the hazards involved with electrical circuitry and familiar with standard practices for preventing accidents.**

Obtaining Documentation

Cisco documentation and additional literature are available on Cisco.com. Cisco also provides several ways to obtain technical assistance and other technical resources. These sections explain how to obtain technical information from Cisco Systems.

Cisco.com

You can access the most current Cisco documentation at this URL:

http://www.cisco.com/univercd/home/home.htm

You can access the Cisco website at this URL:

http://www.cisco.com

You can access international Cisco websites at this URL:

http://www.cisco.com/public/countries_languages.shtml

Ordering Documentation

You can find instructions for ordering documentation at this URL:

http://www.cisco.com/univercd/cc/td/doc/es_inpck/pdi.htm

You can order Cisco documentation in these ways:

- Registered Cisco.com users (Cisco direct customers) can order Cisco product documentation from the Ordering tool:

  http://www.cisco.com/en/US/partner/ordering/index.shtml

- Nonregistered Cisco.com users can order documentation through a local account representative by calling Cisco Systems Corporate Headquarters (California, USA) at 408 526-7208 or, elsewhere in North America, by calling 800 553-NETS (6387).

Documentation Feedback

You can send comments about technical documentation to bug-doc@cisco.com.

You can submit comments by using the response card (if present) behind the front cover of your document or by writing to the following address:

Cisco Systems
Attn: Customer Document Ordering
170 West Tasman Drive
San Jose, CA 95134-9883

We appreciate your comments.

Cisco Product Security Overview

This product contains cryptographic features and is subject to United States and local country laws governing import, export, transfer and use. Delivery of Cisco cryptographic products does not imply third-party authority to import, export, distribute or use encryption. Importers, exporters, distributors and users are responsible for compliance with U.S. and local country laws. By using this product you agree to comply with applicable laws and regulations. If you are unable to comply with U.S. and local laws, return this product immediately.

A summary of U.S. laws governing Cisco cryptographic products may be found at: http://www.cisco.com/wwl/export/crypto/tool/stqrg.html. If you require further assistance please contact us by sending email to export@cisco.com.

Cisco provides a free online Security Vulnerability Policy portal at this URL:

http://www.cisco.com/en/US/products/products_security_vulnerability_policy.html

From this site, you can perform these tasks:

- Report security vulnerabilities in Cisco products.
- Obtain assistance with security incidents that involve Cisco products.
- Register to receive security information from Cisco.

A current list of security advisories and notices for Cisco products is available at this URL:

http://www.cisco.com/go/psirt

If you prefer to see advisories and notices as they are updated in real time, you can access a Product Security Incident Response Team Really Simple Syndication (PSIRT RSS) feed from this URL:

http://www.cisco.com/en/US/products/products_psirt_rss_feed.html

Reporting Security Problems in Cisco Products

Cisco is committed to delivering secure products. We test our products internally before we release them, and we strive to correct all vulnerabilities quickly. If you think that you might have identified a vulnerability in a Cisco product, contact PSIRT:

- Emergencies—security-alert@cisco.com

  An emergency is either a condition in which a system is under active attack or a condition for which a severe and urgent security vulnerability should be reported. All other conditions are considered nonemergencies.
- Nonemergencies—psirt@cisco.com

In an emergency, you can also reach PSIRT by telephone:

- 1 877 228-7302
- 1 408 525-6532

Tip We encourage you to use Pretty Good Privacy (PGP) or a compatible product to encrypt any sensitive information that you send to Cisco. PSIRT can work from encrypted information that is compatible with PGP versions 2.*x* through 8.*x*.

Never use a revoked or an expired encryption key. The correct public key to use in your correspondence with PSIRT is the one linked in the Contact Summary section of the Security Vulnerability Policy page at this URL:

http://www.cisco.com/en/US/products/products_security_vulnerability_policy.html

The link on this page has the current PGP key ID in use.

Obtaining Technical Assistance

For all customers, partners, resellers, and distributors who hold valid Cisco service contracts, Cisco Technical Support provides 24-hour-a-day, award-winning technical assistance. The Cisco Technical Support Website on Cisco.com features extensive online support resources. In addition, Cisco Technical Assistance Center (TAC) engineers provide telephone support. If you do not hold a valid Cisco service contract, contact your reseller.

Cisco Technical Support Website

The Cisco Technical Support Website provides online documents and tools for troubleshooting and resolving technical issues with Cisco products and technologies. The website is available 24 hours a day, 365 days a year at this URL:

http://www.cisco.com/techsupport

Access to all tools on the Cisco Technical Support Website requires a Cisco.com user ID and password. If you have a valid service contract but do not have a user ID or password, you can register at this URL:

http://tools.cisco.com/RPF/register/register.do

Submitting a Service Request

Using the online TAC Service Request Tool is the fastest way to open S3 and S4 service requests. (S3 and S4 service requests are those in which your network is minimally impaired or for which you require product information.) After you describe your situation, the TAC Service Request Tool automatically provides recommended solutions. If your issue is not resolved using the recommended resources, your service request will be assigned to a Cisco TAC engineer. The TAC Service Request Tool is located at this URL:

http://www.cisco.com/techsupport/servicerequest

For S1 or S2 service requests or if you do not have Internet access, contact the Cisco TAC by telephone. (S1 or S2 service requests are those in which your production network is down or severely degraded.) Cisco TAC engineers are assigned immediately to S1 and S2 service requests to help keep your business operations running smoothly.

To open a service request by telephone, use one of the following numbers:

Asia-Pacific: +61 2 8446 7411 (Australia: 1 800 805 227)
EMEA: +32 2 704 55 55
USA: 1 800 553 2447

For a complete list of Cisco TAC contacts, go to this URL:

http://www.cisco.com/techsupport/contacts

Definitions of Service Request Severity

To ensure that all service requests are reported in a standard format, Cisco has established severity definitions.

Severity 1 (S1)—Your network is “down,” or there is a critical impact to your business operations. You and Cisco will commit all necessary resources around the clock to resolve the situation.

Severity 2 (S2)—Operation of an existing network is severely degraded, or significant aspects of your business operation are negatively affected by inadequate performance of Cisco products. You and Cisco will commit full-time resources during normal business hours to resolve the situation.

Severity 3 (S3)—Operational performance of your network is impaired, but most business operations remain functional. You and Cisco will commit resources during normal business hours to restore service to satisfactory levels.

Severity 4 (S4)—You require information or assistance with Cisco product capabilities, installation, or configuration. There is little or no effect on your business operations.

Obtaining Additional Publications and Information

Information about Cisco products, technologies, and network solutions is available from various online and printed sources.

- Cisco Marketplace provides a variety of Cisco books, reference guides, and logo merchandise. Visit Cisco Marketplace, the company store, at this URL:

  http://www.cisco.com/go/marketplace/

- The Cisco *Product Catalog* describes the networking products offered by Cisco Systems, as well as ordering and customer support services. Access the Cisco Product Catalog at this URL:

  http://cisco.com/univercd/cc/td/doc/pcat/

- *Cisco Press* publishes a wide range of general networking, training and certification titles. Both new and experienced users will benefit from these publications. For current Cisco Press titles and other information, go to Cisco Press at this URL:

  http://www.ciscopress.com

- *Packet* magazine is the Cisco Systems technical user magazine for maximizing Internet and networking investments. Each quarter, Packet delivers coverage of the latest industry trends, technology breakthroughs, and Cisco products and solutions, as well as network deployment and troubleshooting tips, configuration examples, customer case studies, certification and training information, and links to scores of in-depth online resources. You can access Packet magazine at this URL:

  http://www.cisco.com/packet

- *iQ Magazine* is the quarterly publication from Cisco Systems designed to help growing companies learn how they can use technology to increase revenue, streamline their business, and expand services. The publication identifies the challenges facing these companies and the technologies to help solve them, using real-world case studies and business strategies to help readers make sound technology investment decisions. You can access iQ Magazine at this URL:

  http://www.cisco.com/go/iqmagazine

- *Internet Protocol Journal* is a quarterly journal published by Cisco Systems for engineering professionals involved in designing, developing, and operating public and private internets and intranets. You can access the Internet Protocol Journal at this URL:

  http://www.cisco.com/ipj

- World-class networking training is available from Cisco. You can view current offerings at this URL:

  http://www.cisco.com/en/US/learning/index.html

PART 1

Overview

Overview

The Cisco Unified CallManager Bulk Administration (BAT), a web-based application, performs bulk transactions to the Cisco Unified CallManager database. BAT lets you add, update, or delete a large number of similar phones, users, or ports at the same time. When you use Cisco Unified CallManager Administration, each database transaction requires an individual manual operation, while BAT automates the process and achieves faster add, update, and delete operations.

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

Bulk Provision Service (BPS) administers and maintains all jobs that are submitted through Bulk Administration menu of Cisco Unified CallManager administration. This service can be started from Cisco Unified CallManager Serviceability.

The BPS Server service parameter determines if the service is activated on a particular server or not. BPS has to be activated only on the first node of Cisco Unified CallManager.

You can use BAT to work with the following types of devices and records:

- Add, update, and delete Cisco Unified IP Phones including voice gateway (VG) phones, computer telephony interface (CTI) ports, and H.323 clients, and migrate phones from Skinny Client Control Protocol (SCCP) to Session Initiation Protocol (SIP)
- Add, update, and delete users
- Add, update, and delete User Device Profiles
- Add, update, and delete Cisco Unified CallManager Assistant and Managers associations
- Add, update, and delete ports on a Cisco Catalyst 6000 FXS Analog Interface Module
- Add or delete Cisco VG200 analog gateways and ports
- Add or delete Forced Authorization Codes
- Add or delete Client Matter Codes
- Add or delete Call Pickup Groups

Note Cisco recommends that you limit the number of records when you perform a bulk transaction in Cisco Unified CallManager Bulk Administration to a maximum of 12,000 records. This applies when you insert, update, delete, or query any records using BAT.

You can also work with these devices in combination with the user information. For example, when you add CTI ports and users, BAT allows you to “Enable CTI Application Use.” This saves time when you are adding users who have applications that require a CTI port, such as Cisco IP SoftPhone.

An optional component of BAT, the Cisco Unified CallManager Auto-Register Phone Tool, further reduces the time and effort that is involved in administering a large system. When you need to add a large block of new phones, you can use BAT to add the devices with dummy media access control (MAC) addresses instead of entering each MAC address in the data input file. After the phones are installed, the phone users or the administrator can call the Unified CM Auto-Register Phone Tool directory number, follow the voice prompts, and download the correct user device profiles for their phones. For more information about the Unified CM Auto-Register Phone Tool tool, see Chapter 52, "Working with the Cisco Unified CallManager Auto-Register Phone Tool."

Use the following topics to understand how to use BAT:

Bulk Administration Installation

BAT is installed as part of the Cisco Unified CallManager Administration. Refer to *Cisco Unified CallManager Administration Guide* for more details.

Additional Topics

See the "Related Topics" section on page 1-11.

BAT Data Input Files

Every device includes a multitude of individual attributes, settings, and information fields that enable the device to function in the network and provide its telephony features. Many devices have the same attributes and settings in common, while other values, such as the directory number, are unique to a user or to a device. To condense the BAT data input file contents, BAT uses templates for settings that devices usually have in common.

For bulk configuration transactions on the Cisco Unified CallManager database, the BAT process uses two components: a template for the device type and a data file in comma separated value (CSV) format that contains the unique values for configuring a new device or updating an existing record in the database. The CSV data file works in conjunction with the device template.

For instance, when you create a bulk transaction for a group of Cisco IP Phones, you set up the CSV data file that contains the unique information for each phone, such as the directory number and MAC address. In addition, you set up or choose the BAT template that contains the common settings for all phones in the transaction, such as a Cisco IP Phone 7960 template.

Additional Topics

See the "Related Topics" section on page 1-11.

BAT Configuration Process

BAT uses a multistep process to prepare the bulk configuration transaction. BAT uses a Bulk Administration menu options, to guide you through the configuration tasks. The BAT process includes these tasks:

1. Set up the template for data input.
2. Define a format for the CSV data file.
3. Collect the data for each device in the bulk transaction.
4. Upload the data files choosing the relevant target and function for the transaction.
5. Validate the data input files with the Cisco Unified CallManager database.
6. Submit jobs for execution.
7. Schedule jobs.
8. Execute jobs to insert the devices into the Cisco Unified CallManager database.

Using the BAT Menu

From the Bulk Administration menu, you can choose one of these device or configuration options:

- Upload/Download Files
- Phones
- Users
- Phones and Users
- Manager/Assistants
- User Device Profiles
- Gateways
- Forced Authorization Codes
- Client Matter Codes
- Call Pickup Group
- Job Scheduler
- Unified CM Auto-Register Phone Tool

When you choose an option, the corresponding menu items display. For example, when you choose Phones, the following list of menu items displays:

- Validate Phones—Validate phones records.
- Insert Phones—Add new phones.
- Update Phones—Locate and modify existing phones.
- Delete Phones—Locate and delete phones.
- Export Phones—Locate and export specific phone records or all phone records.
- Add/Update Lines—Add new lines to existing phones, and locate and modify lines on existing phones.
- Reset/Restart Phones—Locate and reset or restart phones.
- Generate Phone Reports—Generate customized reports for phones.
- Migrate Phones—Migrate phones from SCCP to SIP protocol.

When you choose a menu option from the Bulk Administration menu the corresponding window opens, such as the Phone Template Configuration window. The configuration window provides the entry fields for defining a template.

Additional Topics

See the "Related Topics" section on page 1-11.

Using BAT Templates

As the first task in the BAT configuration process, you set up a template for the devices that you are configuring. You specify the type of phone or device that you want to add or modify, and then you create a BAT template that has features that are common to all the phones or devices in that bulk transaction.

You can create BAT templates for the following types of device options:

- Phones: All Cisco Unified IP Phone models and Cisco ATA 186, Cisco VGC phones, CTI ports, and H.323 clients.
- Gateways: Cisco VG200 and Cisco Catalyst 6000 FXS Analog Interface Module
- User Device Profiles: Cisco Unified IP Phone 7900 series and Cisco SoftPhone

Define a BAT template by specifying values in the template fields that will be common to all the devices in the bulk transaction. The BAT template fields require similar values to those that you enter when you are adding a device in Cisco Unified CallManager Administration.

Prior to creating the BAT template, make sure settings such as device pools, locations, calling search spaces, button templates, and softkey templates have already been configured in Cisco Unified CallManager Administration.

After you create a BAT template, you save it with a name. Later in the configuration process, you associate the template name with the CSV data file. The system stores the templates, so they are reusable for future bulk transactions. For example, you can configure a Cisco IP Phone 7960 template with a specific button template and calling search space and then configure another Cisco IP Phone 7960 template with a different button template and the Extension Mobility feature enabled. When you need to add a large number of phones with the same configuration, you can reuse the existing BAT template.

Master Phone Templates

When you are adding a group of phones that have multiple lines, you can create a master phone template that provides multiple lines and the most common values for a specific phone model. You can use the master template to add phones that have differing number of lines, but do not exceed the number of lines in the master phone template. For example, you can create a master phone template for a Cisco Unified IP Phone 7960 that has eight lines. You can use this template to add phones that have one line, two lines, or up to eight lines.

Additional Topics

See the "Related Topics" section on page 1-11.

Working with CSV Data Files

The CSV data file contains the unique settings and information for each individual device, such as its directory number, MAC address, and description. Make sure that all phones and devices in a CSV data file are the same phone or device model and match the BAT template. The CSV data file can contain duplicates of some values from the BAT template. Values in the CSV data file override any values that were set in the BAT template. You can use the override feature for special configuration cases.

Overriding Template Values Example

If you want most of the phones in the bulk transaction to be redirected to a voice-messaging system, you can set the Call Forward Busy (Internal/External) (CFB) and Call Forward No Answer (Internal/External) (CFNA) fields to the voice-messaging number. However, if a few phones in the bulk transaction need to be redirected to a secretary instead of to a voice messaging system, you can specify the secretary's directory number in the Call CFB and CFNA fields in the CSV data file. Most of the phones will use the CFB and CFNA values from the BAT phone template, but certain phones will use the secretary's directory number as specified in the CSV data file.

The CSV data file for phones can contain multiple directory numbers. Keep in mind that the number of directory numbers that are entered in the CSV data file must not exceed—but can be less than— the number of lines that are configured in the BAT phone template, or an error will result.

Use the following topics to understand the different types of CSV data files:

- CSV Data Files for Adding New Devices, page 1-5
- CSV Data Files to Update Existing Devices, page 1-6
- Customizing File Formats for CSV Data Files, page 1-6

CSV Data Files for Adding New Devices

When you are adding new devices to the system, you can use the Microsoft Excel spreadsheet that was designed to use with BAT. The BAT spreadsheet assists you with the following features:

- Data file templates with macros for the different devices
- Customized file format definition
- Support for multiple phone lines
- Record error checking
- File conversion to CSV format

When you are creating new records, use the BAT spreadsheet, which is named BAT.xlt, because the data gets validated automatically when you export to the CSV format. For more information about using the BAT spreadsheet, see "Using the BAT Spreadsheet for Gathering Data" section on page 1-8.

Note BAT.xlt validates data only for valid characters, data types, and field length for particular fields. For more information see the "Validating CSV Data File Phone Records" section on page 5-1.

For experienced BAT users who are comfortable with working in a CSV formatted file, you can use a text editor to create a CSV data file by following the sample text file that is provided on the device insert task window. For more information about text-based CSV data files, see Appendix A, "Text-Based CSV Files."

Additional Topics

See the "Related Topics" section on page 1-11.

CSV Data Files to Update Existing Devices

To modify or update existing phones and devices, you need to locate the records for these devices. BAT provides two methods for locating phones, gateways, and device profiles. You can search by using a customized query or by using a custom file.

Customized Queries

BAT provides a window for defining your query criteria. You can choose the specific device model and/or choose criteria from a list of device details and a list of line details. To locate all devices of a specific device model, such as Cisco IP Phone 7912, you choose the model but add no other criteria for the search. You get the records for all the Cisco Unified IP Phones 7912 that are configured in the database.

Custom Files

When no common attribute to use for a query exists, BAT provides the custom file option. A custom file includes device names or directory numbers. You can build a custom text file by putting each record on a separate line. The search gives you all the records that match the criteria.

Exported Files

When you need to move a group of phones, you can use the export utility. You use the export utility to extract existing records from the Cisco Unified CallManager database to move them into a CSV data file. When you move phones, use the option, Export Phones with the All Phone Details. This option generates an export file that contains records with all the information, including the device attributes, line attributes, and services, that is associated with that phone. You can also export phone records with specific details when phones have similar line configurations and you want to use a template. For more information about using the export utility to update devices, see Using Phone Export, page 9-1

Additional Topics

See the "Related Topics" section on page 1-11.

Customizing File Formats for CSV Data Files

CSV data files comprise a string of device attributes and information in a comma separated value (CSV) format. To insert data records into the Cisco Unified CallManager database, ensure that each data file is in the CSV format. In earlier releases of BAT, the CSV file had a fixed format with two options:

- Default format—CSV files that have a fixed and limited number of attributes and settings for each device.
- All details format—CSV files that are created by using the export utility and include all attributes and settings for each device.

The first row of every CSV data file shows the file format by displaying the name of each field that the CSV file includes. The file format information makes it easier to locate the entry for a specific field in the CSV data file. For instance, in the following sample CSV file, USER ID represents the fifth field in the header, and the fifth field in the CSV file for the phone shows "johns."

Sample CSV Data File with the Default File Format:

```
MAC ADDRESS,DESCRIPTION,LOCATION,USER ID,DIRECTORY NUMBER 1,DISPLAY 1,LINE TEXT LABEL
1,FORWARD BUSY EXTERNAL 1,FORWARD NO ANSWER EXTERNAL 1,FORWARD NO COVERAGE EXTERNAL
1,FORWARD BUSY INTERNAL 1,FORWARD NO ANSWER INTERNAL 1,FORWARD NO COVERAGE INTERNAL 1,CALL
PICKUP GROUP 1,SPEED DIAL NUMBER 1, SPEED DIAL LABEL 1
1231123245AB,SEP1231123245AB,Dallas,johns,9728437154,9728437154,Mike,9728437172,9728437196
,9728437127,9728437154,9728437178,9728437189,9728437121/TollByPass,1230000000,Helpdesk
9728437127,9728437154,9728437178,9728437189,Marketing,1230000000,Helpdesk
```

Now, you can customize the file format for the CSV data file by using the Create Phone File Format Configuration window. You can add attributes to your file format that are also in the BAT template. This allows you to override the template entry with a specific attribute for a device. For instance, you can choose the route partition attribute for your file format and enter different partitions for each phone in the CSV data file.

From this window, you can choose specific attributes from Device fields and Line fields

The following device attributes always remain in each file format:

- MAC Address
- Description

The File Format Configuration dialog box makes it easy to choose the device attribute in the Device Field box and click an arrow to move the attribute into the Selected Device Field box. You can select multiple attributes at the same time by holding down the Ctrl key.

You can rearrange the order of the device attribute fields and line attribute fields in the file format by using the Up and Down arrows. You can select an attribute and then click the Up arrow to move the item closer to the first record or click the down arrow to move the item further away from the first record. You cannot move line attributes before device attributes or change the order of speed dials.

Tip You can customize a CSV file format so it matches the arrangement of your employee phone information that is stored in another database. This method simplifies exporting data between a company database and the Cisco Unified CallManager database.

Sample CSV Data File with the Customized File Format:

Device fields—MAC Address, Description, Device Pool, Calling Search Space

Line fields—Directory number, Partition, Line Text Label (moved to position after directory number in file)

The File Format does not include speed-dial codes. Speed-dials can be chosen by selecting the Include Speed Dials in the CSV Format check box.

```
MAC ADDRESS,DESCRIPTION,DEVICE POOL,CSS,DIRECTORY NUMBER,LINE TEXT LABEL,PARTITION,
2234900AEF01,SEP2234900AEF01,DP_1,CSS_Restricted,
9725098827,Lobby Phone,Part1
```

Associating the File Format with the CSV Data File

When you are using a text editor to create a CSV data file, you can create a customized file format and then enter values in the same order as specified by that file format. Before inserting the text-based CSV data file that uses the customized file format, you must associate the file format name with the CSV data file. You can associate only one file format with a CSV data file.

Use the Add File Format window to choose the name of the CSV data file <CSVfilename>.txt from the File Name drop-down list. Next, you choose your file format from the File Format Name drop-down list. The data in the CSV data file must match the custom file format that you have chosen.

Additional Topics

See the "Related Topics" section on page 1-11.

Using the BAT Spreadsheet for Gathering Data

The BAT spreadsheet simplifies the creation of CSV data files. You can add multiple devices and view the records for each device in a spreadsheet format. It allows you to customize the file format within the spreadsheet and provides validation and error checking automatically to help reduce configuration errors. The BAT spreadsheet includes tabs along the bottom of the spreadsheet for access to the required data input fields for the various devices and user combinations in BAT.

Note BAT.xlt validates data only for valid characters, data types, and field length for particular fields. For more information see the "Validating CSV Data File Phone Records" section on page 5-1.

The CSV data file works in combination with the BAT template. For example, when you choose the Phone tab in the BAT spreadsheet, you can leave Location, Forward Busy Destination, or Call Pickup Group blank. The values from the BAT phone template get used for these fields; however, if you specify values for Forward Busy Destination or Call Pickup Group, those values override the values for these fields that were set in the BAT phone template.

Tip When Cisco Unified CallManager is installed, the Microsoft Excel file for the BAT spreadsheet gets placed on the first node database server; however, you probably do not have Microsoft Excel running on the first node database server. You must download the file from the first node database server to the local machine on which you plan to work.

To download the file to a local machine, see Chapter 2, "Uploading and Downloading Files.". Download the file **BAT.xlt** file to a local machine where Microsoft Excel is installed.

To use the BAT.xlt spreadsheet to create a CSV data file, locate and double-click the BAT.xlt file. You must choose to "enable macros" when you open the BAT spreadsheet.

The spreadsheet displays a set of columns with attribute headings that specify the BAT field names, whether the field is a required or optional, and the maximum number of characters that are allowed in the field.

Tabs for every device display along the bottom of the spreadsheet. When you click the tab for the type of device with which you want to work, the columns adjust to display all relevant fields for the chosen device. For example, to add phones and users all at once, click the tab that is marked **Phones-Users**.

Tip If the "enable macros" option does not display while you are opening the spreadsheet, a possibility exists that macro security on the Excel program is set to high. Ensure that Macro security is medium or low for the macros to run. To set the Macro security to medium, do the following task: choose Tools>Macro>Security from Excel menu. Set the security level to medium. Close the Excel program and open it again. This action should give you the "enable macros" option when you open the spreadsheet the next time.

Next, define the file format for the CSV data file by clicking the **Create File Format** button. You can use the Field Selection dialog box to choose items and their order in your CSV data file. When you click **Create**, the columns in the spreadsheet adjust to your new file format.

In the first row, enter data for a device in all mandatory fields and any relevant optional fields. You enter data in a new row for each device.

Note The system treats blank rows in the spreadsheet as "end of file" markers and discards subsequent records.

After all device records are completed, you export the BAT spreadsheet data to the CSV file format that BAT must use to perform the bulk transaction with the Cisco Unified CallManager first node database.

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.

The system saves the CSV formatted file as a text file to the a folder that you choose. The file name format follows:

<tabname><timestamp>.txt

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

Next, you must upload the converted CSV data file (CSV format version) back to the Cisco Unified CallManager database server using Upload/Download Files option in the Bulk Administration of Cisco Unified CallManager Administration. For more information, refer to Chapter 2, "Uploading and Downloading Files."

Additional Topics

See the "Related Topics" section on page 1-11.

Validating the BAT Data Input File

In the next task, you use the Validate File option. In this task, you choose the name of the CSV data file and the BAT template for the device or the model when you have a CSV data file with all details. You have these options for how records are validated:

Specific Details—For validating records that follow the Default or Custom file format.

All Details—For validating records from a file that was generated with the export utility by using the All Details option.

When you choose Validate, the system runs a validation routine to check for errors against the first node database. These checks include the following items:

- Fields, such as description, display text, and speed-dial label that do not have a dependency on a database table, use valid characters.
- Cisco Unified CallManager shows that groups, pools, partitions, and other referenced attributes are already configured.
- Number of lines that are configured on a device matches the device template. (Only for Specific Details)

Validation does not check for the existence of a user or for mandatory/optional fields that are BAT defined, such as the dummy MAC address.

After the transaction completes, click the **Log File Name** link in the Job configuration window to see a log file that displays the devices that could not be validated successfully and the error code. For more information on log files, see Chapter 54, "Troubleshooting BAT and Unified CM Auto-Register Phone Tool."

Additional Topics

See the "Related Topics" section on page 1-11.

Inserting the BAT Data Input File

When the data input file has passed validation, you are ready to use the Insert window to add the device records into the Cisco Unified CallManager first node database. During this task, you choose the name of the data input file, the BAT template for the device, and the model, if applicable. You have these options for how records are validated:

Specific Details—For inserting records that use a customized file format.

All Details—For inserting records from a file that was generated with the export utility by using the All Details option.

Enter Job Information details and click submit. A job is created that can be accessed using the Job Scheduler Option in the Bulk Administration menu. Use the Job Configuration window to view the status, and to schedule and activate the job.

Note If any line information for a phone record fails, BAT does not insert that phone record.

After the transaction completes, click the **Log File Name** link in the Job Configuration window to see a log file that displays the number of records that were added and the number of records that failed, including an error code. For more information on log files, see Chapter 54, "Troubleshooting BAT and Unified CM Auto-Register Phone Tool."

Additional Topics

See the "Related Topics" section on page 1-11.

Using the BAT Application

The following topics provide information about the BAT application and how to start and use it:

A web browser, a resource-intensive application, can consume large amounts of system memory and CPU cycles. When the web browser takes resources away from Cisco Unified CallManager, it adversely affects call processing. Possible consequences of using the browser on the same machine as the web server and Cisco Unified CallManager include delayed dial tone and dropped calls.

Accessing Cisco Unified CallManager Administration and BAT

BAT, a web-based application, requires the use of a web browser. For more details and specifications, refer to *Cisco Unified CallManager Administration Guide*.

Additional Topics

See the "Related Topics" section on page 1-11.

Using Online Help

To access BAT online help, choose the **Help** menu. The Help menu provides two help features:

- **Contents and Index**—Opens the BAT help file and allows you to browse for information or search the index.
- **For This Page**—Opens the help directly for the window that you are currently viewing. You can still browse the remainder of the help or use the index.

Online help provides a multivolume system that allows you to access several different help systems, all from the same window. You can also access a comprehensive search engine and index.

Additional Topics

See the "Related Topics" section on page 1-11.

Finding the Cisco Unified CallManager Version

To find the current version of Cisco Unified CallManager, choose **Help > About**.

Additional Topics

See the "Related Topics" section on page 1-11.

Related Topics

- BAT Data Input Files, page 1-2
- BAT Configuration Process, page 1-3
- Using BAT Templates, page 1-4
- Working with CSV Data Files, page 1-5
- CSV Data Files for Adding New Devices, page 1-5
- CSV Data Files to Update Existing Devices, page 1-6
- Customizing File Formats for CSV Data Files, page 1-6
- Using the BAT Spreadsheet for Gathering Data, page 1-8
- Validating the BAT Data Input File, page 1-9
- Inserting the BAT Data Input File, page 1-10
- Using the BAT Application, page 1-10
- Accessing Cisco Unified CallManager Administration and BAT, page 1-11

- Using Online Help, page 1-11
- Finding the Cisco Unified CallManager Version, page 1-11

Cisco Systems

PART 2

Upload/Download Files

Uploading and Downloading Files

This chapter describes the procedures to upload files to Cisco Unified CallManager first node and download files to a local machine.

Use the following procedures:

Finding a File

Use the following procedure to find files that you can download from the Cisco Unified CallManager server.

Procedure

Step 1 Choose **Bulk Administration > Upload/Download Files**. The Find and List Files window displays.

Step 2 From the first Find File where drop-down list box, choose one of the following options.

- Name
- Type

Step 3 From the second Find Job where drop-down list box, choose one of the following options.

- If you chose Name in Step 2, chose one of the following options and continue with Step 4.
  - begins with
  - contains
  - is exactly
  - ends with
  - is empty
  - is not empty
- If you chose Type in Step 2, continue with Step 4.

Step 4 Specify the appropriate search text, if applicable.

Tip To find all files that are registered in the database, click **Find** without entering any search text.

Step 5 To further define your query and to add multiple filters, check the Search Within Results check box choose AND or OR from the drop-down box, and repeat steps 2 through 4.

Step 6 If you chose Type in Step 2, from the Select item or enter search text drop-down list box, choose one of the following options.

- Insert Files
- Export Files
- Report Files
- Custom Files
- Log Files
- BAT Excel Template

Step 7 Click **Find**.

A list of discovered files displays by

- File Name
- Function Type

If you chose Type in Step 2, the list of discovered files displays by

- File Name
- Launch Date and Time

To download a file(s) that you chose, see "Downloading a File" section on page 2-2.

Additional Topics

See the "Related Topics" section on page 2-4.

Downloading a File

Use the following procedure to download a file from the Cisco Unified CallManager server.

Procedure

Step 1 Find the files you want to download using the "Finding a File" section on page 2-1.

Step 2 Check the check boxes corresponding to the files that you want to download and click **Download Selected**.

Note You can download all the files by clicking **Select All** and then clicking **Download Selected**.

Note If you select more than one file to download at a time, the files will be downloaded to a common zip file.

Step 3 The File Download pop-up window displays. Click **Save**.

Step 4 In the Save As pop-up window, choose the location you want to save the file to and click Save.

Step 5 The Download Complete pop-up window displays. Click **Open** to open the downloaded file or click **Close** to open it at a later time.

Additional Topics

See the "Related Topics" section on page 2-4.

Uploading a File

Use the following procedure to upload a file to the Cisco Unified CallManager server.

Procedure

Step 1 Choose **Bulk Administration > Upload/Download Files**. The Find and List Files window displays.

Step 2 Click **Add New**. The File Upload Configuration window displays.

Step 3 In the File text box, enter the full path of the file you want to upload or click Browse and locate the file.

Step 4 From the Select the Target drop-down list box, choose the target you want to use the file for.

Step 5 From the Transaction Type drop-down list box, choose the transaction type the file defines.

Step 6 If you want to overwrite an existing file with the same name, check the Overwrite File if it Exists check box.

Step 7 Click **Save**. The status displays that the upload is successful.

Additional Topics

See the "Related Topics" section on page 2-4.

Deleting a File

Use the following procedure to delete files.

Procedure

Step 1 Find the files that you want to delete using the "Finding a File" section on page 2-1.

Step 2 In the Search Results area, check the check box corresponding to the files that you want to delete.

Step 3 Click **Delete Selected**.

Note To delete all files displayed in the Search Results area, click **Select All** and **Delete Selected**.

Step 4 To continue, click **OK**.

Step 5 The files are now deleted from the server.

Note If any files that you chose for deletion are being used to execute any jobs, then these file will not be deleted.

Note Do not delete the BAT.xlt file.

Additional Topics

See the "Related Topics" section on page 2-4.

Related Topics

- Finding a File, page 2-1
- Downloading a File, page 2-2
- Uploading a File, page 2-3
- Deleting a File, page 2-3

PART 3

Phones

Phone Template

Cisco Unified CallManager Bulk Administration (BAT) gives the administrator a fast and efficient way to add, update, or delete large numbers of phones in batches, rather than performing individual updates through Cisco Unified CallManager Administration. You can use BAT to work with the following types of phones:

- Cisco Unified IP Phones (all models)
- CTI ports
- H.323 clients

The following topics provide information about using BAT to work with phone templates and other IP telephony devices:

Adding Phones

When you use BAT to add phones and other IP telephony devices to the Cisco Unified CallManager 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).

Use the following steps to add phones and IP telephony devices in bulk.

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

The Find and List Phone Templates window displays. See the "Using BAT Phone Templates" section on page 3-2 for information about configuring phone templates.

Step 2 To create a CSV data file for inserting phone templates using the BAT spreadsheet, see "Using the BAT Spreadsheet to Create a CSV Data File for Phones" section on page 3-30

Text Editor to Create the CSV Data File

a. Choose **Bulk Administration > Phones > Phone File Format > Create File Format**.

The Find and List Phone File Formats window displays. See "Finding a Phone File Format" section on page 4-2 for information about configuring file formats for CSV data file.

b. Use a text editor and create the CSV data file for phones that follows the file format that you want to use. For more information about creating a text-based CSV file, see the "Creating a Text-Based CSV File for Phones" section on page A-1.

c. Choose **Bulk Administration > Phones > Phone File Format > Add File Format.**

The Add File to Format window displays. See the "Associating the File Format with the CSV Data File" section on page 4-5 for information about associating file formats.

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

The Validate Phones window displays. See Chapter 5, "Validating Phone Records," for information about validating phone records.

Step 4 Choose **Bulk Administration > Phones > Insert Phones**.

The Insert Phones window displays. See the "Inserting Phones into Cisco Unified CallManager" section on page 6-1 for information about inserting phone records into the Cisco Unified CallManager database.

Additional Topics

See the "Related Topics" section on page 3-43.

Using BAT Phone Templates

Use BAT phone templates to define the common phone attributes to add a group of new phones. Prior to creating the template, make sure phone settings such as device pool, location, calling search space, button template and softkey templates have already been configured in Cisco Unified CallManager Administration. You cannot create new settings in BAT.

Use these topics to work with BAT Phone Templates:

Finding a BAT Phone Template

Because you might have several phone templates, Cisco Unified CallManager lets you locate specific phone template on the basis of specific criteria. Use the following procedure to locate templates.

Note During your work in a browser session, your find/list search preferences are stored in the cookies on the client machine. If you navigate to other menu items and return to this menu item, or if you close the browser and then reopen a new browser window, your Cisco Unified CallManager search preferences are retained until you modify your search.

Procedure

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

The Find and List Phone Templates window displays. Use the two drop-down list boxes to search for a template.

Step 2 From the first Find Phone Templates where drop-down list box, choose one of the following criteria:

- Device Name
- Description
- Directory Number
- Calling Search Space
- Device Pool
- Device Type
- Call Pickup Group
- LSC Status
- Authentication String
- Device Protocol
- Security Profile

From the second Find Phone Template where drop-down list box, choose one of the following criteria:

- begins with
- contains
- is exactly
- ends with
- is empty
- is not empty

Step 3 Specify the appropriate search text, if applicable, and click **Find**.

Tip To find all Phone Templates that are registered in the database, click **Find** without entering any search text.

A list of discovered templates displays.

Step 4 From the list of records, click the device name that matches your search criteria.

The window displays the phone template that you choose.

Additional Information

See the "Related Topics" section on page 3-43.

Creating a New BAT Phone Template

Use this procedure to create the phone template. After you create a phone template, you can add lines, services, and speed dials. Use the following procedure to create a phone template.

Procedure

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

The Find and List Phone Templates window displays.

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

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

Step 4 Choose the device protocol from the Select the Device Protocol drop-down list box. Click **Next**.

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

Step 5 In the Phone Template Name field, enter a name for the template. The name can contain up to 50 alphanumeric characters. Example: Sales_7960.

Step 6 In the Device Information area, enter the phone settings that this batch has in common. See Table 3-1 for field descriptions. Some phone models and device types do not have all the attributes that the table lists.

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

Step 8 When the status indicates that the transaction has completed, you can add line attributes.

Additional Information

See the "Related Topics" section on page 3-43.

Adding or Updating Lines in a BAT Template

To add one or more lines to the BAT template or to update existing lines, follow this procedure. The button template in use for this BAT template determines the number of lines that you can add or update. You can create a master phone template that has multiple lines. Then, you can use the master template to add phones with a single line or up to the number of lines in the master template. See the "Master Phone Templates" section on page 1-4 for more information.

Procedure

Step 1 Find the Phone Template you want to add line to, using the procedure in "Finding a BAT Phone Template" section on page 3-2

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.

Note 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.

Step 3 Enter or choose the appropriate values for the line settings that are described in Table 3-2. Keep in mind that all phones or user device profiles in this batch will use the settings that you choose for this line. Treat all fields as optional.

Step 4 Click **Save**.

BAT adds the line to the phone template configuration.

Step 5 Repeat Step 2 through Step 4 to add settings for any additional lines.

Note 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. To find existing line template, enter the appropriate search criteria and click **Find**. To add a new line template click **Add New** on Find and List Line Template window.

It is recommended that you use alpha-numeric characters for Line Template. This is so that , if numbers are given there is a chance of this conflicting with an actual directory number. This would also avoid conflicts with features such as Call Pickup group number, Call Park number, etc.

Note For some Cisco Unified IP Phone models, you can add Cisco Unified IP Phone services and speed dials to the template. For more information, see Adding or Updating IP Services in a BAT Template, page 3-5 and Adding or Updating Speed Dials in a BAT Template, page 3-6.

Additional Information

See the "Related Topics" section on page 3-43.

Adding or Updating IP Services in a BAT Template

You can subscribe Cisco Unified IP Phone services to the Cisco Unified IP Phone models that include this feature.

Note You can bulk subscribe users or phones to IP services with common service parameters but not to IP services with unique service parameters.
This is valid only for services that are subscribed through a phone template. For services with unique parameters, values can be specified through CSV file.

Procedure

Step 1 Find the Phone Template you want add an IP Service to, using the procedure in "Finding a BAT Phone Template" section on page 3-2.

Step 2 In 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 Cisco Unified IP Phone 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 To associate these phone services to the phone template, click **Subscribe** .

Step 7 To add more services, repeat Step 3 through Step 6.

Step 8 To add all the services to the template, click **Update**.

Step 9 Close the popup window.

Step 10 You can add speed dials to the template by continuing to the "Adding or Updating Speed Dials in a BAT Template" section on page 3-6.

Additional Information

See the "Related Topics" section on page 3-43.

Adding or Updating Speed Dials in a BAT Template

You can add and update speed dials in the BAT template.

You can designate speed dials for phones and Cisco VGC phones if the Phone Button Template provides speed-dial buttons.

Procedure

Step 1 Find the Phone Template you want to add speed dials to, using the procedure in "Finding a BAT Phone Template" section on page 3-2

Step 2 In the Phone Template Configuration window, click **Add a new SD** in the Associated Information area, or 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 Cisco Unified IP Phones and expansion modules. The phone button template in use for this BAT template determines the number of available speed-dial buttons.

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

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

Step 5 In the ASCII Label field, enter the corresponding ASCII label for the speed-dial number.

Step 6 In the Abbreviated Dial Settings area, you can set abbreviated speed dials for applicable IP phone models by repeating Step 3 and Step 5.

Step 7 Click **Save**.

BAT inserts the speed-dial settings in the template, and the popup window closes.

Additional Topics

See the "Related Topics" section on page 3-43.

Adding or Updating Busy Lamp Field in a BAT Template

You can add and update busy lamp filed speed dials in the BAT template.

You can designate busy lamp field speed dials for phones and Cisco VGC phones if the Phone Button Template provides speed-dial buttons.

Procedure

Step 1 Find the Phone Template you want to add speed dials to, using the procedure in "Finding a BAT Phone Template" section on page 3-2

Step 2 In the Phone Template Configuration window, click **Add a new BLF SD** in the Associated Information area, or choose **Add/Update Busy Lamp Field 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 busy lamp field speed-dial (BLF SD) buttons for Cisco Unified IP Phones and expansion modules. The phone button template in use for this BAT template determines the number of available BLF SD buttons.

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 box. 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 In the ASCII Label field, enter the corresponding ASCII label for the BLF SD number.

Step 7 Click **Save**.

BAT inserts the BLF SD settings in the template, and the popup window closes.

Additional Topics

See the "Related Topics" section on page 3-43.

Modifying BAT Phone Templates

Use this procedure to view or modify an existing phone or user device profile template. You can add or update lines, services, and speed dials.

Procedure

Step 1 Find the Phone Template you want to modify, using the procedure in "Finding a BAT Phone Template" section on page 3-2

Step 2 In the Phone Template Configuration window, add, change, or remove settings in the template. See "Field Descriptions for a Phone Template" section on page 3-9 for more information.

Step 3 After you have modified the settings to update the template, click **Save**.

Step 4 If you want to update other attributes, choose one of the following procedures:

- Adding or Updating Lines in a BAT Template, page 3-4
- Adding or Updating IP Services in a BAT Template, page 3-5
- Adding or Updating Speed Dials in a BAT Template, page 3-6

Additional Information

See the "Related Topics" section on page 3-43.

Copying a BAT Phone Template

You can copy the properties of a phone template into a new phone template when you want to change only a few fields.

Note The new template that you create must be the same device type as the original template, such as Cisco IP Phone model 7960.

Use the following procedure to copy an existing BAT phone template.

Procedure

Step 1 Find the Phone Template you want to copy, using the procedure in "Finding a BAT Phone Template" section on page 3-2

Step 2 In the Phone Template Configuration window, verify that this is the template that you want to copy and click **Copy**.

Note You can also copy the phone template from the Find and List Phone Templates window. Click the icon in the Copy or Copy with Lines column corresponding the phone template you wish to copy.

The template reproduces and creates a copy. The copy duplicates all the values that were specified in the original template. If you click the icon in the Copy with Lines column in the Find and List Phone Templates window, then all the lines associated with the template are also copied.

Step 3 In the Phone Template Name field, enter a name for the template. The name can contain up to 50 alphanumeric characters. Example: Sales_7960.

Step 4 Update the fields as needed for the new template. See "Field Descriptions for a Phone Template" section on page 3-9 for information.

Step 5 Click **Save**. The template that is added to BAT displays in the Phone Templates column on the left.

Step 6 For more information on adding lines to the phone template, see the "Adding or Updating Lines in a BAT Template" section on page 3-4. You can also define services and speed-dial buttons.

Additional Topics

See the "Related Topics" section on page 3-43.

Deleting Templates

You can delete BAT templates when you no longer require them. Use this procedure to delete a template.

Procedure

Step 1 Find the Phone Template you want to delete, using the procedure in "Finding a BAT Phone Template" section on page 3-2.

Step 2 In the Phone Template Configuration window, verify that this is the template that you want to delete and click **Delete**.

Note You can also delete the phone template from the Find and List Phone Templates window.check the check box next to the template you want to delete and click **Delete Selected**

A message displays that asks you to confirm the delete operation.

Step 3 To delete the template, click **OK**. The template name disappears from the list of phone templates list on the Find and List Phone Templates window.

Caution If you submit a job that uses a particulate phone template and if you delete the phone template then the job also gets deleted.

Additional Topics

See the "Related Topics" section on page 3-43.

Field Descriptions for a BAT Phone Template

Table 3-1 provides descriptions of all possible fields that display when you are adding a BAT phone template for all IP telephony devices. Some device types do not require all the phone settings.

Some fields display the values that were configured in Cisco Unified CallManager Administration.

In the BAT user interface, field names that have an asterisk require an entry. Treat fields that do not have an asterisk as optional.

For related procedures, see the "Related Topics" section on page 3-43.

Table 3-1 Field Descriptions for a Phone Template

Field	Description
Device Name	Enter the device name.
Description	Enter a description for the phone template you want to create.
Device Pool	Choose the device pool for this group of phones/ports. For devices, a device pool defines sets of common characteristics, such as region, date/time group, Cisco Unified CallManager group, and calling search space for auto-registration.

Table 3-1 Field Descriptions for a Phone Template (continued)

Field	Description
Common Phone Profile	From the drop-down list box, choose a common phone profile from the list of available common phone profiles.
Calling Search Space	Choose the calling search space for this group of phones/ports. A calling search space specifies the collection of Route Partitions that are searched to determine how a dialed number should be routed.
AAR Calling Search Space	Choose the appropriate calling search space for the device to use when it performs automated alternate routing (AAR). The AAR calling search space specifies the collection of route partitions that are searched to determine how to route a collected (originating) number that is otherwise blocked due to insufficient bandwidth.
Media Resource Group List	Choose the media resource group list (MRGL) for this group of phones/ports. An MRGL specifies a list of prioritized media resource groups. An application can choose required media resources from the available ones according to the order that is defined in the MRGL.
User Hold Audio Source	Choose the user hold audio source for this group of phones/ports. The user hold audio source identifies the audio source from which music is played when a user places a call on hold.
Network Hold Audio Source	Choose the network hold audio source for this group of IP phones or ports. The network hold audio source identifies the audio source from which music is played when the system places a call on hold, such as when the user transfers or parks a call.
Location	Choose the appropriate location for this group of IP phones or ports. The location specifies the total bandwidth that is available for calls to and from this location. A location setting of *None* means that the locations feature does not keep track of the bandwidth that this Cisco IP Phone consumes.
User Locale	Choose the country and language set that you want to associate with this group of IP phones. This choice determines which cultural-dependent attributes exist for this user and which language displays for the user in the Cisco Unified CallManager user windows and phones.
Network Locale	Choose the network locale that you want to associate with this group of phones. The Network Locale comprises a set of tones and cadences that Cisco gateways and phones use when communicating with the PSTN and other networks in a specific geographical area.
Owner User ID	Enter a user ID for the primary phone user.

Table 3-1 Field Descriptions for a Phone Template (continued)

Field	Description
Phone Load Name	Enter the custom phone load, if applicable. **Note** Any value that is entered in this field overrides the default value for the chosen model. For more information about Cisco IP Phone software and configuration, refer to the *Cisco IP Phone Administration Guide for Cisco Unified CallManager 5.0*, which is specific to the phone model.
Device Security Mode	From the drop-down list box, choose the mode that you want to set for the device: Use System Default—The phone uses the value that you specified for the enterprise parameter, Device Security Mode. Non-secure—No security features exist for the phone. A TCP connection opens to Cisco Unified CallManager. Authenticated—Cisco Unified CallManager provides integrity and authentication for the phone. A TLS connection using NULL/SHA opens. Encrypted—Cisco Unified CallManager provides integrity, authentication, and encryption for the phone. A TLS connection using AES128/SHA opens This field displays only if the phone model supports authentication or encryption.
Built In Bridge	Enable or disable the built-in conference bridge for the barge feature by using the Built In Bridge drop-down list box (choose *On, Off,* or *Default*). For more configuration information, refer to the Barge and Privacy Features in the *Cisco Unified CallManager Features and Services Guide*.
Privacy	For each phone that wants Privacy, choose *On* in the Privacy drop-down list box. For more configuration information, refer to Barge and Privacy Features in the *Cisco Unified CallManager Features and Services Guide*.
Retry Video Call as Audio	This check box applies only to video endpoints that receive a call. If this phone receives a call that does not connect as video, the call tries to connect as an audio call. By default, the system checks this check box to specify that this device should immediately retry a video call as an audio call (if it cannot connect as a video call) prior to sending the call to call control for rerouting. If you uncheck this check box, a video call that fails to connect as video does not try to establish as an audio call. The call then fails to call control, and call control routes the call via Automatic Alternate Routing (AAR) and/or route/hunt list.

Table 3-1 Field Descriptions for a Phone Template (continued)

Field	Description
Ignore Presentation Indicators (Internal Calls Only)	Check this check box to configure call display restrictions on a call-by-call basis. When this check box is checked, Cisco Unified CallManager ignores any presentation restriction that is received for internal calls.
Allow Control of Device from CTI	Check this check box to allow control of all CTI controllable devices from CTI. This check box can be enabled or disabled based on CTI Controllable Device Type and Device Protocol. For example, a 7960 with SIP protocol is not supported by CTI, therefore, the check box should be disabled. A 7960 with SCCP protocol is supported by CTI, hence check box should be enabled.
Protocol Specific Information	
Packet Capture Mode	From the drop-down list box, choose the mode that you want to set for signal packet capture: • None—Choose None if you do not want to specify a mode. • Real-Time Mode—Use this mode for real-time signal packet capture. • Batch Processing Mode—Use this mode for batch processing signal packet capture mode.
Packet Capture Duration	Enter the time for packet capture in minutes. You can enter a maximum duration of 300 minutes. The default duration specifies 60 minutes.
Presence Group	Used with the Presence feature, the SIP or SCCP phone serves as a watcher because it requests status about the presence entity, for example, directory number, that is configured as a BLF speed dial button on the phone. If you want the phone to receive the status of the presence entity, choose a Presence group that is allowed to view the status of the Presence group that is applied to the directory number, as indicated in the Presence Group Configuration window. **Tip** For more information on the Presence feature, refer to the *Cisco Unified CallManager Features and Services Guide*.
SIP Dial Rules	If required, choose the appropriate SIP dial rule. SIP dial rules provide local dial plans for Cisco SIP IP Phones model 7905, 7912, 7940, and 7960, so that users do not have to press a key or wait for a timer before the call gets processed. Leave the SIP Dial Rules field set to <None> if you do not want dial rules applied to the SIP IP Phone. This means the user will have to use the Dial softkey or wait for the timer to expire before the call gets processed.
Device Security Profile	For SCCP or SIP phones, choose the security profile that you want to apply to the device. All phones require that you apply a security profile. If the phone does not support security, choose a nonsecure profile.

Table 3-1 Field Descriptions for a Phone Template (continued)

Field	Description
MTP Preferred Originating Codec	From the drop-down list box, choose the codec to use if a media termination point is required for SIP calls.
Rerouting Calling Search Space	From the drop-down list box, choose a calling search space to use for rerouting. The rerouting calling search space of the referrer gets used to find the route to the refer-to target. When the Refer fails due to the rerouting calling search space, the Refer Primitive rejects the request with the "405 Method Not Allowed" message. The redirection (3xx) primitive and transfer feature also uses the rerouting calling search space to find the redirect-to or transfer-to target.
Out-of-Dialog Refer Calling Search Space	From the drop-down list box, choose an out-of-dialog refer calling search space. Cisco Unified CallManager uses the out-of-dialog (OOD) Refer Authorization calling search space (CSS) to authorize the SIP out-of-dialog Refer. The administrator can restrict the use of out-of-dialog Refer by configuring the OOD CSS of the Referrer. Refer Primitive rejects the OOD Refer request with a "403 Forbidden" message.
SUBSCRIBE Calling Search Space	Used with the Presence feature, the SUBSCRIBE Calling Search Space determines how Cisco Unified CallManager routes the subscription requests that come from the phone. From the drop-down list box, choose the calling search space that you want to use for this purpose. **Tip** For more information on the Presence feature, refer to the *Cisco Unified CallManager Features and Services Guide*.
SIP Profile	Choose the default SIP profile or a specific profile that was previously created. SIP profiles provide specific SIP information for the phone such as default telephony event payload type, registration and keep alive timers, media ports, Iris, and dynamic DNS server addresses.
Digest User	Used with digest authentication (SIP security), choose an end user that you want to associate with the phone. Ensure that you configured digest credentials for the user that you choose, as specified in the End User Configuration window. After you save the phone configuration and reset the phone, the digest credentials for the user get added to the phone configuration file. For more information on digest authentication, refer to the *Cisco Unified CallManager Security Guide*.
Unattended Port	Check this check box to indicate an unattended port on this device.
Require DTMF Reception	For SIP and SCCP phones, check this check box to require DTMF reception for this phone.

Table 3-1 Field Descriptions for a Phone Template (continued)

Field	Description
RFC2833 Disabled	For SCCP phones, check this check box to disable RFC2833 support.
Phone Button Template and Expansion Module Template Information	
Phone Button Template	Choose the button template for all phones in this group. Button templates determine the button identity (line, speed dial) and the button location on the phone. Button templates include the expansion modules.
Softkey Template Information	
Softkey Template	Choose the softkey template to be used for all phones in this group.
Expansion Module Information	
Module 1	Choose the expansion module if installed in the phone.
Module 2	Choose the expansion module if installed in the phone.
Firmware Load Information	
Module 1 Load Name	Enter the firmware load for the first Cisco Unified IP Phone Expansion Module, if applicable. Leave this field blank to use the default load.
Module 2 Load Name	Enter the firmware load for the second Cisco Unified IP Phone Expansion Module, if applicable. Leave this field blank to use the default load.
Certification Authority Proxy Function (CAPF) Information (These parameters display only for devices with the capability to support authentication or encryption.)	
Certificate Operation	From the drop-down list box, choose the Certification Operation that you want to perform from the following options: • No Pending Operation—No pending Certification Operation lists for this device. Choosing this option disables the remaining CAPF fields. • Install/Upgrade—Install or upgrade a Certification Operation. • Delete—Delete a Certification Operation. • Troubleshoot—Troubleshoot a Certification Operation.

Table 3-1 Field Descriptions for a Phone Template (continued)

Field	Description
Authentication Mode	From the drop-down list box, choose the Authentication Mode by which you want the phone to authenticate with CAPF during the certificate operation from the following options: • By Null String—Install/upgrade, delete, or troubleshoot a locally significant certificate without user intervention. • <None> **Note** This option prompts you to specify a value for the Authentication Mode. • By Authentication String—Installs/upgrades, deletes, or troubleshoots a locally significant certificate only when the user enters the CAPF authentication string on the phone. • By Existing Certificate (precedence to LSC)—Installs/upgrades, deletes, or troubleshoots a locally significant certificate if a manufacture-installed certificate (MIC) or locally significant certificate (LSC) exists in the phone. **Note** Before you choose this option, verify that a certificate exists in the phone. If you choose this option and no certificate exists in the phone, the operation fails. • By Existing Certificate (precedence to MIC)—Installs/upgrades, deletes, or troubleshoots a locally significant certificate if a LSC or MIC exists in the phone. **Note** Before you choose this option, verify that a certificate exists in the phone. If you choose this option and no certificate exists in the phone, the operation fails.
Authentication String	If you chose the By Authentication String option from the Authentication Mode drop-down list box in the security profile, this setting applies. Manually enter a numeric string that contains 4 to 10 digits. To install, upgrade, or troubleshoot a locally significant certificate, the phone user or administrator must enter the authentication string on the phone.

Table 3-1 Field Descriptions for a Phone Template (continued)

Field	Description
Key Size (Bits)	From the drop-down list box, choose the Key Size that you want for the certificate from the following options: • 1024—This is the default option. • <None> **Note** This option prompts you to specify a value for the Key Size for the certificate. • 2048 • 512 **Note** If you choose a higher key size than the default setting, the phones take longer to generate the entropy that is required to generate the keys. Key generation, which is set at low priority, allows the phone to function while the action occurs. Depending on the phone model, you may notice that key generation takes up to 30 or more minutes to complete.
Operation Completes By	This field, which supports the Install/Upgrade, Delete, and Troubleshoot Certificate Operation options, specifies the date and time in which you must complete the operation.
Certificate Operation Status	This field displays the progress of the certificate operation; for example, <operation type> pending, failed, or successful, where operating type equals the Install/Upgrade, Delete, or Troubleshoot Certificate Operation options. You cannot change the information that displays in this field.
Cisco Unified IP Phone - External Data Locations	
Information	Enter the help text URL for the information button for Cisco IP Phones.
Directory	Enter the URL of the directory server for Cisco IP Phones.
Messages	Enter the voice-messaging access pilot number for Cisco IP Phones.
Services	Enter the URL for the services menu for Cisco IP Phones.
Authentication Server	Enter the URL that the phone uses to validate requests that are made to the phones web server. If you do not provide an authentication URL, the advanced features on the Cisco Unified IP Phone models that require authentication will not function. Leave this field blank to accept the default setting. By default, this URL accesses a Cisco Unified IP Phone User Options window that was configured during installation.

Table 3-1 Field Descriptions for a Phone Template (continued)

Field	Description
Proxy Server	Enter the host and port (for example, proxy.cisco.com:80) that are used to proxy HTTP requests for access to non-local host addresses from the phones HTTP client. If the phone receives a URL such as www.cisco.com in a service and the phone is not configured in the cisco.com domain, the phone uses the proxy server to access the URL. If the phone is configured in the cisco.com domain, the phone accesses the URL without using the proxy because it is in the same domain as the URL. Leave this field blank to accept the default setting.
Idle	Enter the URL of the XML service that will appear as the idle display on the Cisco Unified IP Phone LCD screen when the phone has not been used for the time that is specified in the Idle Time field. For example, you can display a logo on the LCD screen when the phone has not been used for 5 minutes. Leave this field blank to use the default value.
Idle Timer	Enter the seconds that you want to elapse before the phone displays the URL that is specified in the Idle field. Leave this field blank to use the default value.
Extension Mobility (Device Profile) Information	
Enable Extension Mobility Feature	Check this check box to enable the extension mobility feature. Extension mobility allows a user to log in and out of a Cisco IP Phone. Refer to the *Cisco Unified CallManager Features and Services Guide* for more information about extension mobility.
Log Out Profile	Choose the profile that a phone should load when an extension mobility user logs out. You must configure logout profiles in Cisco Unified CallManager Administration. Use Current Device Setting—This choice creates an autogenerated device profile as the default device profile. Select a User Device Profile—This choice assigns a user device profile, which has already been defined, that becomes the default device profile for this device. The chosen user device profile gets loaded onto the device when no user is logged in.

Table 3-1 Field Descriptions for a Phone Template (continued)

Field	Description
MultiLevel Precedence and Preemption (MLPP) Information	
MLPP Indication	If available, this setting specifies whether a device capable of playing precedence tones will use the capability when it places an MLPP precedence call. From the drop-down list box, choose a setting to assign to this device from the following options: • **Default**—This device inherits its MLPP indication setting from its device pool. • **Off**—This device does not send indication of an MLPP precedence call. • **On**—This device does send indication of an MLPP precedence call. **Note** Do not configure a device with the following combination of settings: MLPP Indication is set to *Off* while MLPP Preemption is set to *Forceful*.
MLPP Preemption	If available, this setting specifies whether a device that is capable of preempting calls in progress will use the capability when it places an MLPP precedence call. From the drop-down list box, choose a setting to assign to this device from the following options: • **Default**—This device inherits its MLPP preemption setting from its device pool. • **Disabled**—This device does not preempt calls in progress when it places an MLPP precedence call. • **Forceful**—This device preempts calls in progress when it places an MLPP precedence call. **Note** Do not configure a device with the following combination of settings: MLPP Indication is set to *Off* while MLPP Preemption is set to *Forceful*.
MLPP Domain (e.g., "0000FF")	Enter a hexadecimal value for the MLPP domain associated with this device. Must be blank or a value between 0 and FFFFFF.
H.323 Device Information	
Signaling Port	The value designates the H.225 signaling port that this device uses. The default value specifies 1720. Valid values include 1 through 65535.

Table 3-1 Field Descriptions for a Phone Template (continued)

Field	Description
Retry Video Call as Audio	This check box applies only to video endpoints that receive a call. If this phone receives a call that does not connect as video, the call tries to connect as an audio call. By default, the system checks this check box to specify that the sending device should immediately retry a video call that does not connect as an audio call prior to sending the call to call control for rerouting. If you uncheck this check box, a video call that fails to connect as video fails to call control. At this point, call control reroutes the call within the route list. If Automatic Alternate Routing (AAR) is configured and enabled, call control also reroutes the call between route lists.
Wait for Far End H.245 Terminal Capability Set	By default, the system keeps this check box checked to specify that Cisco Unified CallManager should initiate capabilities exchange. This check box specifies that the Cisco Unified CallManager needs to receive the far-end H.245 Terminal Capability Set before it sends its H.245 Terminal Capability Set.
H.323 Protocol Specific Information	
SRTP Allowed	When this check box is checked, IPSec needs to be configured in the network to provide end to end security. Failure to do so will expose keys and other information.
MTP Preferred Originating Codec	From the drop-down list box, choose the codec to use if a media termination point is required for SIP calls.
Media Termination Point Required	Use this field to indicate whether a media termination point (MTP) is used to implement features that H.323 does not support (such as hold and transfer). Check the Media Termination Point Required check box if you want to use a media termination point to implement features. Uncheck the Media Termination Point Required check box if you do not want to use a media termination point to implement features. Use this check box only for H.323 clients and those H.323 devices that do not support the H.245 empty capabilities set or if you want media streaming to terminate through a single source. If you check this check box to require an MTP and this device becomes the endpoint of a video call, the call works as audio only.
H.323 Information	
Outgoing Caller ID Pattern	For incoming calls to the phone, enter the pattern, from 0 to 24 digits, that you want to use for caller ID.

Table 3-1 Field Descriptions for a Phone Template (continued)

Field	Description
Calling Party Selection	Choose one of the following options to specify which directory number is sent: • Originator—Send the directory number of the calling device. • First Redirect Number-—Send the directory number of the redirecting device. • Last Redirect Number—Send the directory number of the last device to redirect the call. • First Redirect Number(external)—Send the directory number of the redirecting device. • Last Redirect Number(external)—Send the directory number of the last device to redirect the call.
Calling Party Presentation	Choose whether the central office transmits or blocks caller ID: • Choose Allowed if you want the central office to send caller ID. • Choose Restricted if you do not want the central office to send caller ID. • Default displays the caller ID unless the caller ID was restricted in a previous level in the call stream.
Display IE Delivery	Check the check box to deliver the display information element (IE) in SETUP and CONNECT messages for the calling and called party name delivery service.
Redirecting Number IE Delivery—Outbound	Check this check box to include the Redirecting Number IE in the outgoing SETUP message from the Cisco Unified CallManager to indicate the first redirecting number and the redirecting reason of the call when the call is forwarded. Uncheck the check box to exclude the first redirecting number and the redirecting reason from the outgoing SETUP message. Use Redirecting Number IE for voice-messaging integration only. If your configured voice-messaging system supports Redirecting Number IE, check the check box.
Redirecting Number IE delivery—Inbound	Use Redirecting Number IE when you are integrating a voice-messaging system that supports Redirecting Number IE. Check this check box to accept the Redirecting Number IE in the incoming SETUP message to the Cisco Unified CallManager. Uncheck the check box to exclude the Redirecting Number IE in the incoming SETUP message to the Cisco Unified CallManager.
Gatekeeper Information	

Table 3-1 Field Descriptions for a Phone Template (continued)

Field	Description
Gatekeeper Name	Choose the gatekeeper for the gatekeeper-controlled H.323 device from the drop-down list box. **Note** If you do not choose the device, the system disables the E.164, Technology Prefix, and Zone fields. **Note** You cannot change the device to a gatekeeper-controlled phone if more than one directory number is configured for the device.
E.164	Choose the E.164 address that is registered with the gatekeeper. **Note** Ensure the H.323 client is configured as a gatekeeper-controlled device. **Note** You must enter a value in this field for a gatekeeper-controlled H.323 client. You can enter only numbers (0-9) and special characters # and * in this field.
Technology Prefix	Enter the technology prefix to eliminate the need for entering the IP address for every Cisco Unified CallManager system when configuring the **gw-type-prefix** command. For example, you can enter 1#* in this field if you can use the following gw-type-prefix command on the gatekeeper: **gw-type-prefix 1#* default-technology**. **Note** You must enter a value in this field for a gatekeeper-controlled H.323 client. You can enter only numbers (0-9) and special characters # and * in this field.
Zone	On the Gatekeeper, enter the specific zone with which Cisco Unified CallManager will register. The zone specifies the total bandwidth that is available for calls between this zone and another zone. **Note** You must enter a value in this field for a gatekeeper-controlled phone. You can enter only letters, numbers, spaces, dashes, dots, and underscores in this field.
Gatekeeper Controlled H.323 Client	Check this check box to configure the H.323 client gatekeeper as a controlled gatekeeper.
Secure Shell Information	
Secure Shell User	Enter a user ID for the secure shell user. If the phone you are configuring does not support secure shell access, this field does not display. Cisco Technical Assistance Center (TAC) uses secure shell for troubleshooting. Contact TAC for further assistance.
Secure Shell Password	Enter the password for a secure shell user. If the phone you are configuring does not support secure shell access, this field does not display. Contact TAC for further assistance.

Table 3-1 Field Descriptions for a Phone Template (continued)

Field	Description
Product-Specific Configuration	
Model-specific configuration fields defined by the device manufacturers	The device manufacturer specifies the model-specific fields under product-specific configuration. Because they are dynamically configured, they can change without notice. To view field descriptions and help for product-specific configuration items, click the "**?**" information icon to the right of the Product Specific Configuration heading to display help in a popup dialog box. If you need more information, refer to the documentation for the specific device that you are configuring or contact the manufacturer.

Note To continue configuring the BAT phone template, go to the "Creating a New BAT Phone Template" section on page 3-4

Field Descriptions for Adding a Line to a BAT Template

Table 3-2 provides descriptions of all possible fields that display when you are adding a line in a BAT phone, gateway, or UDP template. Some device types do not require all the phone settings.

Some fields display the values that were configured in Cisco Unified CallManager Administration.

In the BAT user interface, field names that have an asterisk require an entry. Treat fields that do not have asterisk as optional.

For related procedures, see the "Related Topics" section on page 3-43.

Table 3-2 Field Descriptions for Adding a Line to a BAT Template

Field	Description
Directory Number Information	
Line Template Name	Enter a unique name for the line template.
Route Partition	Choose a route partition to which the directory number belongs. **Note** The directory number can appear in more than one partition.
Description	Enter description for the line template
Alerting Name	This name represents the name that displays during an alert to a shared directory number. For non-shared directory numbers, during alerts, the system uses the name that is entered in the Display field.
Alerting Name ASCII	This field provides the same information as the Alerting Name field, but you must limit input to ASCII characters. Devices that do not support Unicode (internationalized) characters display the content of the Alerting Name ASCII field.

Table 3-2 Field Descriptions for Adding a Line to a BAT Template (continued)

Field	Description
Active	To view this check box on the Directory Number Configuration window, access an unassigned directory number from the Route Plan Report window. Checking this check box allows calls to this DN to be forwarded (if forwarding is configured). If check box is not checked, Cisco Unified CallManager ignores the DN.
Directory Number Settings	
Voice Mail Profile	Choose this parameter to make the pilot number the same as the directory number for this line. This action proves useful if you do not have a voice-messaging server that is configured for this phone.
Calling Search Space	Choose partitions that are searched for numbers that are called from this directory number. **Note** Changes cause an update of Pickup Group Names that are listed in the Call Pickup Group field. The setting applies to all devices that are using this directory number.
Presence Group	Used with the Presence feature, the directory number serves as the presence entity; that is, watchers request the status of the directory number, so the real-time status of the directory number displays on the device. If you want the phone to receive the status of the presence entity, make sure that the Presence group of the watcher is allowed to view the status of the Presence group that is applied to the directory number, as indicated in the Presence Group Configuration window. For information on the Presence feature, refer to the *Cisco Unified CallManager Features and Services Guide*.
AAR Group	Choose the automated alternate routing (AAR) group for this device. The AAR group provides the prefix digits that are used to route calls that are otherwise blocked due to insufficient bandwidth. Set AAR Group to <None> to prevent rerouting blocked calls.
User Hold Audio Source	Choose the music on hold audio source to be played when the user presses HOLD to place a call on hold.
Network Hold Audio Source	Choose the music on hold audio source to be played when the system places a call on hold while the user transfers a call or initiates a conference or call park.
Call Forward and Pickup Settings	
Forward All Voice Mail	Check this check box if you want calls to forward to the number that you chose in the voice-mail profile. Checking this check box makes the Forward All Destination field and Forward All Calling Search Space check box not relevant.

Table 3-2 Field Descriptions for Adding a Line to a BAT Template (continued)

Field	Description
Forward All Destination	Enter the directory number to which all calls are forwarded. **Note** The setting applies to any dialable phone number, including an outside destination unless restricted, and to all devices that are using this directory number.
Forward All Calling Search Space	Choose the calling search space to use when calls are forwarded to the specified destination. **Note** This setting applies to all devices that are using this directory number.
Secondary Calling Search Space for Forward All	Choose the secondary calling search space (CSS) from the drop-down list box. Because Call Forwarding is a line-based feature, in cases where the device calling search space is unknown, only the line calling search space is used to forward the call. If the line calling search space is restrictive and not routable, the forward attempt fails. Addition of a secondary calling search space for Call Forward All provides a solution to enable forwarding. The primary calling search space for Call Forward All and secondary calling search space for Call Forward All get concatenated (Primary CFA CSS + Secondary CFA CSS) when processing Call Forward All. Cisco Unified CallManager uses this combination to validate the CFA destination and to forward the call.
Forward Busy Internal Voice Mail	Check this check box if you want calls from an internal number forwarded to a number that you chose in the voice-mail profile. Checking this check box makes the Forward Busy Internal Destination field and Calling Search Space check box not relevant.
Forward Busy Internal Destination	Enter the directory number to which an internal call is forwarded when the line is in use. **Note** This setting applies to any internal dialable phone number and to all devices that are using this directory number.
Forward Busy Internal Calling Search Space	Choose the calling search space to use when internal calls are forwarded to the specified destination. **Note** This setting applies to all devices that are using this directory number.
Forward Busy External Voice Mail	Check this check box if you want calls from an external number forwarded to a number that you chose in the voice-mail profile. Checking this check box makes the Forward Busy External Destination field and Calling Search Space check box not relevant.

Table 3-2 Field Descriptions for Adding a Line to a BAT Template (continued)

Field	Description
Forward Busy External Destination	Enter the directory number to which an external call is forwarded when the line is in use. **Note** This setting applies to any dialable external phone number, including an outside destination unless restricted, and to all devices that are using this directory number.
Forward Busy External Calling Search Space	Choose the calling search space to use when external calls are forwarded to the specified destination. **Note** This setting applies to all devices that are using this directory number.
Forward No Answer Internal Voice Mail	Check this check box if you want calls from an internal number forwarded to the number that you chose in the voice-mail profile. Checking this check box makes the Forward No Answer Internal Destination field and Calling Search Space check box not relevant.
Forward No Answer Internal Destination	Enter a directory number to which an internal call is forwarded when the phone is not answered. **Note** This setting applies to any internal dialable phone number and to all devices that are using this directory number.
Forward No Answer Internal Calling Search Space	Choose the calling search space to use when internal calls are forwarding to the specified destination. The setting displays only if it is configured in the system. **Note** This setting applies to all devices that are using this directory number.
Forward No Answer External Voice Mail	Check this check box if you want calls to forward to an external number that you chose in the voice-mail profile. Checking this check box makes the Forward No Answer Externally Destination field and External Calling Search Space check box are not relevant.
Forward No Answer External Destination	Enter a directory number to which an external call is forwarded when the phone is not answered. **Note** This setting applies to any external dialable phone number, including an outside destination unless restricted, and to all devices that are using this directory number.
Forward No Answer External Calling Search Space	Choose the calling search space to use when external calls are forwarding to the specified destination. The setting displays only if it is configured in the system. **Note** This setting applies to all devices that are using this directory number.

Table 3-2 Field Descriptions for Adding a Line to a BAT Template (continued)

Field	Description
Forward No Coverage Internal Voice Mail	Check this check box if you want calls from an internal number forwarded to the number that you chose in the voice-mail profile. Checking this check box makes the Forward No Answer Destination field and Calling Search Space check box not relevant.
Forward No Coverage Internal Destination	Enter an directory number to which an internal call is forwarded when the phone has no coverage. **Note** This setting applies to any internal dialable phone number and to all devices that are using this directory number.
Forward No Coverage Internal Calling Search Space	Choose the calling search space to use when internal calls are forwarding to the specified destination. The setting displays only if it is configured in the system. **Note** This setting applies to all devices that are using this directory number.
Forward No Coverage External Voice Mail	Check this check box if you want calls from external number forwarded to the number that you chose in the voice-mail profile. Checking this check box makes the Forward No Answer Destination field and Calling Search Space check box not relevant.
Forward No Coverage External Destination	Enter a directory number to which an external call is forwarded when the phone has no coverage. **Note** This setting applies to any dialable phone number, including an outside destination unless restricted, and to all devices that are using this directory number.
Forward No Coverage External Calling Search Space	Choose the calling search space to use when external calls are forwarding to the specified destination. The setting displays only if it is configured in the system. **Note** This setting applies to all devices that are using this directory number.

Table 3-2 Field Descriptions for Adding a Line to a BAT Template (continued)

Field	Description
Forward on CTI Failure Voice Mail	The Forward on CTI Failure field applies only to CTI route points and CTI ports. The settings in this row specify the forwarding treatment for external calls to this CTI route point or CTI port if the CTI route point or CTI port fails. Check this check box to use settings in the Voice Mail Profile Configuration window. When this check box is checked, Cisco Unified CallManager ignores the settings in the Destination box and Calling Search Space. When this check box is checked for internal calls, the system automatically checks the Voice Mail check box for external calls. If you do not want external calls to forward to the voice-messaging system, you must uncheck the Voice Mail check box for external calls.
Forward on CTI Failure Destination	This setting specifies the directory number to which an internal nonconnected call is forwarded when an application that controls that directory number fails. Use any dialable phone number, including an outside destination. When you enter a destination value for internal calls, the system automatically copies this value to the Destination field for external calls. If you want external calls to forward to a different destination, you must enter a different value in the Destination field for external calls.
Forward on CTI Failure Calling Search Space	This setting applies to all devices that are using this directory number. When you choose a Calling Search Space for internal calls, the system automatically copies this setting to the Calling Search Space setting for external calls. If you want external calls to forward to a different calling search space, choose a different setting in the Calling Search Space for external calls.
No Answer Ring Duration	Enter the number of seconds to allow the call to ring before forwarding the call to the Forward No Answer Destination.
Call Pickup Group	Choose a Pickup Group Name to specify the call pickup group, which can answer incoming calls to this directory number by dialing the appropriate pickup group number.
Multilevel Precedence and Preemption Alternate Party Settings	
Target (Destination)	Enter the number to which MLPP precedence calls should be directed if this directory number receives a precedence call and neither this number nor its call forward destination answers the precedence call. Values can include numeric characters, pound (#), and asterisk (*).
MLPP Calling Search Space	From the drop-down list box, choose the calling search space to associate with the alternate party target (destination) number.

Table 3-2 Field Descriptions for Adding a Line to a BAT Template (continued)

Field	Description
MLPP No Answer Ring Duration (Seconds)	Enter the number of seconds (between 4 and 30) after which an MLPP precedence call will be directed to the alternate party of this directory number if this directory number and its call forwarding destination have not answered the precedence call. Leave this setting blank to use the value that is set in the Cisco Unified CallManager enterprise parameter, Precedence Alternate Party Timeout.
Line Settings for This Phone	
Display (Internal Caller ID)	Use this field only if you do not want the directory number to show on the line appearance. Enter text that identifies this directory number for a line/phone combination. Suggested entries include boss's name, department's name, or other appropriate information to identify multiple directory numbers to secretary/assistant who monitors multiple directory numbers.
Line Text Label	Enter text that identifies this directory number for a line/phone combination. **Note** The default language specifies English
External Phone Number Mask	Enter the phone number (or mask) that is sent for Caller ID information when a call is placed from this line. You can enter a maximum of 24 numbers and "X" characters. The Xs represent the directory number and must appear at the end of the pattern. For example, if you specify a mask of 972813XXXX, an external call from extension 1234 displays a caller ID number of 9728131234.
Message Waiting Lamp Policy	Use this field to configure the handset lamp illumination policy. Choose one of the following options: • Use System Policy (The directory number refers to the service parameter "Message Waiting Lamp Policy" setting.) • Light and Prompt • Prompt Only • Light Only • None Setting applies only to the current device unless you check the check box at right (called Update Shared Device Settings) and click the **Propagate selected** button. (The check box at right displays only if other devices share this directory number.)

Table 3-2 Field Descriptions for Adding a Line to a BAT Template (continued)

Field	Description
Ring Setting (Phone Idle)	Choose the ring setting for the line appearance when an incoming call is received and no other active calls exist on that device. Choose one of the following options: • Use system default • Disable • Flash only • Ring once • Ring
Ring Setting (Phone Active)	Choose the ring setting that is used when this phone has another active call on a different line. Choose one of the following options: • Use system default • Disable • Flash only • Ring once • Ring • Beep only
Multiple Call/Call Waiting Settings	
Maximum Number of Calls	You can configure up to 184 calls for a line on a device in a cluster, with the limiting factor being the device. As you configure the number of calls for one line, the calls available for another line decrease. The default specifies 4. If the phone does not allow multiple calls for each line, the default specifies 2. For CTI route points, you can configure up to 10,000 calls for each port. The default specifies 5000 calls. Use this field in conjunction with the Busy Trigger field.
Busy Trigger	This setting, which works in conjunction with Maximum Number of Calls and Call Forward Busy, determines the maximum number of calls to be presented at the line. If maximum number of calls is set for 50 and the busy trigger is set to 40, then incoming call 41 gets rejected with a busy cause (and will get forwarded if Call Forward Busy is set). If this line is shared, all the lines must be busy before incoming calls get rejected. Use this field in conjunction with Maximum Number of Calls for CTI route points. The default specifies 4500 calls.
Forwarded Call Information Display for this Device	
Caller Name	Check this check box to include the caller's name in the display when a forwarded call is received. Default leaves this check box checked.

Table 3-2 Field Descriptions for Adding a Line to a BAT Template (continued)

Field	Description
Caller Number	Check this check box to include the caller's number in the display when receiving a forwarded call.
Redirected Number	Check this check box to include the redirected number in the display when receiving a forwarded call.
Dialed Number	Check this check box to include the dialed number in the display when a forwarded call is received. The default setting leaves this check box checked.

Note To complete the procedure for phones and UDPs, go to the "Adding or Updating Lines in a BAT Template" section on page 3-4. To complete the updates for gateways, see Chapter 43, "Gateway Template."

Note You can edit the device or line by choosing device name in the Associated Devices list box and clicking **Edit Device** or **Edit Line Appearance**.

Using the BAT Spreadsheet to Create a CSV Data File for Phones

When you are adding new phones or IP telephony devices to the system, you can use the Microsoft Excel spreadsheet that was designed to use with BAT. The spreadsheet has macros that automatically adjust the options for the selected devices. 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.

Use the following procedure to create the CSV data file by using the BAT spreadsheet for adding new phones and other IP telephony devices.

For information about installing and using the BAT spreadsheet, see the "Using the BAT Spreadsheet for Gathering Data" section on page 1-8.

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 a radio button for one of the following device types:

- Phones
- CTI Port
- H.323 Client
- VGC Phones
- VGC Virtual Phones

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.

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

Step 5 To choose the device and line fields that you can define for each phone, click **Create File Format**. The Field Selection popup window displays.

Step 6 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 You can select a range of items in the list by holding down the Shift key. To select random field names, hold down the Ctrl key and click field names.

Step 7 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 You can change the order of the items in the Selected Line and Device boxes. Choose an item and use the up arrow to move the field closer to the beginning of the list, or the down arrow to move the item to the end of the list.

Step 8 Click **Create** to modify the CSV data file format. A message asks whether you want to overwrite the existing CSV format.

Step 9 Click **OK**. New columns for the selected fields display in the BAT spreadsheet in the order that you specified.

Step 10 Scroll to the right to locate the Number of Phone Lines box. The number of lines that you specify here must not exceed the number of lines that are configured in the BAT template.

Note When you insert a CSV data file, the number of lines on phones must not exceed the number of lines in the BAT phone template, or you receive an error.

Step 11 For phones, you must enter the number of speed-dial buttons in the Number of Speed Dials box. After you enter the number, columns display for each speed-dial number.

Note When you insert the data records, do not exceed the number of speed dials that are configured in the BAT template, or an error will result when the CSV data file and BAT phone template are inserted.

Step 12 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. Table 3-3 describes all the phone fields in the BAT spreadsheet.

Step 13 If you did not enter the MAC address for each phone, check the **Create Dummy MAC Address** check box.

When you choose the dummy MAC address option, you can update the phones later with the correct MAC address by manually entering this information into Cisco Unified CallManager Administration or by using the Unified CM Auto-Register Phone Tool tool. See the "Introducing Cisco Unified CM Auto-Register Phone Tool" section on page 52-2 for more information about Unified CM Auto-Register Phone Tool.

Note If you are adding CTI ports, the dummy MAC address option gives a unique device name to each CTI port in the form of the dummy MAC addresses.
Do not use the dummy MAC address option for H.323 clients, VGC phones, or VGC virtual phones.

Step 14 To transfer the data from the BAT Excel spreadsheet into a CSV formatted data file, click **Export to BAT Format**.

The system saves the file to your choice of a folder on your local workstation under the following filename:

<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.

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

Note A CSV filename with a comma (for example, abcd,e.txt) cannot be uploaded to the Cisco Unified CallManager server.

You must upload the CSV data file to the Cisco Unified CallManager first node database server, so BAT can access the CSV data file. For more information on uploading and downloading files, see Chapter 2, "Uploading and Downloading Files."

Note 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.

Additional Topics

See the "Related Topics" section on page 3-43.

Field Descriptions for Phones in the BAT Spreadsheet

Table 3-3 provides descriptions of the phone fields that are available for adding device and line details in a CSV data file. For related procedures, see the "Related Topics" section on page 3-43.

Table 3-3 Phone Field Descriptions for the BAT Spreadsheet

Field	Description
Device Fields	
MAC Address/Device Name	Enter the MAC address for phones, VGC virtual phones, and VGC phones. Enter a unique identifier (Device Name) for the CTI port or H.323 client. You can check the **Create Dummy MAC Addresses** check box to automatically generate unique device identifiers.
Description	Enter a description such as “Conference Room A” or “John Smith” that identifies the phone or device.
Media Resource Group List	Enter the media resource group list (MRGL) for this group of phones/ports. An MRGL specifies a list of prioritized media resource groups. An application can choose required media resources from the available ones according to the order that is defined in the MRGL.
User Hold Audio Source	Enter the user hold audio source that this group of IP phones or CTI ports should use. The user hold audio source identifies the audio source from which music is played when a user places a call on hold.
Network Hold Audio Source	Enter the network hold audio source that this group of IP phones or CTI ports should use. The network hold audio source identifies the audio source from which music is played when the system places a call on hold, such as when the user transfers or parks a call.
User Locale	Enter the country and language set that you want to associate with this group of IP phones. This choice determines which cultural-dependent attributes exist for this user and which language displays for the user in the Cisco Unified CallManager user windows and phones.
Network Locale	Enter the network locale that you want to associate with this group of phones. The Network Locale comprises a set of tones and cadences that Cisco gateways and phones use when communicating with the PSTN and other networks in a specific geographical area.
Softkey Template	Enter the softkey template to be used for all phones in this group.
Common Phone Profile	From the drop-down list box, choose a common phone profile from the list of available common phone profiles.

Table 3-3 Phone Field Descriptions for the BAT Spreadsheet (continued)

Field	Description
Presence Group	Used with the Presence feature, the SIP or SCCP phone serves as a watcher because it requests status about the presence entity, for example, directory number, that is configured as a BLF speed dial button on the phone. If you want the phone to receive the status of the presence entity, choose a Presence group that is allowed to view the status of the Presence group that is applied to the directory number, as indicated in the Presence Group Configuration window. **Tip** For more information on the Presence feature, refer to the *Cisco Unified CallManager Features and Services Guide*.
Phone Load Name	Enter the custom phone load, if applicable. **Note** Any value that is entered in this field overrides the default value for the chosen model. Value does not apply for CTI ports.
Security Profile	Enter the security profile that you want to apply to the device. If the phone does not support the profile that you choose, Cisco Unified CallManager does not allow you to apply the configuration. All phones require that you apply a security profile. If the phone does not support security, choose a nonsecure profile.
SUBSCRIBE Calling Search Space	Used with the Presence feature, the SUBSCRIBE Calling Search Space determines how Cisco Unified CallManager routes the subscription requests that come from the phone. From the drop-down list box, choose the calling search space that you want to use for this purpose. **Tip** For more information on the Presence feature, refer to the *Cisco Unified CallManager Features and Services Guide*.
E.164	Choose the E.164 address that is registered with the gatekeeper. **Note** Ensure the H.323 client is configured as a gatekeeper-controlled device. **Note** You must enter a value in this field for a gatekeeper-controlled H.323 client. You can enter only numbers (0-9) and special characters # and * in this field.
User ID	Enter the user ID for the phone user.
Media Resource Group List	This list provides a prioritized grouping of media resource groups. An application chooses the required media resource, such as a Music On Hold server, from among the available media resources according to the priority order that is defined in a Media Resource List.

Table 3-3 Phone Field Descriptions for the BAT Spreadsheet (continued)

Field	Description
AAR Calling Search Space	Enter the appropriate calling search space for the device to use when it performs automated alternate routing (AAR). The AAR calling search space specifies the collection of route partitions that are searched to determine how to route a collected (originating) number that is otherwise blocked due to insufficient bandwidth.
MLPP Domain	Enter a hexadecimal value for the MLPP domain associated with this device. Must be blank or a value between 0 and FFFFFF
MLPP Indication	If available, this setting specifies whether a device capable of playing precedence tones will use the capability when it places an MLPP precedence call. • **Default**—This device inherits its MLPP indication setting from its device pool. • **Off**—This device does not handle nor process indication of an MLPP precedence call. • **On**—This device does handle and process indication of an MLPP precedence call.
MLPP Preemption	If available, this setting specifies whether a device that is capable of preempting calls in progress will use the capability when it places an MLPP precedence call. • **Default**—This device inherits its MLPP indication setting from its device pool. • **Off**—This device does not handle nor process indication of an MLPP precedence call. • **On**—This device does handle and process indication of an MLPP precedence call.
Packet Capture Mode	Enter the mode that you want to set for signal packet capture: • None—Choose None if you do not want to specify a mode. • Real-Time Mode—Use this mode for real-time signal packet capture. • Batch Processing Mode—Use this mode for batch processing signal packet capture mode.
Packet Capture Duration	Enter the time for packet capture in minutes. You can enter a maximum duration of 300 minutes.
Authentication String	Enter a numeric string that contains 4 to 10 digits. To install, upgrade, or troubleshoot a locally significant certificate, the phone user or administrator must enter the authentication string on the phone.
Ignore Presentation Indicator	Enter **Yes** or **No** to configure call display restrictions on a call-by-call basis. When this check box is checked, Cisco Unified CallManager ignores any presentation restriction that is received for internal calls.
SIP Profile	Enter the default SIP profile or a specific profile that was previously created. SIP profiles provide specific SIP information for the phone such as default telephony event payload type, registration and keep alive timers, media ports, Iris, and dynamic DNS server addresses.

Table 3-3 Phone Field Descriptions for the BAT Spreadsheet (continued)

Field	Description
Digest User	Used with digest authentication (SIP security), choose an end user that you want to associate with the phone. Ensure that you configured digest credentials for the user that you choose, as specified in the End User Configuration window. After you save the phone configuration and reset the phone, the digest credentials for the user get added to the phone configuration file. For more information on digest authentication, refer to the Cisco Unified CallManager Security Guide.
Log Out Profile	Enter the profile that a phone should load when an extension mobility user logs out. You must configure logout profiles in Cisco Unified CallManager Administration. Use Current Device Setting—This choice creates an autogenerated device profile as the default device profile. Select a User Device Profile—This choice assigns a user device profile, which has already been defined, that becomes the default device profile for this device. The chosen user device profile gets loaded onto the device when no user is logged in.
SIPCodec_MTPPreferredOrigCodec	Enter the codec to use if a media termination point is required for SIP calls.
Dial Rules	If required, enter the appropriate SIP dial rule. SIP dial rules provide local dial plans for Cisco SIP IP Phones model 7905, 7912, 7940, and 7960, so that users do not have to press a key or wait for a timer before the call gets processed. Leave the SIP Dial Rules field set to <None> if you do not want dial rules applied to the SIP IP Phone. This means the user will have to use the Dial softkey or wait for the timer to expire before the call gets processed.
Calling Search Space Reroute	Enter a calling search space to use for rerouting. The rerouting calling search space of the referrer gets used to find the route to the refer-to target. When the Refer fails due to the rerouting calling search space, the Refer Primitive rejects the request with the "405 Method Not Allowed" message. The redirection (3xx) primitive and transfer feature also uses the rerouting calling search space to find the redirect-to or transfer-to target.
Calling Search Space Refer	Enter an out-of-dialog refer calling search space. Cisco Unified CallManager uses the out-of-dialog (OOD) Refer Authorization calling search space (CSS) to authorize the SIP out-of-dialog Refer. The administrator can restrict the use of out-of-dialog Refer by configuring the OOD CSS of the Referrer. Refer Primitive rejects the OOD Refer request with a "403 Forbidden" message.

Table 3-3 Phone Field Descriptions for the BAT Spreadsheet (continued)

Field	Description
Certificate Operation	Enter the Certification Operation that you want to perform from the following options: • No Pending Operation—No pending Certification Operation lists for this device. Choosing this option disables the remaining CAPF fields. • Install/Upgrade—Install or upgrade a Certification Operation. • Delete—Delete a Certification Operation • Troubleshoot—Troubleshoot a Certification Operation.
Certificate Operation Completion Time	This field, which supports the Install/Upgrade, Delete, and Troubleshoot Certificate Operation options, specifies the date and time in which you must complete the operation.
Secure Shell User	Enter a user ID for the secure shell user. If the phone you are configuring does not support secure shell access, this field does not display. Cisco Technical Assistance Center (TAC) uses secure shell for troubleshooting. Contact TAC for further assistance.
Secure Shell Password	Enter the password for a secure shell user. If the phone you are configuring does not support secure shell access, this field does not display. Contact TAC for further assistance.
Device Pool	Enter the appropriate device pool. The device pool specifies a collection of properties for this device including CallManager Group, Date/Time Group, Region, and Calling Search Space for auto registration of devices.
Built-in Bridge	Enter On, Off, or Default to enable or disable the built-in conference bridge for the barge feature. For more configuration information, refer to the Barge and Privacy Features in the *Cisco Unified CallManager Features and Services Guide*.
Calling Search Space	Enter the appropriate calling search space. A calling search space comprises a collection of partitions that are searched for numbers that are called from this phone number. The value that you choose applies to all devices that are using this phone number. For configuration information about calling search space refer to *Cisco Unified CallManager Administration Guide*.
Location	Choose the appropriate location for this phone. A location setting of Hub_None means that the locations feature does not keep track of the bandwidth that this phone consumes.
Module 1	Enter the appropriate expansion module or none.
Module 1 Load Name	Enter the custom software for the appropriate expansion module, if applicable. The value that you enter overrides the default value for the current model. Ensure the firmware load matches the module load.
Module 2	Enter the appropriate expansion module or none.

Table 3-3 Phone Field Descriptions for the BAT Spreadsheet (continued)

Field	Description
Module 2 Load Name	Module 2 Load Name Enter the custom software for the second expansion module, if applicable. The value that you enter overrides the default value for the current model. Ensure the firmware load matches the module load.
Phone Template	Enter the phone template name that you created for this type of bulk transaction.
Authentication Server	Enter the URL that the phone uses to validate requests that are made to the phones web server. If you do not provide an authentication URL, the advanced features on the Cisco Unified IP Phone models that require authentication will not function. Leave this field blank to accept the default setting. By default, this URL accesses a Cisco Unified IP Phone User Options window that was configured during installation.
Proxy Server	Enter the host and port (for example, proxy.cisco.com:80) that are used to proxy HTTP requests for access to non-local host addresses from the phones HTTP client. If the phone receives a URL such as www.cisco.com in a service and the phone is not configured in the cisco.com domain, the phone uses the proxy server to access the URL. If the phone is configured in the cisco.com domain, the phone accesses the URL without using the proxy because it is in the same domain as the URL.
Idle	Enter the URL of the XML service that will appear as the idle display on the Cisco Unified IP Phone LCD screen when the phone has not been used for the time that is specified in the Idle Time field. For example, you can display a logo on the LCD screen when the phone has not been used for 5 minutes.
Idle Timer	Enter the seconds that you want to elapse before the phone displays the URL that is specified in the Idle field.
Owner User ID	Enter a user ID for the primary phone user.
Line Fields (Optional)	
Directory Number	Enter the directory number, up to 24 digits and special characters, for the phone.
Route Partition	Enter a route partition to which the directory number belongs. **Note** The directory number can appear in more than one partition.
Display	Enter the text that you want to display on the called party's phone display, such as the user name (John Smith) or phone location (Conference Room 1). **Note** If this filed is left blank the system uses the value that is entered in the Directory Number field. **Note** The default language specifies English.

Table 3-3 Phone Field Descriptions for the BAT Spreadsheet (continued)

Field	Description
Line Text Label	Enter text that identifies this directory number for a line/phone combination. **Note** The default language specifies English
Voice Mail Profile	Enter this parameter to make the pilot number the same as the directory number for this line. This action proves useful if you do not have a voice-messaging server that is configured for this phone.
Line Calling Search Space	Enter partitions that are searched for numbers that are called from this directory number. **Note** Changes cause an update of Pickup Group Names that are listed in the Call Pickup Group field. The setting applies to all devices that use this directory number.
AAR Group	Enter the automated alternate routing (AAR) group for this device. The AAR group provides the prefix digits that are used to route calls that are otherwise blocked due to insufficient bandwidth. Set AAR Group to <None> to prevent rerouting blocked calls.
Line User Hold Audio Source	Enter the music on hold audio source to be played when the user presses Hold and places a call on hold.
Line Network Hold Audio Source	Enter the music on hold audio source to be played when the system places a call on hold while the user transfers a call or initiates a conference or call park.
Forward All CSS	Choose the calling search space to use when a call is forwarded to the specified destination. **Note** This setting applies to all devices that are using this directory number.
Secondary Calling Search Space for Forward All	Enter the secondary calling search space (CSS) from the drop-down list box. Because Call Forwarding is a line-based feature, in cases where the device calling search space is unknown, only the line calling search space is used to forward the call. If the line calling search space is restrictive and not routable, the forward attempt fails. Addition of a secondary calling search space for Call Forward All provides a solution to enable forwarding. The primary calling search space for Call Forward All and secondary calling search space for Call Forward All get concatenated (Primary CFA CSS + Secondary CFA CSS) when processing Call Forward All. Cisco Unified CallManager uses this combination to validate the CFA destination and to forward the call.
Forward All Destination	Enter the directory number to which all calls are forwarded. **Note** This setting applies to any dialable phone number, including an outside destination unless restricted, and to all devices that are using this directory number.

Table 3-3 Phone Field Descriptions for the BAT Spreadsheet (continued)

Field	Description
Forward Busy External CSS	Enter the calling search space to use when a call from an external number is forwarded to the specified destination. **Note** This setting applies to all devices that are using this directory number.
Forward Busy Internal CSS	Enter the calling search space to use when a call from an internal number is forwarded to the specified destination. **Note** This setting applies to all devices that are using this directory number.
Forward Busy Destination External	Enter the directory number to which a call that is coming from an external number is forwarded when the line is in use. **Note** This setting applies to any dialable phone number, including an outside destination unless restricted, and to all devices that are using this directory number.
Forward Busy Destination Internal	Enter the directory number to which a call that is coming from an internal number is forwarded when the line is in use. **Note** This setting applies to any dialable phone number, including an outside destination unless restricted, and to all devices that are using this directory number.
Calling Search Space Forward No Answer External	Enter the calling search space to use when a call from an external number is forwarded to the specified destination. The setting displays only if it is configured in the system. **Note** This setting applies to all devices that are using this directory number.
Forward No Answer Internal CSS	Enter the calling search space to use a call from an internal number is forwarded to the specified destination. The setting displays only if it is configured in the system. **Note** This setting applies to all devices that are using this directory number.
Forward No Answer Destination External	Enter the directory number to which a call that is coming from an external number is forwarded when the phone is not answered. **Note** This setting applies to any dialable phone number, including an outside destination unless restricted, and to all devices that are using this directory number.
Forward No Answer Destination Internal	Enter the directory number to which a call that is coming from an internal number is forwarded when the phone is not answered. **Note** This setting applies to any dialable phone number, including an outside destination unless restricted, and to all devices that are using this directory number.
Forward No Coverage External CSS	Enter the calling search space to use when a call from an external number is forwarded to the specified destination. The setting displays only if it is configured in the system. **Note** This setting applies to all devices that are using this directory number.

Table 3-3 Phone Field Descriptions for the BAT Spreadsheet (continued)

Field	Description
Forward No Coverage Internal CSS	Enter the calling search space to use when a call from an internal number is forwarded to the specified destination. The setting displays only if it is configured in the system. **Note** This setting applies to all devices that are using this directory number.
Forward No Coverage Destination External	Enter the directory number to which a call that is coming from an external number is forwarded when the phone does not have coverage. **Note** This setting applies to any dialable phone number, including an outside destination unless restricted, and to all devices that are using this directory number.
Forward No Coverage Destination Internal	Enter the directory number to which a call that is coming from an internal number is forwarded when the phone does not have coverage. **Note** This setting applies to any dialable phone number, including an outside destination unless restricted, and to all devices that are using this directory number.
Calling Search Space Forward on Failure External/Internal	(CTI ports only) Enter the calling search space to use when a call from an internal or external call is forwarded to the specified destination. The setting appears only if it is configured in the system. **Note** This setting applies to all devices that are using this directory number.
Forward on Failure Destination External/Internal	(CTI ports only) Enter the directory number to which a call coming from an internal or an external number should be forwarded when a phone or CTI application fails.
Forward on CTI Failure Destination	This setting specifies the directory number to which an internal nonconnected call is forwarded when an application that controls that directory number fails. Use any dialable phone number, including an outside destination. When you enter a destination value for internal calls, the system automatically copies this value to the Destination field for external calls. If you want external calls to forward to a different destination, you must enter a different value in the Destination field for external calls.
Forward on CTI Failure Calling Search Space	This setting applies to all devices that are using this directory number. When you choose a Calling Search Space for internal calls, the system automatically copies this setting to the Calling Search Space setting for external calls. If you want external calls to forward to a different calling search space, choose a different setting in the Calling Search Space for external calls.
Call Pickup Group	Choose a Pickup Group Name to specify the call pickup group, which can answer incoming calls to this directory number by dialing the appropriate pickup group number.

Table 3-3 Phone Field Descriptions for the BAT Spreadsheet (continued)

Field	Description
External Phone Number Mask	Enter the phone number (or mask) that is sent for Caller ID information when a call is placed from this line. You can enter a maximum of 24 numbers and "X" characters. The Xs represent the directory number and must appear at the end of the pattern. For example, if you specify a mask of 972813XXXX, an external call from extension 1234 displays a caller ID number of 9728131234.
No Answer Ring Duration (CFNA)	Enter the number of seconds to allow the call to ring before forwarding the call to the Forward No Answer Destination.
Target Destination (MLPP)	Enter the number to which MLPP precedence calls should be directed if this directory number receives a precedence call and neither this number nor its call forward destination answers the precedence call. Values can include numeric characters, pound (#) ,and asterisk (*).
Calling Search Space (MLPP)	Enter the calling search space to associate with the alternate party target (destination) number.
No Answer Ring Duration (MLPP)	Enter the number of seconds (between 4 and 30) after which an MLPP precedence call will be directed to this directory number's alternate party if this directory number and its call forwarding destination have not answered the precedence call. Leave this setting blank to use the value that is set in the Cisco Unified CallManager enterprise parameter, Precedence Alternate Party Timeout.
Maximum Number of Calls	You can configure up to 200 calls for a line on a device in a cluster, with the limiting factor being the device. As you configure the number of calls for one line, the calls available for another line decrease. The default specifies 4. If the phone does not allow multiple calls for each line, the default specifies 2. For CTI route points, you can configure up to 10,000 calls for each port. The default specifies 5000 calls. Use this field in conjunction with the Busy Trigger field.
Busy Trigger	This setting, which works in conjunction with Maximum Number of Calls and Call Forward Busy, determines the maximum number of calls to be presented at the line. If maximum number of calls is set for 50 and the busy trigger is set to 40, then incoming call 41 gets rejected with a busy cause (and will get forwarded if Call Forward Busy is set). If this line is shared, all the lines must be busy before incoming calls get rejected. Use this field in conjunction with Maximum Number of Calls for CTI route points. The default specifies 4500 calls.
Alerting Name	This name represents the name that displays during an alert to a shared directory number. For non-shared directory numbers, during alerts, the system uses the name that is entered in the Display field.

Table 3-3 Phone Field Descriptions for the BAT Spreadsheet (continued)

Field	Description
Route Filter	Enter a name in the Route Filter Name field. The name can contain up to 50 alphanumeric characters and can contain any combination of spaces, periods (.), hyphens (-), and underscore characters (_). Ensure each route filter name is unique to the route plan. **Note** Use concise and descriptive names for your route filters. The CompanynameLocationCalltype format usually provides a sufficient level of detail and is short enough to enable you to quickly and easily identify a route filter. For example, CiscoDallasMetro identifies a route filter for toll free, inter-local access and transport area (LATA) calls from the Cisco office in Dallas.
Dial Plan	Enter a dial plan; for example, North American Numbering Plan.
User Hold MOH Audio Source	Enter the audio source to use for music on hold (MOH) when a user initiates a hold action.
Line Network Hold MOH Audio Source	Enter the audio source to use for music on hold (MOH) when the network initiates a hold action.
E.164	Enter the E.164 address that is registered with the gatekeeper. **Note** Ensure the H.323 client is configured as a gatekeeper-controlled device. **Note** You must enter a value in this field for a gatekeeper-controlled H.323 client. You can enter only numbers (0-9) and special characters # and * in this field.

Note To complete the procedure, go to the "Using the BAT Spreadsheet to Create a CSV Data File for Phones" section on page 3-30.

Related Topics

- Adding Phones, page 3-1
- Using BAT Phone Templates, page 3-2
- Creating a New BAT Phone Template, page 3-4
- Adding or Updating Lines in a BAT Template, page 3-4
- Adding or Updating IP Services in a BAT Template, page 3-5
- Adding or Updating Speed Dials in a BAT Template, page 3-6
- Modifying BAT Phone Templates, page 3-7
- Copying a BAT Phone Template, page 3-8
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- Field Descriptions for a BAT Phone Template, page 3-9

- Using the BAT Spreadsheet to Create a CSV Data File for Phones, page 3-30
- Field Descriptions for Phones in the BAT Spreadsheet, page 3-32

Phone File Format

The following topics provide information about configuring file formats for CSV data files that are created by using a text editor.

Using a Text Editor to Create the CSV Data File for Phones

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 phones, see the "Creating a Text-Based CSV File for Phones" section on page A-1.

Use one of these file format options to identify the device and line fields within the CSV data file:

- Default Phone—Contains a predetermined set of phone device and line fields.
- Simple Phone—Contains basic device and line fields for phones.
- Custom—Contains device and line fields that you choose and order yourself.

You cannot modify or delete the Simple Phone or Default Phone file formats.

Note When you use the Cisco Unified CallManager Bulk Administration (BAT) spreadsheet to create the CSV data file, you can create the file format within the spreadsheet. When you use a text editor to create the CSV data file, you need to create a file format or use the simple or default file format. You enter the values in the text-based file in the same order as specified in the file format.

Additional Information

See the "Related Topics" section on page 4-6

Finding a Phone File Format

Use the following procedure to find a phone file format.:

Procedure

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

The Find and List Phone File Formats window displays.

Step 2 From the Find Phone File Format where Format Name drop-down list box, choose one of the following criteria:

- begins with
- contains
- is exactly
- ends with
- is empty
- is not empty

Step 3 Specify the appropriate search text, if applicable, and click **Find**.

Tip To find all Phone formats, click **Find** without entering any search text.

Step 4 To further define your query and to add multiple filters, check the Search Within Results check box and choose **AND** or **OR** from the drop-down box, and repeat steps 2 and 3.

Step 5 From the list of records, click the file format name that matches your search criteria.

The Phone File Format Configuration window displays.

Additional Information

See the "Related Topics" section on page 4-6

Configuring a Phone File Format

Use the following topics to create, copy, modify, or delete a phone file format:

Creating a File Format

To create your file format for the text-based CSV data file, use the following procedure.

Procedure

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

Step 2 Click **Add New**. The Phone File Format Configuration window displays.

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

Step 4 Under Device Fields, choose the device field names that you want to define for each phone. In the Device Field box, click a device field name and 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 are always selected.

Tip You can select several random field names in the list by holding down the Ctrl key, and then clicking the arrow to select them together. You can select a range of items by using the Shift key.

Step 5 Click line field names in the Line Field box and click the arrow to move the fields to the Selected Line Fields box.

Tip You can change the order of the items in the Selected Line Fields and Selected Device Fields boxes. Select an item and then use the up arrow to move the field closer to the beginning of the list or the down arrow to move it to the end of the list.

Step 6 In the IP Phone Services Maximums area, enter the maximum values for the following fields:

- Maximum Number of Speed Dials
- Maximum Number of IP Phone Services
- Maximum Number of IP Phone Service Parameters

Step 7 To save your custom file format, click **Save**. The name of the file format displays in the File Format Names list in the Find and List Phone File Formats window.

Additional Topics

See the "Related Topics" section on page 4-6.

Copying a File Format

To copy an existing format for the CSV data file, use the following procedure.

Procedure

Step 1 Find the phone file format you want to copy using "Finding a Phone File Format" section on page 4-2.

Step 2 In the Search Results area, choose a file format that you want to copy. The Phone File Format Configuration window displays.

Step 3 To make a copy of the chosen file format, click **Copy**.

Note To copy the file format, you can also click the corresponding Copy icon in the Find and List Phone File Formats window.

Step 4 In the Format Name field, enter a new name for the copied format.

Step 5 Modify the copied format by using one of these methods:

- Add new fields by choosing them from the Device Fields or Line Fields box, and then clicking the arrow to move the chosen fields into the Selected Device Field or Selected Line Fields box.
- Remove selected fields by choosing them from the Selected Device Fields or Selected Line Fields box, and then clicking the arrow to move the chosen fields into the Device Field or Line Fields box.
- Change the order of the fields by choosing a field name in the Selected Device Field or Selected Line Fields box and using the up or down arrow to change its location.

Step 6 After making your changes, click **Save** to save the copied file format with changes in the list.

Additional Topics

See the "Related Topics" section on page 4-6.

Modifying a File Format

To modify an existing file format for the CSV data file, use the following procedure. You can modify custom formats only.

Procedure

Step 1 Find the phone file format you want to copy using "Finding a Phone File Format" section on page 4-2.

Step 2 In the Search Results area, choose a file format that you want to modify. The Phone File Format Configuration window displays.

Step 3 Modify the copied format by using one of these methods:

- Add new fields by choosing them from the Device Fields or Line Fields box, then clicking the arrow to move the chosen fields into the Selected Device Field or Selected Line Fields box.
- Remove fields by choosing them from the Selected Device Fields or Selected Line Fields box, then clicking the arrow to move the selected fields into the Device Field or Line Fields box. You cannot remove the required fields: Number of lines, MAC address, and description.
- Change the order of the fields by choosing a field name in the Selected Device Field or Selected Line Fields box and using the up or down arrow to change its location.

Step 4 After making your changes, click **Save** to save the changes to the file format.

Additional Topics

See the "Related Topics" section on page 4-6.

Deleting a File Format

To delete an existing file format for the CSV data file, use the following procedure.You can delete only custom formats.

Procedure

Step 1 Find the phone file format you want to copy using "Finding a Phone File Format" section on page 4-2.

Step 2 In the Search Results area, verify that this is the file(s) that you want to delete.

Step 3 To remove the file format(s) from the list, click **Delete** selected. A message asks you to confirm that you want to delete the file format(s). Click **OK** to continue. The system removes the file format(s) name from the list.

Note Make sure to browse the entire list of displayed results before clicking **Delete Selected**.

Additional Topics

See the "Related Topics" section on page 4-6.

Associating the File Format with the CSV Data File

When you used a text editor to create the CSV data file, you created a file format for entering values in the text-based file. You entered values in the text file in the order that the file format specified

After the CSV data file is completed, 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.

To add the file format with the text-based CSV data file, use the following procedure.

Procedure

Step 1 Choose **Bulk Administration > Phones > Phone File Format > Add File Format**. Add File Format 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 File Format Name field, choose the file format that you created for this type of bulk transaction.

Step 4 Click **Submit** to create a job for associating the matching file format with the CSV data file.

Step 5 Use the Job Scheduler option in the Bulk Administration main menu to schedule and/or activate this job.

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

Additional Topics

See the "Related Topics" section on page 4-6.

Related Topics

- Using a Text Editor to Create the CSV Data File for Phones, page 4-1
- Finding a Phone File Format, page 4-2
- Configuring a Phone File Format, page 4-2
- Associating the File Format with the CSV Data File, page 4-5
- Creating a Text-Based CSV File for Phones, page A-1

CHAPTER 5

Validating Phone Records

When you choose Validate Phones, the system runs a validation routine to check that the CSV data file and Cisco Unified CallManager Bulk Administration (BAT) phone template have populated all required fields, such as device pool and locations. The validation also checks for discrepancies with the first node database.

Before You Begin

- You must have a BAT phone template for the devices that you are adding. You can use a master phone template with multiple lines to add phones that have a single line or several lines. See the "Master Phone Templates" section on page 1-4 for more information.
- You must have a data file in comma separated variable (CSV) format that contains the unique details for the phones or other IP telephony devices.

Validating CSV Data File Phone Records

To validate your CSV data file phone records, use the following procedure.

Procedure

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

The Validate Phones Configuration window displays.

Step 2 Click Validate Phones Specific Details radio button to validate phone records that use a customized file format. Continue with steps 4 and 5.

Step 3 Click Validate Phones All Details radio button to validate phone records from an exported phones file that was generated by using the All Details option.

Step 4 In the File Name drop-down list box, choose the CSV data file that you created for this specific bulk transaction.

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

Step 6 To verify the chosen CSV data file with the first node database, click **Submit**.

Step 7 The job gets submitted and gets executed immediately.

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 5-2.

Related Topics

- Validating CSV Data File Phone Records, page 5-1
- Phone Template
- Phone File Format

Inserting Phones

To add phones, Cisco VGC phones, CTI ports, or H.323 clients into the Cisco Unified CallManager database, use the following procedure.

Before You Begin

- You must have a Cisco Unified CallManager Bulk Administration (BAT) phone template for the devices that you are adding.
- 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.
- Upload the data files by choosing the relevant target and function for the transaction.
- Before you insert phones, validate the phone records.

Additional Topics

See the "Related Topics" section on page 6-2

Inserting Phones into Cisco Unified CallManager

Use the following procedure to insert phones into Cisco Unified CallManager

Procedure

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

The Phone Insert Configuration window displays.

Step 2 Click Insert Phones Specific Details radio button to insert phone records that use a customized file format. Continue with steps 4 and 6.

Step 3 Click Insert Phones All Details radio button to insert phone records from an exported phones file that was generated by using the All Details option.

Step 4 In the File Name drop-down list box, choose the CSV data file that you created for this specific bulk transaction. Check the Allow Update Phone with Custom File check box to allow updating the phone with the custom file you chose.

Step 5 Checking the Override Configuration Settings check box overwrites the existing phone settings with the information that is contained in the file that you want to insert.

Step 6 For the Specific Details option, in the Phone Template Name drop-down list box, choose the BAT phone template that you created for this type of bulk transaction.

If you did not enter individual MAC addresses in the CSV data file, you must check the **Create Dummy MAC Address** check box. If you are adding CTI ports, the dummy MAC address option provides a unique device name for each CTI port in the form of dummy MAC addresses.

This field automatically generates dummy MAC addresses in the following format:
XXXXXXXXXXXX
where X represents any 12-character, hexadecimal (0-9 and A-F) number.

- If you do not know the MAC address of the phone that will be assigned to the user, choose this option. When the phone is plugged in, a MAC address registers for that device.
- If you supplied MAC addresses or device names in the data input file, do not choose this option.

You can update the phones or devices later with the correct MAC address by manually entering this information into Cisco Unified CallManager Administration or by using Unified CM Auto-Register Phone Tool. See the "Introducing Cisco Unified CM Auto-Register Phone Tool" section on page 52-2 for more information about Unified CM Auto-Register Phone Tool. Skip to Step 9.

Step 7 In the Job Information area, enter the Job description.

Step 8 Click the Run Immediately radio button to insert the phone records immediately or, click Run Later to insert the phone records at a later time.

Step 9 Click **Submit** to create a job for inserting the phone records.

Step 10 Use the Job Configuration window to schedule and/or activate this job.

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 6-2

Related Topics

- Phone Template
- Phone File Format
- Uploading and Downloading Files
- Validating Phone Records

Updating Phones

To update phone settings, such as changing or adding the device pool or calling search space for a group of similar phones, use the Update Phones option. You can locate the existing phone records by these two methods:

Using Query to Update Phones

To create a query to locate phones to update, use the following procedure.

Procedure

Step 1 Choose **Bulk Administration > Phones > Update Phones > Query.**

The Update Phones Query window displays.

Note You can update all phones by not specifying a query and clicking **Find**. Skip to the "Choosing the Update Parameters" section on page 7-3.

Step 2 From the first Find Phone where drop-down list box, choose one of the following criteria:

- Device Name
- Description
- Directory Number
- Calling Search Space
- Device Pool
- Device Type
- Call Pickup Group
- LSC Status
- Authentication String
- Location
- Phone Load Name

- Device Protocol
- Security Profile

From the second Find Phone where drop-down list box, choose one of the following criteria:

- begins with
- contains
- is exactly
- ends with
- is empty
- is not empty

Step 3 Specify the appropriate search text, if applicable.

Tip To find all Phones that are registered in the database, click **Find** without entering any search text.

Step 4 To further define your query and to add multiple filters, check the Search Within Results check box, choose **AND** or **OR** from the drop-down box, and repeat steps 2 and 3.

Step 5 Click **Find**.

A list of discovered phones displays.

The Update Phones window displays the details of the phones that you choose.

To complete the procedure for updating phones, continue to the "Choosing the Update Parameters" section on page 7-3.

Using a Custom File to Update Phones

To create a custom file to search for phones to update, use the following procedure.

Before You Begin

1. Identify the devices that you need to update.
2. Create a text file that lists one of these options on a separate line
   - MAC addresses and device names
   - Directory numbers

Note You can have MAC addresses and device names in the same custom file, but directory numbers must be in a separate custom file.

3. Upload the text file to the Cisco Unified CallManager server. See the "Uploading a File" section on page 2-3.

To update phones by using a list of phones in a custom file, use the following procedure.

Procedure

Step 1 Choose **Bulk Administration > Phones > Update Phones > Use Custom File.**

The Update Phones Custom Configuration window displays.

Step 2 In the Update Phones where drop-down list box, choose the type of custom file that you have created from one of the following criteria:

- Device Name (includes MAC addresses)
- Directory Number
- Description

Step 3 In the list of custom files, choose the filename of the custom file for this update.

Step 4 Click **Find**.

If the query results are not what you expected, you can change the custom file selections.

To complete the procedure for updating phones, continue to the "Choosing the Update Parameters" section on page 7-3.

Choosing the Update Parameters

After you have defined the query or custom file to search for phones, use this procedure to choose parameters and define values for updating phones.

Procedure

Step 1 In the Update Phones Query window, click **Next**. The Update Phones shows the type of query that you chose. If you want to change the type of query, click **Back**.

Step 2 Choose the "Logout Users before Update" check box to log out the users prior to the update. You can also use this option to bulk log out users if no fields are chosen.

Step 3 Specify the setting that you want to update for all the records that you have defined in your query or custom file. You can choose multiple parameters to update. See the "Field Descriptions for Updating Phones" section on page 7-4 for descriptions of parameters.

Step 4 In the Value field for the checked parameter, enter the new value or choose a value from the list box.

Step 5 In the Reset/Restart Phones area, check one of the following choices:

- **Don't Reset/Restart devices**—To reset/restart devices at a later time.
- **Reset devices**—To reset (power-cycle) the phones
- **Restart devices**—To reset phones without power-cycling

Step 6 Update the required phone parameters. See Table 7-1 lists the field descriptions for updating phones.

Step 7 Click **Submit** to create a job for updating the records.

Step 8 Use the Job Scheduler option in the Bulk Administration main menu to schedule and activate this job.

For more information on Jobs, see 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 7-11.

Field Descriptions for Updating Phones

Table 7-1 provides descriptions for all possible fields that display when you are updating phones. Some device types do not require all the phone settings. For related procedures, see the "Related Topics" section on page 7-11.

Values that appear in some fields display from Cisco Unified CallManager. You must configure these values by using Cisco Unified CallManager Administration.

Table 7-1 Field Descriptions for Update Phones

Field	Description
Description	Enter a description that makes the device easy to recognize.
Device Pool	Choose the device pool to which this group of phones/ports should belong. A device pool defines sets of common characteristics for devices, such as region, date/time group, Cisco Unified CallManager group, and calling search space for auto-registration.
Phone Button Template	Choose the appropriate phone button template. The phone button template determines the configuration of buttons on a phone and identifies which feature (line, speed dial, and so on) is used for each button. Cisco Unified CallManager does not make this field available for H.323 clients or CTI ports.
Softkey Template	Choose the softkey template to be used for all phones in this group.
Calling Search Space	Choose the calling search space to which this group of phones/ports should belong. A calling search space specifies the collection of route partitions that are searched to determine how a dialed number should be routed.
AAR Calling Search Space	Choose the appropriate calling search space for the device to use when it performs automated alternate routing (AAR). The AAR calling search space specifies the collection of route partitions that are searched to determine how to route a collected (originating) number that is otherwise blocked due to insufficient bandwidth.

Table 7-1 Field Descriptions for Update Phones (continued)

Field	Description
Media Resource Group List	Choose the media resource group list (MRGL) to which this group of phones/ports should belong. An MRGL specifies a list of prioritized media resource groups. An application can choose required media resources among the available ones according to the priority order that is defined in the MRGL.
User Hold Audio Source	Choose the user-hold audio source for this group of phones or ports. The user-hold audio source plays music when a user places a call on hold.
Network Hold Audio Source	Choose the network hold audio source that this group of IP phones or CTI ports should use. The network-hold audio source plays music when the system places a call on hold, such as when the user transfers or parks a call.
Location	Choose the location to which this group of phones/ports should belong. A location indicates the remote location that is accessed by using restricted bandwidth connections.
User Locale	Choose the country and language set that you want to associate with this user. This choice determines which cultural-dependent attributes exist for this user and which language displays for the user in the Cisco Unified CallManager user windows and phones.
Network Locale	Choose the network locale that you want to associate with this user. The Network Locale comprises a set of tones and cadences that Cisco gateways and phones use when they are communicating with the PSTN and other networks in a specific geographical area.
Built in Bridge	Enable or disable the built-in conference bridge for the barge feature by using the Built In Bridge drop-down list box (choose *On, Off,* or *Default*). For more configuration information, refer to the Barge and Privacy Features in the *Cisco Unified CallManager Features and Services Guide*.
Privacy	For each phone that wants Privacy, choose *On* in the Privacy drop-down list box. For more configuration information, refer to Barge and Privacy Features in the *Cisco Unified CallManager Features and Services Guide*.
Owner User ID	Enter a user ID for the primary phone user.

Table 7-1 Field Descriptions for Update Phones (continued)

Field	Description
Phone Load Name	Enter the custom phone load, if applicable. **Note** Any value that is entered in this field overrides the default value for the chosen model and specifies the custom software for a Cisco Unified IP Phone.
Ignore Presentation Indicators	Check this check box if the system must ignore presentation indicators.
Retry Video Call as Audio	Check this check box to retry a video call as an audio call.
Allow Control of Device from CTI	Check this check box to allow CTI to control and monitor this device. If the associated directory number specifies a shared line, the check box should be enabled as long as at least one associated device specifies a combination of device type and protocol that CTI supports.
Protocol Specific Information	
Packet Capture Mode	From the drop-down list box, choose the mode that you want to set for signal packet capture: None—Choose None if you do not want to specify a mode. Real-Time Mode—Use this mode for real-time signal packet capture. Batch Processing Mode—Use this mode for batch processing signal packet capture mode.
Packet Capture Duration	Enter the time for packet capture in minutes. You can enter a maximum duration of 300 minutes. The default duration specifies 60 minutes.
Presence Group	Used with the Presence feature, the SIP or SCCP phone serves as a watcher because it requests status about the presence entity, for example, directory number, that is configured as a BLF speed dial button on the phone. If you want the phone to receive the status of the presence entity, choose a Presence group that is allowed to view the status of the Presence group that is applied to the directory number, as indicated in the Presence Group Configuration window. **Tip** For more information on the Presence feature, refer to the *Cisco Unified CallManager Features and Services Guide*.

Table 7-1 Field Descriptions for Update Phones (continued)

Field	Description
Device Security Profile	For SCCP and SIP phones, choose the security profile that you want to apply to the device. All phones require that you apply a security profile. If the phone does not support security, choose a nonsecure profile. **Tip** The CAPF settings that are configured in the profile relate to the Certificate Authority Proxy Function settings that display in the Phone Configuration window. If you want to manage manufacture-installed certificates (MICs) or locally significant certificates (LSC), you must configure the CAPF settings in the profile and in the Phone Configuration window.
SUBSCRIBE Calling Search Space	Used with the Presence feature, the SUBSCRIBE Calling Search Space determines how Cisco Unified CallManager routes the subscription requests that come from the phone. From the drop-down list box, choose the calling search space that you want to use for this purpose. **Tip** For more information on the Presence feature, refer to the *Cisco Unified CallManager Features and Services Guide*.
Unattended Port	Check this check box to indicate an unattended port on this device.
Require DTMF Reception	For SIP and SCCP phones, check this check box to require DTMF reception for this phone.
External Data Locations Information	
Information	Enter the help text URL for the information button .
Directory	Enter the URL of the directory server.
Messages	Enter the voice-messaging access pilot number.
Services	Enter the URL for the services menu.
Authentication Server	Enter the URL that the phone uses to validate requests that are made to the phones web server. If you do not provide an authentication URL, the advanced features on Cisco Unified IP Phones that require authentication will not function. Leave this field blank to accept the default setting. By default, this URL accesses a Cisco Unified IP Phone User Options window that was configured during installation.

Table 7-1 Field Descriptions for Update Phones (continued)

Field	Description
Proxy Server	Enter the host and port (for example, proxy.cisco.com:80) that are used to proxy HTTP requests for access to non-local host addresses from the phones HTTP client. If the phone receives a URL such as www.cisco.com in a service and the phone is not configured in the cisco.com domain, the phone uses the proxy server to access the URL. If the phone is configured in the cisco.com domain, the phone accesses the URL without using the proxy because it is in the same domain as the URL. Leave this field blank to accept the default setting.
Idle	Enter the URL to display on the Cisco Unified IP Phone window when the phone has not been used for the time that is specified in the Idle Time field. For example, you can display a logo on the window when the phone has not been used for 5 minutes. Leave this field blank to use the default value.
Idle Timer	Enter the seconds that you want to elapse before the phone displays the URL that is specified in the Idle field. Leave this field blank to use the default value.
Extension Information	
Extension Mobility	Choose 0-Off if you want to disable this feature or choose 1-On to enable this feature. Extension mobility allows a user to log in and out of a Cisco IP Phone. Refer to the *Cisco Unified CallManager Features and Services Guide* for more information about extension mobility.
IP Services1	Use Cisco Unified CallManager Administration to choose any services that have been configured.
IP Services2	Use Cisco Unified CallManager Administration to choose any services that have been configured. Using Cisco Unified CallManager Bulk Administration (BAT), you cannot update more than 2 IP services in one transaction.
Certification Authority Proxy Function (CAPF) Information (These parameters display only for devices with the capability to support authentication or encryption.)	
Certificate Operation	From the drop-down list box, choose the Certification Operation that you want to perform from the following options: • **No Pending Operation**—No pending Certification Operation lists for this device. Choosing this option disables the remaining CAPF fields. • Install/Upgrade—Install or upgrade a Certification Operation. • Delete—Delete a Certification Operation • Troubleshoot—Troubleshoot a Certification Operation.

Table 7-1 Field Descriptions for Update Phones (continued)

Field	Description
Generate Unique Authentication Device for Each Device	Check this check box, if needed
Authentication String	If Authentication Mode is By Authentication String, enter the Authentication String. Alternately, to get a system-generated string, click **Generate String**.
Operation Completes By	Enter the date by which the Certification Operation will complete. The date format specifies YYYY: MM: DD: HH. The default completion date specifies 10 days from the current system date.
MultiLevel Precedence and Preemption (MLPP) Information	
MLPP Indication	If available, this setting specifies whether a device that is capable of playing precedence tones will use the capability when it places an MLPP precedence call. From the drop-down list box, choose a setting to assign to this device from the following options: • Default—This device inherits its MLPP indication setting from its device pool. • Off—This device does not send indication of an MLPP precedence call. • On—This device does send indication of an MLPP precedence call. **Note** Do not configure a device with the following combination of settings: MLPP Indication is set to *Off* while MLPP Preemption is set to *Forceful*.
MLPP Preemption	If available, this setting specifies whether a device that is capable of preempting calls in progress will use the capability when it places an MLPP precedence call. From the drop-down list box, choose a setting to assign to this device from the following options: • Default—This device inherits its MLPP preemption setting from its device pool. • Disabled—This device does not preempt calls in progress when it places an MLPP precedence call. • Forceful—This device preempts calls in progress when it places an MLPP precedence call. **Note** Do not configure a device with the following combination of settings: MLPP Indication is set to *Off* while MLPP Preemption is set to *Forceful*.
MLPP Domain (e.g., "0000FF")	Enter a hexadecimal value for the MLPP domain associated with this device. Must be blank or a value between 0 and FFFFFF.
Secure Shell Information	

Table 7-1 Field Descriptions for Update Phones (continued)

Field	Description
Secure Shell User	Enter a user ID for the secure shell user. If the phone you are configuring does not support secure shell access, this field does not display. Cisco Technical Assistance Center (TAC) uses secure shell for troubleshooting. Contact TAC for further assistance.
Secure Shell Password	Enter the password for a secure shell user. If the phone you are configuring does not support secure shell access, this field does not display. Contact TAC for further assistance.
Assign IP Phone Services	
Add All Services From This Template	From the drop-down list box, choose the template that contains list of services that you want to update the phones with. You can click the **Edit IP Phone Service** link to update the subscribed Cisco IP phones services on the template.
Remove Duplicate	Check this check box to remove duplicate IP Phone Services. If you check this check box, the system removes the duplicate service subscriptions from phones and User Device Profiles. The IP system deletes Services based on the IP Service name.
Product Specific Information	
Device Security Mode	From the drop-down list box, choose the mode that you want to set for the device: Use System Default—The phone uses the value that you specified for the enterprise parameter, Device Security Mode. Non-secure—No security features exist for the phone. A TCP connection opens to Cisco Unified CallManager. Authenticated—Cisco Unified CallManager provides integrity and authentication for the phone. A TLS connection that uses NULL/SHA opens. Encrypted—Cisco Unified CallManager provides integrity, authentication, and encryption for the phone. A TLS connection that uses AES128/SHA opens This field applies only if the phone model supports authentication or encryption.
Remove Duplicate IP Services from all Phones and Device Profiles	Check this check box to remove duplicate IP Phone Services. If you check this check box, the system removes the duplicate service subscriptions from phones and User Device Profiles. The IP system deletes Services based on the IP Service name.
Disable Speakerphone	Check this check box to disable the speakerphone.
Disable Speakerphone and Headset	Check this check box to disable the speakerphone and headset
Forwarding Delay	Use this field to enable or disable forwarding delay. Choose enable when you want the port to wait a few seconds before forwarding a call.

Table 7-1 Field Descriptions for Update Phones (continued)

Field	Description
PC Port	Use this field to enable or disable the PC port on phones that have internal switches. Users can connect a PC or workstation to the phone by using the port labeled “10/100 PC” on the back of the phone.
Setting Access	Use this field to choose whether the user has access to phone settings. The options include Enabled and Disable.
Gratuitous ARP	Choose Enabled or Disabled to control gratuitous ARP.
PC Voice VLAN Access	Choose Enabled or Disabled to control access to a PC voice VLAN.
Video Capabilities	Choose Enabled or Disabled to control video capabilities access.
Auto Line Select	Choose Enabled or Disabled to allow automatic line selection on the phone.
Web Access	Choose Enabled or Disabled to allow web access on the phone.

Note To complete the procedure, go to “Choosing the Update Parameters” section on page 7-3.

Related Topics

- Using Query to Update Phones, page 7-1
- Using a Custom File to Update Phones, page 7-2
- Choosing the Update Parameters, page 7-3
- Field Descriptions for Updating Phones, page 7-4

Deleting Phones

Use these procedures to delete a group of phones or other IP telephony devices from the Cisco Unified CallManager database.

You can locate existing phone records by these two methods:

- Using Query to Delete Phones, page 8-1.
- Using a Custom File to Delete Phones, page 8-3

Using Query to Delete Phones

Use the following procedure to delete phones by creating a query to locate the phone records.

Procedure

Step 1 Choose **Bulk Administration > Phones > Delete Phones > Query**.

The Bulk Phones Delete Configuration window displays.

Step 2 From the first Find Phone where drop-down list box, choose one of the following criteria:

- Device Name
- Description
- Directory Number
- Calling Search Space
- Device Pool
- Device Type
- Call Pickup Group
- LSC Status
- Authentication String
- Device Protocol
- Security Profile
- Unassigned DN

From the second Find Phone where drop-down list box, choose one of the following criteria:

- begins with

- contains
- is exactly
- ends with
- is empty
- is not empty

Step 3 Specify the appropriate search text, if applicable.

Tip To find all Phones that are registered in the database, click **Find** without entering any search text.

Step 4 To further define your query and to add multiple filters, check the Search Within Results check box, choose **AND** or **OR** from the drop-down box, repeat steps 2 and 3.

Step 5 Click **Find**.

A list of discovered phones displays by:

- Device Name
- Description
- Device Pool
- Device Protocol
- Status
- IP Address

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

Step 7 Click the Run Immediately radio button to delete phone records immediately or, click Run Later to delete the phone records at a later time.

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

Note Make sure to browse the entire list of displayed results before submitting the job.

Step 9 Use the Job Configuration window to schedule and/or activate this job.

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.

Caution If you do not enter any information in the query text box, the system deletes all phone records. Because the delete action is final, you cannot retrieve deleted records.

Additional Topics

See the "Related Topics" section on page 8-4.

Using a Custom File to Delete Phones

You can create a custom file of phones that you want to delete by using a text editor. You can have MAC addresses and device names in the same custom file, but you cannot have directory numbers in the same file. You need to create separate files—one file that contains the device names and MAC addresses and another file that contains the directory numbers.

Before You Begin

1. Create a text file that lists one of these details for the phones that you want to delete:
   - Device names and MAC addresses
   - Description
   - Directory numbers
2. Put each item on a separate line in the text file.
3. Upload the custom file to Cisco Unified CallManager server. For more details on uploading files, see the "Uploading a File" section on page 2-3.

To delete phones that are listed in a custom file, use the following procedure.

Procedure

Step 1 Choose **Bulk Administration > Phones > Delete Phones > Custom File**.

The Bulk Phones Delete Configuration window displays.

Step 2 In the Delete Phones where drop-down list box, choose the type of custom file that you have created from one of the following criteria:

- Device Name (includes MAC addresses)
- Directory Number
- Description

Step 3 In the list of custom files, choose the filename of the custom file for this delete.

Step 4 Click **Find**. A list of phones matching your search criteria display.

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

Step 6 Click the Run Immediately radio button to delete phone records immediately or, click Run Later to delete the phone records at a later time.

Step 7 Click **Submit** to create a job for deleting the phone records.

Step 8 Use the Job Configuration window to schedule and/or activate this job.

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 8-4.

Related Topics

- Using Query to Delete Phones, page 8-1
- Using a Custom File to Delete Phones, page 8-3

Exporting Phones

You can use the export utility to merge records from multiple Cisco Unified CallManager servers onto one Cisco Unified CallManager server. Use this procedure to move records from one Cisco Unified CallManager server to another. Only export the records that you are interested in moving. Perform the following procedures:

- Exporting Phone Records, page 9-3
- Exporting User Records, page 19-1
- Exporting User Device Profile Records, page 39-3
- (Optional) Edit the CSV file with a text editor. The record format must follow the format that is specified for that file format. For example, records for phones need to follow the phone file format.

Caution Use extreme care when editing the CSV file. Phones might not work if you insert records that are in the wrong format.

1. Upload the CSV file to Cisco Unified CallManager server. See the "Uploading a File" section on page 2-3.

Caution Because the order in which the records are inserted is important, you must insert user records first. This ensures that devices properly associate with existing users.

2. Insert User Records.
3. Insert Phone Records.
4. Insert User Device Profile Records.
5. Check the log files for errors. See the "Viewing Export Log Files" section on page 25-11.

Additional Information

See the "Related Topics" section on page 9-5.

Using Phone Export

You can choose between two file format options when you are exporting phone records:

Specific Details—For phones that have similar configurations.

All Details—For phones that have different line configurations, such as multiple partitions or calling search spaces.

Default Phone File Format

Choosing Default phone file format allows you to export records by using a defined query.

Table 9-1 lists the fields that are exported when you choose the Default Phone file format.

Table 9-1 Exported Fields in the Default Phone File Format

Field Types	Exported Fields
Device Fields	MAC Address, Description, Location
Line Fields	Directory Number, Display, Line Text Label, Forward Busy External, Forward Busy Internal, Forward No Answer Internal, Forward No Answer External, Forward No Coverage Internal, Forward No Coverage External, Call Pickup Group
User Fields	User ID
Speed Dials	Speed Dials

All Phone Details File Format

When you export phone records by using All Phone Details option, you export phone records for a particular model of phone along with all the device field information, different line attributes, and services that are associated with the phone or you can export all phone models in a single file. To export all phone types to a single file you can choose All Phone Types from the Select the Device Type drop-down list box. You cannot use the query to limit the number of records.

Table 9-2 lists the fields that are exported when you choose the All Phone Details file format.

Note The device name, not the MAC Address, gets saved when you choose to export by using the All Phone Details file format.

Table 9-2 Exported Fields in the All Phone Details File Format

Field Types	Exported Fields
Device Fields	Device Name, Description, Owner User ID, Device Pool, CSS, AAR CSS, Media Resource Group List, User Hold Audio Source, Network Hold Audio Source, Location, User Locale, Network Locale, Phone Button Template, Expansion Module type I, Expansion Module type II, Softkey Template, Phone Load Name, Module 1 Load Name, Module 2 Load Name, Login user ID, Built in Bridge, MLPP Indication, MLPP Preemption, MLPP Domain, Retry Video call as Audio, Privacy, Security Mode, Ignore Presentation Indicators, Single Packet Capture mode, Packet Capture Duration, Certificate Operation, Authentication Mode, Authentication String, Key Size (bits), Operation Completes By

Table 9-2 Exported Fields in the All Phone Details File Format (continued)

Field Types	Exported Fields
Model Specific Device Fields	Information, Directory, Messages, Services, Authentication Server, Proxy Server, Idle, Idle Timer, Enable Extension Mobility, Logout Profile, Login User ID, Login Time, Logout Time, Product Specific XML
Line Fields	Directory Number, Partition, Voice Mail Profile, Line CSS, AAR Group, Line User Hold Audio Source, Line Network Hold Audio Source, Auto Answer, Forward All to Voice Mail, Forward All Destination, Forward All CSS, Forward Busy External to Voice Mail, Forward Busy External Destination, Forward Busy External CSS, Forward No Answer External to Voice Mail, Forward No Answer External Destination, Forward No Answer External CSS, Forward On Failure to Voice Mail, Forward On Failure Destination, Forward on Failure CSS, Call pickup group, Forward Busy Internal to Voice Mail, Forward Busy Internal Destination, Forward Busy Internal CSS, Forward No Answer Internal to Voice Mail, Forward No Answer Internal Destination, Forward No Answer Internal CSS, Forward No Call Coverage External to Voice Mail, Forward No Call Coverage External Destination, Forward No Call Coverage External CSS, Forward No Call Coverage Internal to Voice Mail, Forward No Call Coverage Internal Destination, Forward No Call Coverage Internal CSS, Display, External Phone Number Mask, Message Waiting Lamp Policy, Ring Setting When Idle, Line Text Label, Ring Setting When Active, No Answer Ring Duration, MLPP Target Destination, MLPP Calling Search Space, MLPP No Answer Ring Duration, Max Num Calls, Busy Trigger, Call Info Display Mask, Alerting Name
User Fields	User ID
Speed Dials	Speed Dial Number, Speed Dial Label
Services	Service Name, Subscribed Service Name, Parameter Name, Parameter Value

Additional Information

See the "Related Topics" section on page 9-5.

Exporting Phone Records

To export phone records from Cisco Unified CallManager, use this procedure.

Procedure

Step 1 Choose one of the following options:

- **Bulk Administration > Phones > Export Phones > Specific Details**. The Export Phones Query window displays.
- **Bulk Administration > Phones > Export Phones > All Details**. The Export Phone Configuration window displays.

Step 2 Choose from the following options:

- For **All Phone Details** option, choose the type of device or specific model in the Device Type drop-down list box. See Table 9-1 for the list of exported fields in this format. Skip to Step 5.
- For **Specific Details** option, choose the type of device or specific model in the Device Type drop-down list box. See Table 9-2 for the list of exported fields in the default phone format.

Step 3 For Specific Phone Details, choose SIP or SCCP from the Device Protocol drop-down list box.

Step 4 For Specific Phone Details, you can customize the export file by choosing which set of phones to export, but the phone details are not configurable.

a. From the first Find Phone where, drop-down list box, choose from the following options:

- Device Name
- Description
- Directory Number
- Calling Search Space
- Device Pool
- Call Pickup Group
- LSC Status
- Authentication String
- Security Profile

b. In the second drop-down list box, choose from the following options:

- begins with
- contains
- is exactly
- ends with
- is empty
- is not empty

c. In the search field/list box, either choose or enter the value that you want to locate, such as a device name.

d. You can click the Search Within Results check box and choose **AND** or **OR** to add multiple filters and repeat Substep a. through Substep c. to further define your query.

e. Click **Find**. The search results display.

f. Click **Next**. The Export Phones Configuration window displays.

g. Choose a phone file format from the File Format drop-down list box.

Step 5 Enter the export file name in the File Name text box.

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

Step 7 Click the Run Immediately radio button to export phone records immediately or, click Run Later to export at a later time.

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

Step 9 Use the Job Scheduler option in the Bulk Administration main menu to schedule and/or activate this job.

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.

You can search and download the exported file using the Upload/Download Files option in the Bulk Administration menu. See Chapter 2, "Uploading and Downloading Files.".

Additional Information

See the "Related Topics" section on page 9-5.

Exporting and Importing Phones with More Than One User

When you export phone records that have multiple users who control a phone, the export utility generates a unique phone record for each user. The phone information remains the same, but each record has a different user ID.

The exported file name gets suffixed with the timestamp. If a recurring job is scheduled for export phones, then the information gets exported with same filename but different timestamps.

When you import the exported file that has phones with multiple users, then all users are exported in the same record.

The log file for the import transaction will show that the phone insertions failed for all users except the first user that is associated with the phone.

Additional Information

See the "Related Topics" section on page 9-5.

Related Topics

- Exporting Phone Records, page 9-3
- Exporting User Records, page 19-1
- Exporting User Device Profile Records, page 39-3

Adding and Updating Lines for Phones

To update line attributes for a specific group of devices or user device profiles, use the Update Lines option. Lines for a phone and a user device profile get updated at the same time when both are part of the query result.

Note When a phone is deleted from the Cisco Unified CallManager database, the directory number remains in the database. To manage these orphan directory numbers, you can use the Update Lines option to search for unassigned directory numbers and delete or update these directory numbers.

You can add lines to a group of existing phones or user device profiles in the Cisco Unified CallManager database. When you use the template to add new lines, you cannot change phone services or speed dials. Cisco Unified CallManager Bulk Administration (BAT) ignores those fields on the template when you add lines to existing devices.

To update line attributes and add lines and add lines to existing phones or user device profiles, use the following procedures:

- Using Query to Update Lines, page 10-1
- Adding Lines to Existing Phones and UDPs, page 10-7
- Using the BAT Spreadsheet to Add Lines to Existing Phones, page 10-8

Using Query to Update Lines

To update lines, use the following procedure:

Procedure

Step 1 Choose **Bulk Administration > Phones > Add/Update Lines > Update Lines** or **Bulk Administration > User Device Profiles > Add/Update Lines > Update Lines**.

The Update Lines Query window displays.

Note You can update all lines by not specifying a query. Skip to the "Field Descriptions for Updating Lines" section on page 10-3.

Step 2 From the first Find Line where drop-down list box, choose one of the following criteria:

- Directory Number
- Route Pattern
- Line Description
- Calling Search Space (Phone)
- Calling Search Space (Line)
- Device Pool
- Device Description
- Line Position
- Unassigned DN
- Call Pickup Group

Note To locate and delete orphaned directory numbers, use "unassigned DN."

From the second Find Line where drop-down list box, choose one of the following criteria:

- begins with
- contains
- is exactly
- ends with
- is empty
- is not empty

Step 3 In the search field list box, choose or enter the value that you want to locate. For example, you can choose the Line Partition from the list or enter a range of directory numbers.

Tip To find all lines that are registered in the database, click **Find** without entering any search text.

Step 4 To further define your query and to add multiple filters, check the Search Within Results check box, choose **AND** or **OR** from the drop-down box, and repeat steps 2 and 3.

Step 5 To display the records that are going to be affected, click **Find**.

A list of discovered lines displays by:

- Pattern/Directory Number
- Partition
- Description

Step 6 Click **Next**. The Update Lines window shows the type of query that you chose at the top. If you want to change the type of query, click **Back**.

Step 7 Specify the setting that you want to update for all the records that you have defined in your query. You can choose multiple parameters to update. See the "Field Descriptions for Updating Lines" section on page 10-3 for descriptions of the parameters.

Step 8 In the Value field for the checked parameter, enter the new value or choose a value from the list box.

Step 9 In the Job Information area, enter the Job description.

Step 10 Click the Run Immediately radio button to insert lines immediately or, click Run Later to insert at a later time.

Step 11 Click **Submit** to create a job for inserting the phone records.

Step 12 Use the Job Configuration window to schedule and/or activate this job.

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 10-11.

Field Descriptions for Updating Lines

Table 10-1 provides the field descriptions for updating line details. For related procedures, see the "Related Topics" section on page 10-11.

Values that display in some fields display from Cisco Unified CallManager. You must configure these values by using Cisco Unified CallManager Administration.

Table 10-1 Field Descriptions for Updating Line Details

Field	Description
Line Partition	Choose a partition. A partition indicates the route partition to which the directory number belongs. **Note** The directory number can appear in more than one partition.
Calling Search Space (Line)	Choose the partitions that are searched for numbers that are called from this directory number. **Note** Changes cause an update of the Pickup Group Names that are listed in the Call Pickup Group field. The setting applies to all devices that are using this directory number.
Calling Search Space Forward All	Choose the calling search space to use when a call is forwarded to the specified destination. **Note** This setting applies to all devices that are using this directory number.
Forward All Destination	Enter the directory number to which all calls are forwarded. **Note** This setting applies to any dialable phone number, including an outside destination unless restricted, and to all devices that are using this directory number.
Forward All to Voice Mail	Check this check box to forward all calls to the number that you chose in the voice-messaging profile. Checking this check box makes the values in the Forward All Destination field and Calling Search Space check box not relevant.
Calling Search Space Forward Busy External	Choose the calling search space to use when a call from an external number is forwarded to the specified destination. **Note** This setting applies to all devices that are using this directory number.

Table 10-1 Field Descriptions for Updating Line Details (continued)

Field	Description
Calling Search Space Forward Busy Internal	Choose the calling search space to use when a call from an internal number is forwarded to the specified destination. **Note** This setting applies to all devices that are using this directory number.
Forward Busy Destination External	Enter the directory number to which a call that is coming from an external number is forwarded when the line is in use. **Note** This setting applies to any dialable phone number, including an outside destination unless restricted, and to all devices that are using this directory number.
Forward Busy Destination Internal	Enter the directory number to which a call that is coming from an internal number is forwarded when the line is in use. **Note** This setting applies to any dialable phone number, including an outside destination unless restricted, and to all devices that are using this directory number.
Forward Busy to Voice Mail External	Check this check box to forward calls from an external number to the number that you chose in the voice-messaging profile when the line is in use. Checking this check box makes the values in the Forward Busy Destination field and Calling Search Space check box not relevant.
Forward Busy to Voice Mail Internal	Check this check box to forward calls from an internal number to the number that you chose in the voice-messaging profile when the line is in use. Checking this check box makes the values in the Forward Busy Destination field and Calling Search Space check box are not relevant.
Calling Search Space Forward No Answer External	Choose the calling search space to use when a call from an external number is forwarded to the specified destination. The setting displays only if it is configured in the system. **Note** This setting applies to all devices that are using this directory number.
Calling Search Space Forward No Answer Internal	Choose the calling search space to use a call from an internal number is forwarded to the specified destination. The setting displays only if it is configured in the system. **Note** This setting applies to all devices that are using this directory number.
Forward No Answer Destination External	Enter the directory number to which a call that is coming from an external number is forwarded when the phone is not answered. **Note** This setting applies to any dialable phone number, including an outside destination unless restricted, and to all devices that are using this directory number.

Table 10-1 Field Descriptions for Updating Line Details (continued)

Field	Description
Forward No Answer Destination Internal	Enter the directory number to which a call that is coming from an internal number is forwarded when the phone is not answered. **Note** This setting applies to any dialable phone number, including an outside destination unless restricted, and to all devices that are using this directory number.
Forward No Answer to Voice Mail External	Check this check box to forward unanswered calls from an external number to the number that you chose in the voice-messaging profile. Checking this check box makes the values in the Forward No Answer Destination field and Calling Search Space check box are not relevant.
Forward No Answer to Voice Mail Internal	Check this check box to forward unanswered calls from an internal number to the number that you chose in the voice-messaging profile. Checking this check box makes the values in the Forward No Answer Destination field and Calling Search Space check box are not relevant.
Calling Search Space Forward No Coverage External	Choose the calling search space to use when a call from an external number is forwarded to the specified destination. The setting displays only if it is configured in the system. **Note** This setting applies to all devices that are using this directory number.
Calling Search Space Forward No Coverage Internal	Choose the calling search space to use when a call from an internal number is forwarded to the specified destination. The setting displays only if it is configured in the system. **Note** This setting applies to all devices that are using this directory number.
Forward No Coverage Destination External	Enter the directory number to which a call that is coming from an external number is forwarded when the phone does not have coverage. **Note** This setting applies to any dialable phone number, including an outside destination unless restricted, and to all devices that are using this directory number.
Forward No Coverage Destination Internal	Enter the directory number to which a call that is coming from an internal number is forwarded when the phone does not have coverage. **Note** This setting applies to any dialable phone number, including an outside destination unless restricted, and to all devices that are using this directory number.
Forward No Coverage to Voice Mail External	Check this check box to forward calls from an external number to the number that you chose in the voice-messaging profile when the phone does not have coverage. Checking this check box makes the values in the Forward No Answer Destination field and Calling Search Space check box are not relevant.
Forward No Coverage to Voice Mail Internal	Check this check box to forward calls from an external number to the number that you chose in the voice-messaging profile when the phone does not have coverage. Checking this check box makes the values in the Forward No Answer Destination field and Calling Search Space check box are not relevant.

Table 10-1 Field Descriptions for Updating Line Details (continued)

Field	Description
Calling Search Space Forward on Failure External/Internal	(CTI ports only) Choose the calling search space to use when a call from an internal or external call is forwarded to the specified destination. The setting appears only if it is configured in the system. **Note** This setting applies to all devices that are using this directory number.
Forward on Failure Destination External/Internal	(CTI ports only) Enter the directory number to which a call coming from an internal or an external number should be forwarded when a phone or CTI application fails.
Forward on Failure to Voice Mail External/Internal	(CTI ports only) Check this check box to forward failed calls from external or internal numbers to the number that you chose in the voice-messaging profile.
Call Forward No Answer Ring Duration	Enter the number of seconds (between 1 and 300) to allow the call to ring, before forwarding the call to the destination number entered in the Forward No Answer Destination field. **Note** Leave this field blank to use the value that is set in the Cisco Unified CallManager service parameter, Forward No Answer Timer.
User Hold Audio Source	Choose the music on hold audio source that plays when the user presses the Hold button or softkey to put a call on hold.
Network Hold Audio Source	Choose the music on hold audio source that plays when the system places a call on hold such as when user transfers a call or initiates a conference or call park.
Auto Answer	Choose this parameter if you want all lines that are updated here to use the auto answer feature. With auto answer, Cisco Unified CallManager automatically answers calls when a headset is in use. A zip tone plays to alert the user that an incoming call connected.
Voice Mail Profile	Choose this parameter to make the pilot number the same as the directory number for this line. This choice proves useful if you do not have a voice-messaging server that is configured for this phone.
Ring Setting When Idle	Choose the type of ring for an incoming call on a phone.
Ring Setting when Active	Choose the type of ring for an incoming call on a phone, which is used when this phone has another active call on a different line.
Call Pickup Group Name	Choose a Pickup Group Name to specify the call pickup group, which can answer incoming calls to this directory number by dialing the appropriate pickup group number.
AAR Group	Choose the automated alternate routing (AAR) group for this device. The AAR group provides the prefix digits that are used to route calls that are otherwise blocked due to insufficient bandwidth. Set AAR Group to <None> to prevent rerouting blocked calls.
Target (Destination) MLPP	Enter the number to which MLPP precedence calls should be directed if this directory number receives a precedence call and neither this number nor its call forward destination answers the precedence call. Values can include numeric characters, pound(#), and asterisk (*).

Table 10-1 Field Descriptions for Updating Line Details (continued)

Field	Description
MLPP Calling Search Space	From the drop-down list box, choose the calling search space to associate with the alternate party target (destination) number.
MLPP No Answer Ring Duration	Enter the number of seconds (between 4 and 30) after which an MLPP precedence call will be directed to this directory number's alternate party if this directory number and its call forwarding destination have not answered the precedence call. Leave this setting blank to use the value that is set in the Cisco Unified CallManager enterprise parameter, Precedence Alternate Party Timeout.
External Phone Number Mask	Enter the phone number (or mask) that is sent for Caller ID information when a call is placed from this line. You can enter a maximum of 30 numbers and "X" characters. The Xs represent the directory number and must appear at the end of the pattern. For example, if you specify a mask of 972813XXXX, an external call from extension 1234 displays a caller ID number of 9728131234.
Maximum Number of Calls	You can configure up to 184 calls for a line on a device in a cluster, with the limiting factor being the device. As you configure the number of calls for one line, the calls available for another line decrease. The default specifies 4. If the phone does not allow multiple calls for each line, the default specifies 2. For CTI route points, you can configure up to 10,000 calls for each port. The default specifies 5000 calls. Use this field in conjunction with the Busy Trigger field.
Busy Trigger	This setting, which works in conjunction with Maximum Number of Calls and Call Forward Busy, determines the maximum number of calls to be presented at the line. If maximum number of calls is set for 50 and the busy trigger is set to 40, then incoming call 41 gets rejected with a busy cause (and will get forwarded if Call Forward Busy is set). If this line is shared, all the lines must be busy before incoming calls get rejected. Use this field in conjunction with Maximum Number of Calls for CTI route points. The default specifies 4500 calls.

Note To complete the procedure, go to the "Using Query to Update Lines" section on page 10-1.

Adding Lines to Existing Phones and UDPs

Use the following procedure to add lines to exiting phones and UDP templates:

Before You Begin

- You must have a BAT template for this transaction. See the "Adding or Updating Lines in a BAT Template" section on page 3-4.
- You must have a CSV data file for this transaction. See the "Using the BAT Spreadsheet to Add Lines to Existing Phones" section on page 10-8 for information.

Procedure

Step 1 Choose **Bulk Administration > Phones > Add/Update Lines > Add Lines.**

The Phone Add Lines window displays.

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

Step 3 If you are changing the phone settings for existing phones in the template, check the **Override the existing configuration** check box. The user phone information also gets updated when this check box is checked.

Step 4 In the Select Templates area, choose one of the following options:

- To add lines to phones, choose **Phone Template**.

  In the Template Name field, choose the BAT phone template to use for this bulk transaction.

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

Step 6 Click the Run Immediately radio button to insert the phone records immediately or, click Run Later to insert the phone records at a later time.

Step 7 Click **Submit** to create a job for adding lines to existing phones and UDPs.

Step 8 Use the Job Configuration window to schedule and/or activate this job.

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 10-11.

Using the BAT Spreadsheet to Add Lines to Existing Phones

To create the CSV data file by using the BAT spreadsheet for adding lines to existing phones, use the following procedure.

For information about installing and using the BAT spreadsheet, see the "Using the BAT Spreadsheet for Gathering Data" section on page 1-8.

Procedure

Step 1 To open the BAT Spreadsheet, locate and double-click the **BAT.xlt** file. For more information on uploading and downloading files, see Chapter 2, "Uploading and Downloading Files."

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

Step 3 To display the fields, click the **Add Lines** tab at the bottom of the spreadsheet.

Step 4 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. Table 10-2 describes the fields for adding lines in the BAT spreadsheet.

Step 5 To transfer the data from the BAT Excel spreadsheet into a CSV formatted data file, click **Export to BAT Format**.

The system saves the file to C:\XLSDataFiles\ or you can use Browse to save your file in another existing folder on your local workstation. The filename is

<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.

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

Upload the file to the Cisco Unified CallManager server. See the "Uploading a File" section on page 2-3.

Note 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.

Additional Topics

See the "Related Topics" section on page 10-11.

Field Descriptions for Adding Lines by Using the BAT Spreadsheet

Table 10-2 provides the field descriptions when you are adding lines by using the BAT spreadsheet. For related procedures, see the "Related Topics" section on page 10-11.

Table 10-2 Field Descriptions for Adding Lines by Using the BAT Spreadsheet

Field	Description
MAC Address	Enter the MAC address for phones, VGC virtual phones, and VGC phones. Enter a unique identifier for CTI ports and H.323 clients.
Line Index	Enter a number between 1 and 34 for the line index of a phone.
Directory Number	Enter a directory number, up to 24 numerals and special characters, for this line.

Table 10-2 Field Descriptions for Adding Lines by Using the BAT Spreadsheet

Field	Description
Display	Enter the text that you want to display on the called party's phone display, such as the user name (John Smith) or phone location (Conference Room 1). **Note** If this filed is left blank the system uses the value that is entered in the Directory Number field. **Note** The default language specifies English.
Line Text Label	Enter text that identifies this directory number for a line/phone combination. **Note** The default language specifies English
Forward Busy External	Enter the directory number to which a call that is coming from an external number is forwarded when the line is in use. **Note** This setting applies to any dialable phone number, including an outside destination unless restricted, and to all devices that are using this directory number.
Forward No Answer External	Enter the directory number to which a call that is coming from an external number is forwarded when the phone is not answered. **Note** This setting applies to any dialable phone number, including an outside destination unless restricted, and to all devices that are using this directory number.
Forward No Coverage External	Enter the directory number to which a call that is coming from an external number is forwarded when the phone does not have coverage. **Note** This setting applies to any dialable phone number, including an outside destination unless restricted, and to all devices that are using this directory number.
Forward Busy Internal	Enter the directory number to which a call that is coming from an internal number is forwarded when the line is in use. **Note** This setting applies to any dialable phone number, including an outside destination unless restricted, and to all devices that are using this directory number.
Forward No Answer Internal	Enter the directory number to which a call that is coming from an internal number is forwarded when the phone is not answered. **Note** This setting applies to any dialable phone number, including an outside destination unless restricted, and to all devices that are using this directory number.
Forward No Coverage Internal	Enter the directory number to which a call that is coming from an internal number is forwarded when the phone does not have coverage. **Note** This setting applies to any dialable phone number, including an outside destination unless restricted, and to all devices that are using this directory number.
Call Pickup Group	Enter a Pickup Group Name to specify the call pickup group, which can answer incoming calls to this line by dialing the appropriate pickup group number.

Related Topics

- Using Query to Update Lines, page 10-1
- Adding Lines to Existing Phones and UDPs, page 10-7
- Using the BAT Spreadsheet to Add Lines to Existing Phones, page 10-8

Resetting or Restarting Phones

You can reset or restart devices without updating any attributes. Use this procedure if a problem arises, and you must reset or restart the phones with a bulk transaction.

You can choose between two methods to locate phones you want to reset or restart:

- Using Query to Reset or Restart Phones, page 11-1
- Using a Custom File to Reset or Restart Phones, page 11-2

Using Query to Reset or Restart Phones

To reset or restart phones by creating a query to locate the phones, use the following procedure.

Procedure

Step 1 Choose **Bulk Administration > Phones > Reset/Restart Phones > Query.**

The Reset/Restart Phones Configuration window displays.

Step 2 From the first Find Phone where drop-down list box, choose one of the following criteria:

- Device Name
- Description
- Directory Number
- Calling Search Space
- Device Pool
- Device Type
- Call Pickup Group
- LSC Status
- Authentication String
- Device Protocol
- Security Profile

From the second Find Phone where drop-down list box, choose one of the following criteria:

- begins with
- contains

- is exactly
- ends with
- is empty
- is not empty

Step 3 Specify the appropriate search text, if applicable.

Tip To find all Phones that are registered in the database, click **Find** without entering any search text.

Step 4 To further define your query, you can choose **AND** or **OR** to add multiple filters and repeat steps 2 and 3.

Step 5 Click **Find**.

A list of discovered templates displays by:

- Device Name
- Description
- Device Pool
- Device Protocol
- Status
- IP Address

Step 6 From the list of records, click the device name that matches your search criteria.

Step 7 Click one of the following options:

- **Reset**—To reset (power-cycle) the phones
- **Restart**—To reset phones without power-cycling

Step 8 In the Job Information area, enter the Job description.

Step 9 Click the Run Immediately radio button to insert the phone records immediately or, click Run Later to insert the phone records at a later time.

Step 10 Click **Submit** to create a job for inserting the phone records.

Step 11 Use the Job Configuration window to schedule and/or activate this job.

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 11-3.

Using a Custom File to Reset or Restart Phones

You can create a custom file of phones that you want to reset or restart by using a text editor. You can use either device names or directory numbers in the custom file.

Before You Begin

1. Create a text file that lists one of these details for the phones that you want to reset or restart:

- Device names
- Description
- Directory numbers

2. Put each item on a separate line in the text file.
3. Upload the file to the first node of Cisco Unified CallManager. See the "Uploading a File" section on page 2-3.

To reset or restart phones by using a custom file, use the following procedure.

Procedure

Step 1 Choose **Bulk Administration > Phones > Reset/Restart Phones > Custom File.**

The Reset/Restart Phones Custom Configuration window displays.

Step 2 In the Update Phones where drop-down list box, choose the type of custom file that you have created from one of the following criteria:

- Device Name (includes MAC addresses)
- Directory Number
- Description

Step 3 In the list of custom files, choose the filename of the custom file for this update.

Caution If no information is entered into the query text box, the system resets or restarts all phones.

Step 4 Click **Find**.

Step 5 Click one of the following:

- **Reset**—To reset (power-cycle) the phones
- **Restart**—To reset phones without power-cycling

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

Step 7 Click the Run Immediately radio button to insert the phone records immediately or, click Run Later to insert the phone records at a later time.

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

Step 9 Use the Job Configuration window to schedule and/or activate this job.

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 11-3.

Related Topics

- Using Query to Reset or Restart Phones, page 11-1

- Using a Custom File to Reset or Restart Phones, page 11-2

CHAPTER 12

Generating Phone Reports

Cisco Unified CallManager Bulk Administration (BAT) provides reports to help you manage records effectively. You can create and save reports that provide information about phones, users, user device profiles, managers and assistants, and gateway records. You can save these reports with a filename and store them in a folder on the first node server to review and print.

You can customize BAT reports for phones and for user device profiles to meet your particular needs by choosing items from a list of device fields and line fields. You can also choose how to arrange the fields in the report. The system generates the report in the CSV file format. Because reports for users, managers, assistants, and gateways have a fixed format, you cannot customize them.

Example

You need to have a list of all the directory numbers with their forwarding destinations by phone model. You can generate a Phone Report for the Cisco Unified IP Phone model 7960 and choose these query details: Device Name, Directory Number, Forward Busy Destination, Forward No Answer Destination, and Label. You can arrange the report fields, so the Label field follows the Directory Number field and precedes the two forward destination numbers.

Additional Information

See the "Related Topics" section on page 12-6.

Generating Reports for Phones

To generate reports for phones and other IP telephony devices, use this procedure.

Procedure

Step 1 Choose **Bulk Administration > Phones > Generate Phone Reports**.

The Report Phone Query window displays.

Step 2 In the first Find Phone(s) where drop-down list box, choose the field to query such as Model or Directory Number.

Step 3 In the second drop-down list box, choose the search criteria such as begins with, contains, or is empty.

Step 4 In the search field/list box, either choose or enter the value that you want to locate, such as the model name from the list or directory number range.

Step 5 Specify the appropriate search text, if applicable.

Tip To generate a report for all Phones that are registered in the database, click **Find** without entering any search text.

Step 6 To further define your query and to add multiple filters, check the Search Within Results check box, choose **AND** or **OR** from the drop-down box, and repeat steps 2 through 5.

Step 7 Click **Find**.

A list of discovered phones displays.

Step 8 Click **Next** to choose details for your type of report. The Generate Phone Report Configuration window displays and shows the Query that you chose. If you want to change the type of query, click **Back**.

Step 9 In the Report File Name field, enter your name for this report (required).

Step 10 In the Available Device Fields drop-down list box, choose a device item and click the arrow to move the item into the Selected Fields for this Report list. You can choose one or more fields to include in your report. For a list of device and live fields, see the "Reports for Phones and IP Telephony Devices" section on page 12-3.

Step 11 Arrange the order of the items in the Selected Device Fields for this Report list by choosing an item and clicking the Up arrow or Down arrow to move the item to another position in the list.

Step 12 In the Available Line Fields drop-down list box, choose a line item and click the arrow to move the item into the Selected Fields for this Report list. You can choose one or more fields to include in your report.

Step 13 Arrange the order of the line items in the Selected Line Fields for this Report list by choosing an item and clicking the Up arrow or Down arrow to move the item to another position in the list.

Note You must specify at least one device or line field to generate a report.

Step 14 if you want to include IP phone services fields in your report, check the check boxes for Speed Dial Services and/or IP Phone Services.

Step 15 In the Job Information area, enter the Job description.

Step 16 Click the Run Immediately radio button to generate the report immediately or, click Run Later to generate the report later.

Step 17 Click **Submit** to create a job for inserting the phone records.

Step 18 Use the Job Configuration window to schedule and/or activate this job.

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.

You can search and download the report file using the Upload/Download Files option in the Bulk Administration menu. See Chapter 2, "Uploading and Downloading Files."

Additional Information

See the "Related Topics" section on page 12-6.

Reports for Phones and IP Telephony Devices

You can produce phone reports for all phones and IP telephony devices or limit the report to one of these options:

- Phone Model—Choose one from the list of models that are configured in the cluster.
- Device Name—Specify a filter or use exact name.
- Description—Specify a filter or use exact description.
- Phone Load Name—Specify a filter or use exact name.
- Device Pool—Choose one from a list of device pools that are configured in the cluster.
- Calling Search Space—Choose one from a list of CSS that are configured in the cluster.
- Location—Choose one from a list of locations that are configured in the cluster.
- Directory Number—Specify a filter or use exact number.

After choosing the phone report type, you can choose the device and line details to include in the report.

You can choose from these Device fields:

- AAR Calling Search Space
- AAR Neighborhood
- Authentication String
- Built In Bridge
- Calling Search Space
- Calling Search Space Reroute
- Certificate Operation
- Certificate Status
- Common Profile
- Country
- Description
- Device Name
- Device Pool
- Device Profile
- Device Protocol
- Device_Default Profile
- Dial Rules
- Last Login user ID
- Load Information
- Location
- Login Duration
- Login Time
- MLPP Domain
- MLPP Indication

- Media Resource List
- Model
- Network Hold MOH Audio Source
- Network Location
- Packet Capture Duration
- Packet Capture Mode
- Phone Template
- Preemption
- Privacy
- Product
- Public Key
- Qsig
- SIP Profile
- Secure Shell Password
- Secure Shell User ID
- Security Profile
- Softkey Template
- Upgrade Finish Time
- User ID

You can choose from these Line fields:

- Alerting Name
- Auto Answer
- CSS_Device Failure
- CSS_MWI
- Call Forward Duration
- Calling Line Presentation Bit
- Calling Name Presentation Bit
- Calling Party Prefix Digits
- Connected Line Presentation Bit
- Connected Name Presentation Bit
- Device Failure DN
- Directory Number
- CSS (Forward All)
- CSS (Forward Busy External)
- CSS (Forward Busy Internal)
- CSS (Forward No Answer External)
- CSS (Forward No Answer Internal)
- CSS (Forward On Failure)

- CSS (Forward No Coverage External)
- CSS (Forward No Coverage Internal)
- Forward All Destination
- Forward Busy Destination External
- Forward Busy Destination Internal
- Forward No Answer Destination External
- Forward No Answer Destination Internal
- Forward on Failure Destination
- Forward No Coverage Destination External
- Forward No Coverage Destination Internal
- Forward on CTI Failure CSS
- Line AAR Neighborhood
- Line Alerting Name ASCII
- Line Description
- Line Network Hold MOH Audio Source
- MLPP No Answer Ring Duration (Seconds)
- Route Partition
- Secondary Call Forward All CSS
- Target CSS
- Target Destination
- User Hold MOH Audio Source

Additional Information

See the "Related Topics" section on page 12-6.

Producing a List of Phones with Dummy MAC Addresses

To generate a list of phones that are using dummy MAC addresses, use the following procedure.

Procedure

Step 1 Choose **Bulk Administration > Phones > Generate Phone Reports**.

The Report Phone Query window displays.

Step 2 In the first Find Phone(s) where drop-down list box, choose **Device Name**.

Step 3 In the second drop-down list box, choose **begins with**.

Step 4 In the text field, enter **BAT**. All phones that are added with a dummy MAC address have device names that begin with BAT.

Step 5 Click **Find**. The text Device Name begins with 'BAT' and displays in the query text box.

Step 6 Click **Next**. The Generate Phone Report Configuration window displays.

Step 7 Complete the report by going to Step 9 in the procedure for Generating Reports for Phones.

Additional Information

See the "Related Topics" section on page 12-6.

Viewing Report Log Files

BAT generates log files for each report transaction and stores them on the first node of Cisco Unified CallManager server. You can find the link to log files for this job from the Job configuration window for this job. For more details, see Chapter 51, "Scheduling Jobs."

Additional Information

See the "Related Topics" section on page 12-6.

Related Topics

CHAPTER 13

Migrating Phones

Using Cisco Unified CallManager Bulk Administration (BAT), you can migrate a group of phones from Skinny Client Control Protocol (SCCP) to Session Initiation Protocol (SIP).

Migrating Phones

Use the following procedure to migrate phones.

Procedure

Step 1 Choose **Bulk Administration > Phones > Migrate Phones> SCCP to SIP**.

The Migrate Phones—SCCP to SIP window displays.

Note Migrating an SCCP phone to SIP does not need a manual reset as the migration itself handles the reset of phones.

Step 2 From the first Find Phone where drop-down list box, choose one of the following criteria:

- Device Name
- Description
- Directory Number
- Calling Search Space
- Device Pool
- Device Type
- Call Pickup Group
- LSC Status
- Authentication String
- Location
- Phone Load Name
- Security Profile

Step 3 From the second Find Phone where drop-down list box, choose one of the following criteria:

- begins with

- contains
- is exactly
- ends with
- is empty
- is not empty

Step 4 Specify the appropriate search text, if applicable.

Tip To find all phones that are registered in the database, click **Find** without entering any search text.

Step 5 To further define your query, check the check box corresponding to Search Within Results Using drop-down list box. You can choose **AND** or **OR** to add multiple filters. Repeat steps 2 through 4.

Step 6 Click **Find**.

A list of discovered phones displays by:

- Device Name
- Description
- Device Pool
- Device Protocol
- Status
- IP Address

Step 7 Click **Next**.

Step 8 Choose the phone template from the drop-down list box.

Note SCCP to SIP migration will pick up only SIP protocol specific default values from this template during migration. It will not pick any other value from the template.

Step 9 In the Job Information area, enter the Job description.

Step 10 Click the Run Immediately radio button to migrate phone records immediately or, click Run Later to migrate at a later time.

Step 11 Click **Submit** to create a job for migrating the phone records.

Note After submitting a job for migrating phones from SCCP to SIP, make sure that you reset these phones. Reset phones using **Bulk Administration > Phones > Reset/Restart Phones > Query**. See "Using Query to Reset or Restart Phones" section on page 11-1.

Step 12 Use the Job Scheduler option in the Bulk Administration main menu to schedule and/or activate this job.

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 13-3.

Related Topics

- Migrating Phones, page 13-1
- Using Query to Reset or Restart Phones, page 11-1
- Scheduling Jobs

PART 4

Users

CHAPTER 14

Adding Users

You can use Cisco Unified CallManager Bulk Administration (BAT) to add a group of new users and to associate users to phones and other IP Telephony devices in the Cisco Unified CallManager database.

Note If you use your corporate directory and have Lightweight Directory Access Protocol (LDAP) synchronization enabled (in Cisco Unified CallManager Administration, choose **System > LDAP > LDAP System**), then you cannot use BAT to insert/update or delete users. For more details on LDAP, refer to *Cisco Unified CallManager Administration Guide 5.0*.

This chapter describes working with users.

Use the following topics to manage user records and to work with user combinations, such as phones and users or CTI ports and user records in the Cisco Unified CallManager LDAP directory:

Adding Users

To add users to the Cisco Unified CallManager LDAP Directory in bulk, you must perform these steps:

1. Create a comma separated values (CSV) data file to define individual values for each user that you want to add.
   - See the "Using the BAT Spreadsheet to Create the CSV Data File for Users" section on page 14-2.
   - For information about creating a text-based CSV data file for users, see the "Creating a Text-Based CSV File for Users" section on page A-6.
2. Use BAT to insert the users to the Cisco Unified CallManager directory. See the "Inserting Users to Cisco Unified CallManager" section on page 16-1.

Note When you are adding users who have applications that require a CTI port, such as Cisco IP SoftPhone, BAT can associate CTI ports to existing users.

Additional Topics

See the "Related Topics" section on page 14-5.

Using the BAT Spreadsheet to Create the CSV Data File for Users

You can provide details for adding new users to the Cisco Unified CallManager directory in the BAT spreadsheet and convert it a CSV data file.

For information about installing and using the BAT spreadsheet, see the "Using the BAT Spreadsheet for Gathering Data" section on page 1-8.

To create the CSV data file for adding new users in bulk, use the following procedure.

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 Table 14-1. If a user has multiple devices, the device name field should be repeated, once for each device.

Table 14-1 Field Descriptions in BAT Spreadsheet for Adding Users

Field	Description
First Name	Enter the first name, up to 50 characters, of the phone user.
Middle Name	Enter the middle name, up to 50 characters, of the phone user.
Last Name	Enter the last name, up to 50 characters, of the phone user.
User ID	Enter the user ID , from 1 to 30 characters, for the user of this phone.
Password	Enter the password, up to 20 characters, that the user needs to access the Cisco IP Phone Configuration window. You must specify the Password either in the CSV data file or by using the BAT user interface during user template addition. If you want to apply individual passwords for each user or groups of users, specify the password information in the CSV data file. If you want to use a default password for all users, provide the default password when you insert the users in BAT.
Manager User ID	Enter manager user ID, up to 30 characters, for the user of this phone.
Department	Enter the department number, up to 30 characters, for the user of this phone.
PIN	Enter the personal identification number (PIN) , up to 20 numerals, to be used for extension mobility. You must enter a PIN either in the CSV data file or by using the BAT user interface during user template addition. If you want to apply individual PINs for each user or groups of users, specify the PIN in the CSV data file.To use a default PIN that all users can use, provide default PIN when you insert the users in BAT.

Table 14-1 Field Descriptions in BAT Spreadsheet for Adding Users (continued)

Field	Description
User Device Profile	Enter the user device profile for this user and device, up to 50 characters. You can choose the user device profile from the list of existing UDPs in Cisco Unified CallManager Administration that appears in BAT.
User Locale	Enter the language and country set that you want to associate with this user. Your choice determines which cultural-dependent attributes exist for this user and which language displays in the Cisco Unified CallManager user windows and phones.
Controlled Device Name1	Enter the name, up to 50 characters, for the phone or device that you want to associate with this user. **Note** The Controlled Device Name field(s) displays when the Number of Controlled Devices field, at the extreme right in the spreadsheet, is set to greater than Zero.
Telephone Number	Enter the telephone number, up to 50 numerals for the primary extension (usually Line 1) for the phone.
Primary Extension	This field displays after the user is added and represents the primary directory number for the user. You choose no primary line when you associate devices to the user. Users can have multiple lines on their phones.
Associated PC	This field, which is required for Cisco SoftPhone and Cisco Unified CallManager Attendant Console users, displays after the user is added.
ICD Extension	From the drop-down list box, choose an ICD extension for this end user.
Mail ID	Release 5.0(2) of Cisco Unified CallManager Administration will provide this description.
Controlled Device Name 2	Enter the name, up to 50 characters, for any additional phones that you want to associate with this user. **Note** The Controlled Device Name field(s) displays when the Number of Controlled Devices field, at the extreme right in the spreadsheet, is set to greater than Zero. **Note** You must complete the Controlled Device Name1 field first and then add more Controlled Device Name entries.
Presence Group	Enter the presence group that watches the status of the directory number, the presence entity. For information on the Presence feature, refer to *Cisco Unified CallManager Features and Services Guide*.

Table 14-1 Field Descriptions in BAT Spreadsheet for Adding Users (continued)

Field	Description
SUBSCRIBE Calling Search Space	All calling search spaces that you configure in Cisco Unified CallManager Administration display in the SUBSCRIBE Calling Search Space drop-down list box. The SUBSCRIBE Calling Search Space determines how Cisco Unified CallManager routes the Presence subscription requests that come from the end user. To configure a calling search space specifically for this purpose, you configure a calling search space as you do all calling search spaces (**Call Routing > Class Control > Calling Search Space**). For information on how to configure a calling search space, see the *Cisco Unified CallManager Administration Guide*.
Digest Credentials	When you configure digest authentication for SIP phones, Cisco Unified CallManager challenges the identity of the phone every time the phone sends a SIP request to Cisco Unified CallManager. The digest credentials that you enter in this field get associated with the phone when you choose a digest user in the Phone Configuration window. Enter a string of alphanumeric characters. For more information on digest authentication, refer to the Cisco Unified CallManager Security Guide.
User Group	Enter the user group to which the user belongs. **Note** The User Group field(s) displays when the Number of User Groups field, at the extreme right in the spreadsheet, is set to greater than Zero.

Step 5 To enter additional device names that will be associated to a new user, click the **Add More Devices** button .

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

Note To associate auto-generated device profiles to new users using BAT, BAT administrators can enter the ADP name in the xlt, in User Device Profile column.

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\ or use Browse to save the file to another existing folder. The filename is:

<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.

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 spreadsheet, the system treats the empty row as the end of the file. Data that is entered after a blank line does not get converted to the BAT format.

You must upload the CSV data file to the first node of Cisco Unified CallManager database server, so BAT can access the data file. See Chapter 2, "Uploading and Downloading Files."

Note 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.

Additional Topics

See the "Related Topics" section on page 14-5.

Related Topics

- Adding Users, page 14-1
- Exporting User Records, page 19-1
- Generating Reports for Users, page 21-1
- BAT Log Files, page 54-3.

CHAPTER 15

User Template

You can use Cisco Unified CallManager Bulk Administration (BAT) user templates to define the common user attributes to add a group of new users.

Use these topics to work with BAT User Templates:

Finding a BAT User Template

Because you might have several user templates, Cisco Unified CallManager lets you locate specific user template on the basis of specific criteria. Use the following procedure to locate templates.

Note During your work in a browser session, your find/list search preferences are stored in the cookies on the client machine. If you navigate to other menu items and return to this menu item, or if you close the browser and then reopen a new browser window, your Cisco Unified CallManager search preferences are retained until you modify your search.

Procedure

Step 1 Choose **Bulk Administration > Users > User Template**.

The Find and List User Templates window displays. Use the two drop-down list boxes to search for a template.

Step 2 From the first Find User Templates where drop-down list box, choose one of the following criteria:

- User Template Name
- Department

From the second Find User Template where drop-down list box, choose one of the following criteria:

- begins with

- contains
- is exactly
- ends with
- is empty
- is not empty

Step 3 Specify the appropriate search text, if applicable, and click **Find**.

Tip To find all User Templates that are registered in the database, click **Find** without entering any search text.

A list of discovered templates displays by:

- User Template
- Department

Step 4 From the list of records, click the user template that matches your search criteria.

The window displays the user template that you choose.

Additional Information

See the "Related Topics" section on page 15-6

Creating a New BAT User Template

Use this procedure to create a new user template.

Procedure

Step 1 Choose **Bulk Administration > Users > User Template**.

The Find and List User Templates window displays.

Step 2 Click **Add New**. The User Template Configuration window displays.

Step 3 Enter the user settings that this group of users have in common. See "Field Descriptions for a BAT User Template" section on page 15-4.

Step 4 Click **Save**.

When the user template is added to the database, the status indicates that the transaction has completed.

Additional Information

See the "Related Topics" section on page 15-6

Modifying BAT User Templates

Use this procedure to view or modify an existing user template.

Procedure

Step 1 Find the user template you want to modify, using the procedure in "Finding a BAT User Template" section on page 15-1

Step 2 In the User Template Configuration window, add, change, or remove settings in the template. See "Table 15-1Field Descriptions for a User Template in BAT" section on page 15-4 for more information.

Step 3 After you modified the settings to update the template, click **Save**.

Additional Information

See the "Related Topics" section on page 15-6

Copying a BAT User Template

You can copy the properties of a user template into a new user template when you want to change only a few fields.

Use the following procedure to copy an existing BAT phone template.

Procedure

Step 1 Find the user template you want to copy, using the procedure in "Finding a BAT User Template" section on page 15-1

Step 2 In the User Template Configuration window, verify that this is the template that you want to copy and click **Copy**.

The template reproduces and creates a copy. The copy duplicates all the values that were specified in the original template.

Step 3 Update the fields as needed for the new template. See "Table 15-1Field Descriptions for a User Template in BAT" section on page 15-4 for information.

Step 4 Click **Save**.

Additional Topics

See the "Related Topics" section on page 15-6.

Deleting Templates

You can delete BAT templates when you no longer require them. Use this procedure to delete a template.

Procedure

Step 1 Find the user template you want to delete, using the procedure in "Finding a BAT User Template" section on page 15-1.

Step 2 In the User Template Configuration window, verify that this is the template that you want to delete and click **Delete**.

Note You can also delete the user template from the Find and List User Templates window.check the check box next to the template you want to delete and click **Delete Selected**

A message displays that asks you to confirm the delete operation.

Step 3 To delete the template, click **OK**. The template name disappears from the list of user templates list on the Find and List User Templates window.

Note If you submit a job with a particular user template, and if you delete the user template before the execution of the job, then the job also gets deleted. You have to resubmit the job by creating another user template.

Additional Topics

See the "Related Topics" section on page 15-6.

Field Descriptions for a BAT User Template

Table 15-1 provides descriptions of all possible fields that display when you are adding a BAT user template. For related procedures, see the "Related Topics" section on page 15-6.

In the BAT user interface, field names that have an asterisk require an entry. Treat fields that do not have an asterisk as optional.

Table 15-1 Field Descriptions for a User Template in BAT

Field	Description
User Template Name	Enter a unique name, up to 30 alpha-numeric characters, for the user template.
Password	Enter the password, up to 20 characters, that the user needs to access the Cisco IP Phone Configuration window. You must specify the Password either in the CSV data file or by using the BAT user interface during user template addition. If you want to apply individual passwords for each user or groups of users, specify the password information in the CSV data file. If you want to use a default password for all users, provide the default password when you insert the users in BAT.
Confirm Password	Reenter the password for confirmation.

Table 15-1 Field Descriptions for a User Template in BAT

Field	Description
Default Password to User ID	Check this check box if you want to make the user ID as the default password for all users.
PIN	Enter the personal identification number (PIN) , up to 20 numerals, to be used for extension mobility. You must enter a PIN either in the CSV data file or by using the BAT user interface during user template addition. If you want to apply individual PINs for each user or groups of users, specify the PIN in the CSV data file.To use a default PIN that all users can use, provide default PIN when you insert the users in BAT.
Confirm PIN	Reenter the PIN for confirmation.
Default PIN to Telephone Number	Check this check box to make the telephone number as the default PIN.
Default Telephone Number to Primary Extension	Check this check box to make the telephone number as the primary extension.
Default Mail ID to User ID	Check this check box to default mail ID to user ID.
Manager User ID	Enter manager user ID, up to 30 characters, for the user of this phone.
Department	Enter the department number, up to 30 characters, for the user of this phone.
User Locale	Choose the language and country set that you want to associate with this user from the drop-down list box. Your choice determines which cultural-dependent attributes exist for this user and which language displays in the Cisco Unified CallManager user windows and phones.
Associated PC	This field, which is required for Cisco SoftPhone and Cisco Unified CallManager Attendant Console users, displays after the user is added.
Default Profile	Choose the default profile for this user from the default Profile Drop-down list box.
Presence Group	From the drop-down list box, choose the presence group that watches the status of the directory number, the presence entity. For information on the Presence feature, refer to *Cisco Unified CallManager Features and Services Guide*.

Table 15-1 Field Descriptions for a User Template in BAT

Field	Description
SUBSCRIBE Calling Search Space	All calling search spaces that you configure in Cisco Unified CallManager Administration display in the SUBSCRIBE Calling Search Space drop-down list box. The SUBSCRIBE Calling Search Space determines how Cisco Unified CallManager routes the Presence subscription requests that come from the end user. To configure a calling search space specifically for this purpose, you configure a calling search space as you do all calling search spaces (**Call Routing > Class Control > Calling Search Space**). For information on how to configure a calling search space, see the *Cisco Unified CallManager Administration Guide*.
Digest Credentials	When you configure digest authentication for SIP phones, Cisco Unified CallManager challenges the identity of the phone every time the phone sends a SIP request to Cisco Unified CallManager. The digest credentials that you enter in this field get associated with the phone when you choose a digest user in the Phone Configuration window. Enter a string of alphanumeric characters. For more information on digest authentication, refer to the Cisco Unified CallManager Security Guide.
Allow Control of Device from CTI	Check this check box to allow CTI to control and monitor this device. If the associated directory number specifies a shared line, the check box should be enabled as long as at least one associated device specifies a combination of device type and protocol that CTI supports.
User Group	From the drop-down list box, choose the user group to which the user belongs.

Note To continue configuring the BAT phone template, go to the "Creating a New BAT User Template" section on page 15-2

Related Topics

- Finding a BAT User Template, page 15-1
- Creating a New BAT User Template, page 15-2
- Modifying BAT User Templates, page 15-3
- Copying a BAT User Template, page 15-3
- Deleting Templates, page 15-3
- Field Descriptions for a BAT User Template, page 15-4

CHAPTER 16

Inserting Users

You can use Cisco Unified CallManager Bulk Administration (BAT) to add a group of users to the Cisco Unified CallManager directory.

Inserting Users to Cisco Unified CallManager

To add a group of users to the Cisco Unified CallManager directory, use the following procedure.

Before You Begin

You must have a CSV data file that contains the user names, 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

If you are inserting files that are generated with the export utility, insert the files in descending order based on the _MgrLevel# suffix, where # is 1 through 20. Insert the file with the _user suffix last to ensure that the user record for a manager exists prior to use of the User ID for a manager in the Manager User ID field.

Procedure

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

The Insert Users Configuration page displays.

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 Choose the user template you want to use for this insert from the User Template Name drop-down list box.

Note The User Device Profile, Controlled Device Name, and Directory Number should already exist in the Cisco Unified CallManager database.

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

Step 6 Click the Run Immediately radio button to insert the user records immediately or, click Run Later to insert the user records at a later time.

Step 7 Click **Submit** to create a job for inserting the user records.

Step 8 Use the Job Scheduler option in the Bulk Administration main menu to schedule and activate this job.

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.

Note The field values that you enter in the CSV file for inserting users will override the values provided in the user template.

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.

Additional Topics

See the "Related Topics" section on page 16-2.

Related Topics

- Creating a New BAT User Template, page 15-2
- Field Descriptions for a BAT User Template, page 15-4
- Inserting Users to Cisco Unified CallManager, page 16-1

Updating Users

Update the existing user information that is in the database using the following procedure:

Updating Users

To update existing user information that is in the Cisco Unified CallManager database, use the following steps:

1. Create a comma separated values (CSV) data file to define individual values for each user that you want to update.
   - See the "Using the BAT Spreadsheet to Create a CSV Data File for Updating Users" section on page 17-2.
   - For a text-based CSV file, see the "Updating Users File Format" section on page A-8.

Note To keep values or settings that were previously stored in the Cisco Unified CallManager directory, see the"Retaining Stored Values" section on page 17-1.

2. Use Cisco Unified CallManager Bulk Administration (BAT) to insert the updated user records that are in the Cisco Unified CallManager database. See the Updating Users in Cisco Unified CallManager, page 17-5.

Additional Topics

See the "Related Topics" section on page 17-5.

Retaining Stored Values

When you are updating user records, you might want to keep values or settings for a user that were previously stored in the Cisco Unified CallManager directory. You can use a symbol such as"#" for fields where the value must be retained. In following example CSV data file, the # tells BAT to keep the Manager field the same as the one that was previously entered in the DC directory.

```
userid,#,department,,,123456789012,
```

To identify the value to use to retain a stored value, use the following procedure.

Procedure

Step 1 Choose **Bulk Administrator > Users > Update Users**.

The User Update Configuration window displays.

Step 2 Notice the **Value for fields to be ignored** box. When you insert the CSV data file with the updated user values, you must enter the symbol that you used to retain values in this box.

Step 3 Decide what symbol you want to use for retaining values.

Step 4 Enter this value that is in the **Value for fields to be ignored** box into the BAT spreadsheet box.

Step 5 Use this symbol in BAT spreadsheet fields for any values that you want to retain.

Additional Topics

See the "Related Topics" section on page 17-5

Using the BAT Spreadsheet to Create a CSV Data File for Updating Users

To create the CSV data file for updating a group of existing users, use the following procedure.

Procedure

Step 1 Download and open the **BAT.xlt** file. See Chapter 2, "Uploading and Downloading Files."

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

Step 3 To add user information, click the **Update 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. Use Table 17-1 for descriptions of the BAT spreadsheet fields.

Table 17-1 Field Descriptions in the BAT Spreadsheet for Updating Users

Field	Description
User ID	Enter the user ID, from 1 to 30 characters, for the user of this phone.
Manager	Enter manager user ID, up to 30 characters, for the user of this phone.
Department	Enter the department number, up to 50 characters, for the user of this phone.
User Device Profile	Enter the user device profile, up to 50 characters, for this user and device. You can choose the user device profile from the list of existing UDPs in Cisco Unified CallManager Administration that appears in BAT.

Table 17-1 Field Descriptions in the BAT Spreadsheet for Updating Users (continued)

Field	Description
User Locale	Enter the language and country, up to 50 characters, set that you want to associate with this user. Your choice determines which cultural-dependent attributes exist for this user and which language displays in the Cisco Unified CallManager user windows and phones.
Password	Enter the password, up to 20 characters, that the user needs to access the Cisco IP Phone Configuration window. You must specify the Password either in the CSV data file or by using the BAT user interface during user template addition. If you want to apply individual passwords for each user or groups of users, specify the password information in the CSV data file. If you want to use a default password for all users, provide the default password when you insert the users in BAT.
PIN	Enter the personal identification number (PIN), up to 20 numerals, to be used for extension mobility. You must enter a PIN either in the CSV data file or by using the BAT user interface during user template addition. If you want to apply individual PINs for each user or groups of users, specify the PIN in the CSV data file.To use a default PIN that all users can use, provide default PIN when you insert the users in BAT.
Telephone Number	Enter your telephone number.
Primary Extension	This field displays after the user is added and represents the primary directory number for the user. You choose no primary line when you associate devices to the user. Users can have multiple lines on their phones. If the system is configured for Unity Integration, the Create Voice Mailbox link displays.
Associated PC	This field, which is required for Cisco SoftPhone and Cisco Unified CallManager Attendant Console users, displays after the user is added.
ICD Extension	Enter an ICD extension for this end user.
Mail ID	Enter your e-mail ID.
Controlled Device MAC Address	This field displays after the user is added. After the device is associated, this field displays the description information (for example, the MAC address) that the user controls.
Directory Number	Enter the directory number, up to 24 numerals, for the primary extension (usually Line 1) for the phone.
Presence Group	Enter the presence group that watches the status of the directory number, the presence entity. For information on the Presence feature, refer to *Cisco Unified CallManager Features and Services Guide*.

Table 17-1 Field Descriptions in the BAT Spreadsheet for Updating Users (continued)

Field	Description
SUBSCRIBE Calling Search Space	All calling search spaces that you configure in Cisco Unified CallManager Administration display in the SUBSCRIBE Calling Search Space drop-down list box. The SUBSCRIBE Calling Search Space determines how Cisco Unified CallManager routes the Presence subscription requests that come from the end user. To configure a calling search space specifically for this purpose, you configure a calling search space as you do all calling search spaces (**Call Routing > Class Control > Calling Search Space**). For information on how to configure a calling search space, see the *Cisco Unified CallManager Administration Guide*.
Digest Credentials	When you configure digest authentication for SIP phones, Cisco Unified CallManager challenges the identity of the phone every time the phone sends a SIP request to Cisco Unified CallManager. The digest credentials that you enter in this field get associated with the phone when you choose a digest user in the Phone Configuration window. Enter a string of alphanumeric characters. For more information on digest authentication, refer to the Cisco Unified CallManager Security Guide.

Step 5 In the Value for fields to be ignored box, enter the symbol that you will use to tell BAT that you want to keep the value that was previously stored in the DC directory. Enter the same value in the value of the field you want to retain.

Step 6 To transfer the data from the BAT Excel spreadsheet into a CSV file, click the **Export to BAT format** button.

The system saves the file to C:\XlsDataFiles\ (or to your choice of another existing folder). The filename is

Update_Users-timestamp.txt (or to your choice of filename)

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 spreadsheet, the system treats the empty row as the end of the file. Data that is entered after a blank line does not get converted to the BAT format.

You must upload the CSV data file to the first node of Cisco Unified CallManager server, so BAT can access the CSV data file. See the "Uploading a File" section on page 2-3

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

Additional Topics

See the "Related Topics" section on page 17-5.

Updating Users in Cisco Unified CallManager

To update a group of user records in the to Cisco Unified CallManager directory, use this procedure.

Before You Begin

You must have a CSV data file with updated user information. See the "Using the BAT Spreadsheet to Create a CSV Data File for Updating Users" section on page 17-2 for instructions.

Procedure

Step 1 Choose **Bulk Administrator > Users > Update Users**.

The User Update Configuration window displays.

Step 2 From File Name drop-down list box, choose the CSV data file that you created for this bulk transaction.

Step 3 From the User Template Name drop-down list box, choose the user template that you created for this bulk transaction.

Step 4 In the **Value for fields to be ignored box**, enter the symbol that you used to tell BAT that you want to keep the value that was previously stored in the DC directory. See the "Retaining Stored Values" section on page 17-1 for more information.

Note The value entered in the CSV file for updating users will override the values provided in the user template.

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

Step 6 Click the Run Immediately radio button to update the user records immediately or, click Run Later to insert the user records at a later time.

Step 7 Click **Submit** to create a job for updating the user records.

Step 8 Use the Job Scheduler option in the Bulk Administration main menu to schedule and activate this job.

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 17-5.

Related Topics

- Updating Users, page 17-1
- Retaining Stored Values, page 17-1
- Using the BAT Spreadsheet to Create a CSV Data File for Updating Users, page 17-2

- Updating Users in Cisco Unified CallManager, page 17-5
- Uploading and Downloading Files

CHAPTER 18

Delete Users

You can delete a group of users from the Cisco Unified CallManager directory. You can locate existing user records by using one of these two methods:

- Using Query to Delete Users, page 18-1
- Using a Custom File to Delete Users, page 18-2

Using Query to Delete Users

To delete users when you want to create a query filter to locate the user records, use the following procedure.

Procedure

Use the following procedure to delete users by creating a query to locate the user records.

Step 1 Choose **Bulk Administration > Users > Delete Users > Query**.

The Delete Users Configuration window displays.

Step 2 From the first Find User where drop-down list box, choose one of the following criteria:

- User ID
- First Name
- Middle Name
- Last Name
- Manager
- Department Name

From the second Find User where drop-down list box, choose one of the following criteria:

- begins with
- contains
- is exactly
- ends with
- is empty
- is not empty

Step 3 Specify the appropriate search text, if applicable.

Tip To find all users that are registered in the database, click **Find** without entering any search text.

Step 4 To further define your query and to add multiple filters, check the Search Within Results check box, choose **AND** or **OR** from the drop-down box, and repeat steps 2 and 3.

Step 5 Click **Find**.

A list of discovered templates displays by:

- User ID
- First Name
- Middle Name
- Last Name
- Manager
- Department Name
- LDAP Sync Status

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

Step 7 Click the Run Immediately radio button to delete user records immediately or, click Run Later to delete the user records at a later time.

Step 8 Click **Submit** to create a job for deleting the user records.

Step 9 Use the Job Scheduler option in the Bulk Administration main menu to schedule and activate this job.

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 18-3.

Using a Custom File to Delete Users

To locate and delete users, you can create a custom file of user IDs by using a text editor.

Before You Begin

1. Create a text file that lists each user ID that you want to delete on a separate line.
2. Upload the custom file with the first node of the Cisco Unified CallManager server. See Chapter 2, "Uploading and Downloading Files."

To delete users by using a custom file, use the following procedure.

Procedure

Step 1 Choose **Bulk Administration > Users > Delete Users > Custom File**.

The Find and List Users - Delete Users Based on Custom File window displays.

Step 2 In Delete Users where drop-down list box, choose one of the following criteria:

- User ID
- First Name
- Middle Name
- Last Name
- Department

Step 3 In the Custom file where drop-down list box, choose the filename for the custom file.

Step 4 To check that the query includes the information that you need, click **Find**.

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

Step 6 Click the Run Immediately radio button to delete user records immediately or, click Run Later to delete the user records at a later time.

Step 7 Click **Submit** to create a job for deleting the user records.

Step 8 Use the Job Scheduler option in the Bulk Administration main menu to schedule and/or activate this job.

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 18-3.

Related Topics

- Using Query to Delete Users, page 18-1
- Using a Custom File to Delete Users, page 18-2

Exporting Users

When you use Cisco Unified CallManager Bulk Administration (BAT) to export user records, the export utility sorts users according to the organizational hierarchy in the database. T

From the Exports Users Configuration window, if Default User Format is selected from the File Format drop-down list box. the export utility only exports the default user device profile that is associated with a user. You must insert the other user device profiles for that user separately by using Cisco Unified CallManager Administrator.

Exporting User Records

When you export user records, some users might have a blank PIN because these user records were created prior to Cisco Unified CallManager 3.1. If this is the case, you must specify a default PIN before reinserting the user records in the BAT user interface.

Use this procedure to export User records from Cisco Unified CallManager.

Procedure

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

The Export Users Query window displays.

Step 2 In the first Find User where drop-down list box, choose a field to query from the following options:

- User ID
- First Name
- Middle Name
- Last Name
- Manager
- Department

Step 3 In the second drop-down list box, choose from the following options:

- begins with
- contains
- is exactly
- ends with

- is empty
- is not empty

Step 4 In the search field/list box, enter the value that you want to locate, such as a specific name or User ID.

Note To choose users from more than one department, enter multiple departments in this field. For example, to choose users from departments 12 and 34, enter 12, 34 in the third box instead of performing two operations.

Step 5 You can click the Search Within Results check box and choose **AND** or **OR** to add multiple filters and repeat Step 2 through Step 4 to further define your query.

Step 6 Click **Find**. The search results display.

Note To find all users that are registered in the database, click **Find** without entering any search text.

Step 7 Click **Next**.

Step 8 Enter the export users file name in the File Name text box.

Step 9 Choose file format from the File Format drop-down list box.

Step 10 In the Job Information area, enter the Job description.

Step 11 Click the Run Immediately radio button to export user records immediately or, click Run Later to export at a later time.

Step 12 Click **Submit** to create a job for exporting user records.

Step 13 Use the Job Scheduler option in the Bulk Administration main menu to schedule and/or activate this job.

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.

You can search and download the exported file using the Upload/Download Files option in the Bulk Administration menu. See Chapter 2, "Uploading and Downloading Files.".

Additional Information

See the "Related Topics" section on page 19-2.

Related Topics

- Exporting User Records, page 19-1

CHAPTER 20

Resetting Passwords and PINs

You can reset the password that users use when they log on to the Cisco Unified IP Phone User Options window. You can also reset the PINs for the extension mobility feature that users use when they log in to Cisco Unified IP Phones. Use this action when you must reset a group of users to a default password or to a default PIN without updating any other attributes.

Resetting Passwords and PINs

You have two ways to choose users for resetting passwords and PINs:

- Using Query to Reset User Password and PIN, page 20-1
- Using a Custom File to Reset User Password and PIN, page 20-3

Using Query to Reset User Password and PIN

To use a query to locate users and reset passwords and PINs to a default value, use the following procedure.

Procedure

Step 1 Choose **Bulk Administration > Users > Reset Password/PIN > Query**.

The Reset Password/PIN for Users Query window displays.

Step 2 To locate the users that you want to reset, define the query filter.

Step 3 From the first Find User where drop-down list box, choose one of the following criteria:

- User ID
- First Name
- Middle Name
- Last Name
- Manager
- Department

From the second Find User where drop-down list box, choose one of the following criteria:

- begins with

- contains
- is exactly
- ends with
- is empty
- is not empty

Step 4 Specify the appropriate search text, if applicable, and click **Find**.

Note To choose users from more than one department, enter multiple departments separated with a comma in this field. For example, to choose users from departments 12 and 14, enter **12, 14** in the third box instead of performing two operations.

Tip To find all users that are registered in the database, click **Find** without entering any search text.

Step 5 To further define your query, you can choose **AND** or **OR** to add multiple filters and repeat steps 3 and 4.

Step 6 Click **Find**.

A list of discovered users displays by:

- User ID
- First Name
- Middle Name
- Last Name
- Manager
- Department Name
- LDAP Sync Status

Step 7 Click **Next**.

Step 8 Enter the values that you want to update for all the records that you defined in your query.

- **Password**—Enter the default password that users use when they log on to the Cisco Unified IP Phone User Options window.
- **Confirm Password**—Reenter the password.
- **PIN**—Enter the default PIN for the extension mobility feature that users should use when they log in to a Cisco Unified IP Phone.
- **Confirm PIN**—Reenter the PIN.

Step 9 In the Job Information area, enter the Job description.

Step 10 Click the Run Immediately radio button to change passwords or PINs immediately or, click Run Later to change them at a later time.

Step 11 Click **Submit** to create a job for resetting passwords or PINs.

Step 12 Use the Job Scheduler option in the Bulk Administration main menu to schedule and activate this job.

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 20-4.

Using a Custom File to Reset User Password and PIN

To locate users and to reset passwords and PINs to default values, you can create a custom file of user IDs by using a text editor.

Before You Begin

1. Create a text file that lists each user ID on a separate line for which you want to reset password or PIN.
2. Upload the custom file into Cisco Unified CallManager first node. See "Uploading a File" section on page 2-3.

To reset user passwords and PINS by using a custom file, use the following procedure.

Procedure

Step 1 Choose **Bulk Administration > Users > Reset Password/PIN > Custom File**.

The Find and List Users - Reset Pwd/Pin for users based on custom file window displays.

Step 2 In Reset Pwd/PIN for Users where drop-down list box, choose the field that you used in the custom file from the following options:

- User ID
- First Name
- Middle Name
- Last Name
- Department

Step 3 In the In Custom File drop-down list box, choose the filename for the custom file.

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

Step 5 Click the Run Immediately radio button to change passwords or PINs immediately or, click Run Later to change them at a later time.

Step 6 Click **Submit** to create a job for resetting passwords or PINs.

Step 7 Use the Job Scheduler option in the Bulk Administration main menu to schedule and activate this job.

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. The log file displays the number of users that were updated and the number of records that failed, including an error code.

Additional Topics

See the "Related Topics" section on page 20-4.

Related Topics

- Using Query to Reset User Password and PIN, page 20-1
- Using a Custom File to Reset User Password and PIN, page 20-3

Generating User Reports

Cisco Unified CallManager Bulk Administration (BAT) provides reports to help you manage records effectively. You can create and save reports that provide information about phones, users, user device profiles, managers and assistants, and gateway records. You can save these reports with a filename and store them in a folder on Cisco Unified CallManager first node to review and print.

Additional Information

See the "Related Topics" section on page 21-2.

Generating Reports for Users

Reports for users have a fixed format. You can generate a report for all users by not specifying any query options, or you can specify a limited set of query options.

To generate a report for users, use this procedure.

Procedure

Step 1 Choose **Bulk Administration > Users > Generate User Reports**. The Find and List Users window displays.

Note You can generate a report for all users by not specifying a query, or you can generate a report for specific users by using following steps:

Step 2 In Select Users Where scroll box, choose from these query options: User ID, Department, First Name, Middle Name, Last Name, Manager.

Step 3 In the second drop-down list box, choose from the following search criteria.

- begins with
- contains
- is exactly
- ends with
- is empty
- is not empty

Step 4 In the search field box, enter the value that you want to locate, such as the exact user ID or the last name of a user.

You can add multiple values to the search field box by separating them with a comma as shown in this example: *JohnJ, PaulP, SueS, JoeJ*

Tip To generate a report for all users that are registered in the database, click **Find** without entering any search text.

Step 5 Click **Find**. A list of discovered user records displays.

Step 6 Click **Next** to choose details for your type of report. If you want to change the type of query, click **Back**.

Step 7 In the File Name field, enter your name for this report (required).

Step 8 In the Available Fields drop-down list box, choose an item and click the arrow to move the item into the Selected Fields for this Report list. You can choose one or more fields to include in your report.

Step 9 Arrange the order of the items in the Selected Fields for this report list by choosing an item and clicking the Up arrow or Down arrow to move the item to another position in the list.

Step 10 In the Job Information area, enter the Job description.

Step 11 Click the Run Immediately radio button to generate report immediately or, click Run Later.

Step 12 Click **Submit** to create a job for generating user reports.

Step 13 Use the Job Scheduler option in the Bulk Administration main menu to schedule and/or activate this job.

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.

You can search and download the report file using the Upload/Download Files option in the Bulk Administration menu. See Chapter 2, "Uploading and Downloading Files.".

Additional Information

See the "Related Topics" section on page 21-2.

Viewing Report Log Files

BAT generates log files for each report transaction and stores them on the first node of Cisco Unified CallManager server. You can find the link to log files for this job from the Job configuration window for this job. For more details, see Chapter 51, "Scheduling Jobs."

Additional Information

See the "Related Topics" section on page 21-2.

Related Topics

- Generating Reports for Users, page 21-1
- Viewing Report Log Files, page 21-2

Cisco Systems

PART 5

Phones and Users

CHAPTER 22

Phones with Users

You can use Cisco Unified CallManager Bulk Administration to add a group of users and their phones on a Cisco Unified CallManager server in one bulk transaction. You have two options for creating a CSV data file for the 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).

You can access the Insert Phones with Users option by choosing **Bulk Administration > Phones and Users** from the Cisco Unified CallManager Administration main menu.

Adding New Phones with Users

Use the following steps to insert phones with users.

1. Create a comma separated values (CSV) data file to define individual values for each phone/user record that you want to update.
   - See the "Using the BAT Spreadsheet to Add Phones with Users" section on page 22-1.
   - For a text-based CSV file, see the "Phones With Users Combinations File Format" section on page A-2.
2. Associate file format with the CSV data file.
   - See the "Adding Phones/Users File Format" section on page 23-1.
3. Validate Phones with users records
   - See the "Validating Phones and Users Records" section on page 24-1.
4. Insert Phones with users records.
   - See the "Inserting Phones with Users to Cisco Unified CallManager" section on page 25-1.

Using the BAT Spreadsheet to Add Phones with Users

To create the CSV data file for adding phones and users in bulk, use the following procedure.

For information about installing and using the BAT spreadsheet, see "Using the BAT Spreadsheet for Gathering Data" section on page 1-8.

Procedure

Step 1 Locate and double-click **BAT.xlt** file to open the BAT spreadsheet. For more information on downloading **BAT.xlt** file, see Chapter 2, "Uploading and Downloading Files."

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

Step 3 Click the **Phones-Users** tab at the bottom of the spreadsheet.

Step 4 Follow steps 4 through 14 in the Using the BAT Spreadsheet to Create a CSV Data File for Phones, page 3-30.

For descriptions for the user information fields, see Table 14-1Field Descriptions in BAT Spreadsheet for Adding Users, page 14-2.

Additional Topics

See the "Related Topics" section on page 22-2.

Related Topics

- Adding New Phones with Users, page 22-1
- Phones With Users Combinations File Format, page A-2
- Adding Phones/Users File Format, page 23-1
- Validating Phones and Users Records, page 24-1
- Inserting Phones with Users to Cisco Unified CallManager

Phones and Users File Format

To create a comma separated values (CSV) data file to define individual values for each user that you want to update.

- See the "Using the BAT Spreadsheet to Add Phones with Users" section on page 22-1.
- For a text-based CSV file, see the "Phones With Users Combinations File Format" section on page A-2.

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.

After the CSV data file is completed, 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.

Adding Phones/Users File Format

To add the file format with the text-based CSV data file, use the following procedure.

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

Step 4 Click **Submit** to create a job for associating the matching file format with the CSV data file.

Step 5 Use the Job Scheduler option in the Bulk Administration main menu to schedule and/or activate this job.

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 23-2.

Related Topics

- Using the BAT Spreadsheet to Add Phones with Users, page 22-1
- Phones With Users Combinations File Format, page A-2
- BAT Log Files, page 54-3

Validating Phones and Users

You can use Cisco Unified CallManager Bulk Administration (BAT) to add a group of users and their phones on a Cisco Unified CallManager server in one bulk transaction. You have two options for creating a CSV data file for the 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).

You can access the Insert Phones with Users option by choosing **Bulk Administration > Phones and Users** from the Cisco Unified CallManager Administration main menu.

Before you Begin

1. Create a comma separated values (CSV) data file to define individual values for each phone/user that you want to validate.
   - See the "Validating Phones and Users Records" section on page 24-1.
   - For a text-based CSV file, see the "Phones With Users Combinations File Format" section on page A-2.
2. Associate file format with the CSV data file.
   - See the "Associating the File Format with the CSV Data File" section on page 4-5.

Validating Phones and Users Records

When you choose Validate Phones/Users, the system runs a validation routine to check that the CSV data file and BAT phone template have populated all required fields, such as device pool and locations. The validation checks only the device fields and their dependencies. Users fields are not validated.

Before You Begin

- You must have a BAT phone template for the devices that you are adding. You can use a master phone template with multiple lines to add phones that have a single line or several lines. See the "Master Phone Templates" section on page 1-4 for more information.
- You must have a CSV data file that you created by using one of these options:
   - Validating Phones and Users Records, page 24-1
   - Creating a text-based CSV file in the Phones With Users Combinations File Format, page A-2.

To validate your CSV data file records, use the following procedure.

Procedure

Step 1 Choose **Bulk Administration > Phones and Users > Validate Phones/Users**. The Validate Phones/Users Configuration window displays.

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

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

Step 4 Click **Submit** to create a job for validating users and phones.

Step 5 Use the Job Scheduler option in the Bulk Administration main menu to schedule and/or activate this job.

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 24-2.

Related Topics

- Phones With Users Combinations File Format, page A-2
- Associating the File Format with the CSV Data File, page 4-5
- BAT Log Files, page 54-3
- Scheduling Jobs

CHAPTER 25

Inserting Phones and Users

To add a group of phones and users to the Cisco Unified CallManager database and directory, use the following procedure.

Inserting Phones with Users to Cisco Unified CallManager

Before you Begin

1. Create a comma separated values (CSV) data file to define individual values for each phones with users that you want to insert.
   - See the "Using the BAT Spreadsheet to Add Phones with Users" section on page 22-1.
   - For a text-based CSV file, see the "Phones With Users Combinations File Format" section on page A-2.
2. Associate file format with the CSV data file.
   - See the "Adding Phones/Users File Format" section on page 23-1.
3. Validate Phones with users records
   - See the "Validating Phones and Users Records" section on page 24-1.

Use the following procedure to insert phones with users into Cisco Unified CallManager:

Procedure

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

The Insert Phones/Users window displays.

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.

If you did not enter individual MAC addresses in the CSV data file, you must check the **Create Dummy MAC Address** check box. If you are adding CTI ports, the dummy MAC address option provides a unique device name for each CTI port in the form of dummy MAC addresses.

This field automatically generates dummy MAC addresses in the following format:
BATXXXXXXXXXXX
where X represents any 12-character, hexadecimal (0-9 and A-F) number.

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

- If you supplied MAC addresses or device names in the data input file, do not choose this option.

You can update the phones or devices later with the correct MAC address by manually entering this information into Cisco Unified CallManager Administration or by using Unified CM Auto-Register Phone Tool. See the"Introducing Cisco Unified CM Auto-Register Phone Tool" section on page 52-2 for more information about Unified CM Auto-Register Phone Tool.

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 Click the Run Immediately radio button to insert phones with users immediately or, click Run Later to insert phones with users at a later time.

Step 7 Click **Submit** to create a job for deleting the user records.

Step 8 Use the Job Scheduler option in the Bulk Administration main menu to schedule and activate this job.

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 25-2.

Related Topics

- Using the BAT Spreadsheet to Add Phones with Users, page 22-1
- Phones With Users Combinations File Format, page A-2
- Adding Phones/Users File Format, page 23-1
- Validating Phones and Users Records, page 24-1
- Scheduling Jobs, page 51-1
- Introducing Cisco Unified CM Auto-Register Phone Tool, page 52-2
- BAT Log Files, page 54-3

Cisco Systems

PART 6

Managers and Assistants

CHAPTER 26

Working with Cisco Unified CallManager Assistant

You can use Cisco Unified CallManager Bulk Administration (BAT) to manage the Cisco Unified CallManager Assistant feature in Cisco Unified CallManager. BAT allows you to add IP phones for managers and assistants. See the following sections for information:

- Configuring Phones in Proxy Line Mode for Cisco Unified CM Assistant, page 26-2
- Configuring Phones in Shared Line Mode for Cisco Unified CM Assistant, page 26-7

You can add, update, and delete managers or assistants with their associations in bulk transactions. See the Creating the CSV Data File for Manager-Assistant Associations, page 26-9.

The following topics explain the options for managing Cisco Unified CM Assistant with BAT:

- Inserting Manager-Assistant Associations to Cisco Unified CallManager, page 27-1
- Deleting Manager-Assistant Associations from Cisco Unified CallManager, page 28-1
- Deleting Managers from Cisco Unified CallManager, page 29-1
- Deleting Assistants from Cisco Unified CallManager, page 30-1

For more information related to Cisco Unified CM Assistant, refer to this documentation.

- *Cisco Unified CallManager Features and Services Guide*
- *Cisco Unified CallManager Assistant User Guide*

Overview of Phones and Lines for Use with Cisco Unified CM Assistant

The Cisco Unified CM Assistant feature works with several Cisco Unified IP Phone models and device profiles. Cisco Unified CM Assistant provides two modes for configuring managers and assistants lines for use with Cisco Unified CM Assistant features.

- Proxy mode—The manager's primary line associates with a proxy line that has a different directory number on the assistant's phone. See the "Configuring Phones in Proxy Line Mode for Cisco Unified CM Assistant" section on page 26-2.
- Shared line mode—The manager and assistant have a shared line on their phones that uses the same directory number and partition. See the "Configuring Phones in Shared Line Mode for Cisco Unified CM Assistant" section on page 26-7.

Note You can associate users to devices/phones only if they support Unified CM Assistant.

You can use BAT to set up the manager and assistant phones with either proxy lines or shared lines.

Configuring Phones in Proxy Line Mode for Cisco Unified CM Assistant

To prepare for configuring manager and assistant phones with Unified CM Assistant proxy line support, you must complete the following tasks:

1. Cisco recommends that you use the Cisco Unified CM Assistant Configuration Wizard to set up and configure Unified CM Assistant requirements for your system. The wizard automatically creates the phone templates for Unified CM Assistant manager and assistant, route points, partitions, translation patterns, and calling search space for the Cisco Unified CM Assistant service. To run the Cisco Unified CM Assistant Configuration Wizard ensure BAT and the wizard are on the same server. Refer to the Cisco Unified CallManager *Features and Services Guide* for information about running the Cisco Unified CM Assistant Configuration Wizard.

   Note You can use the Cisco Unified CM Assistant Configuration Wizard only one time to set up the Unified CM Assistant configuration requirements for your system. After running the configuration wizard, you can only view, but not change, your configuration with the wizard.

2. To add new phones and users for managers and assistants, use the Unified CM Assistant manager and Unified CM Assistant assistant phone templates that the Cisco Unified CM Assistant Configuration Wizard produced on the BAT server. Use the BAT templates to configure phones for proxy mode only. For information about the templates, see the "Default Settings for Unified CM Assistant Manager and Assistant Phone Templates" section on page 26-2.
3. For existing manager and assistant phones, you can change the manager and assistant phones to correspond to the Unified CM Assistant phone templates by using either of these methods:
   - You can use the Add Lines feature in BAT to modify existing phones to resemble the Unified CM Assistant phone templates. See the "Adding Lines to Existing Phones and UDPs" section on page 10-7.
   - You can delete the original phones and add new phones by using the Unified CM Assistant phone templates for managers and assistants. Follow the procedures for setting up new phones in the "Adding Phones" section on page 3-1.
4. After you configure the phones and lines for managers and assistants, you associate the manager and assistant lines for Unified CM Assistant control. For information about Unified CM Assistant line configurations, see the "Manager and Assistant Proxy Line Configurations" section on page 26-3.

Default Settings for Unified CM Assistant Manager and Assistant Phone Templates

Table 26-1 lists the default settings for the Unified CM Assistant manager phone template.

Table 26-1 Default Settings for Manager Phone Templates for Proxy Lines

Field	Default Value
Softkey Template	Softkey Template Standard Manager
Phone Button Template	Standard Cisco Unified IP Phone model 7960 (2 lines)
Line1	Primary line • CSS = Generated_CSS_I_E • Partition = Generated_Managers
Line 2	Incoming Intercom line • CSS = Generated_CSS_I_E • Partition = Generated_Everyone • Also configure auto answer with headset option.
Services	Assistant Primary Service

Table 26-2 lists the default settings for the Unified CM Assistant assistant phone template.

Table 26-2 Default Settings for Assistant Phone Template for Proxy Lines

Field	Default Value
Softkey Template	Softkey Assistant
Phone Button Template	Standard Cisco Unified IP Phone 7960 Assistant
Expansion Module 1	14-button expansion module
One line on base phone and five lines on expansion module	For Proxy lines, one line on base phone and five lines on expansion module have the following default configuration: • CSS = Generated_CSS_M_E • Partition = Generated_Everyone
Line 7 (On Expansion Module)	Intercom line • CSS = Generated_CSS_I_E • Partition = Generated_Everyone • Also configure auto answer with headset option.

Manager and Assistant Proxy Line Configurations

BAT assigns Unified CM Assistant line configurations by mapping the manager's primary lines on the phone to proxy lines on the assistant phone. When you use the Unified CM Assistant manager and assistant default templates that the Unified CM Assistant wizard created, you can associate from one to five manager lines on one assistant phone. For phones configured with the Unified CM Assistant templates, this example shows the line configurations when you associate two manager phones to an assistant phone.

Manager 1 Phone:

- Line 1— Primary line
- Line 2— Intercom line

Manager 2 Phone:

- Line 1— Primary line
- Line 2— Intercom line

Assistant Phone:

- Line 1—Primary line
- Line 2—Proxy line for Manager 1
- Line 3—Proxy line for Manager 2
- Lines 4 through 6 are unassigned
- Line 7—Intercom line

Lines 4 through 6 remain available for other manager associations.

When you associate multiple managers to an assistant phone, BAT creates proxy lines based on the order in the CSV data file. BAT creates the first manager-assistant line by assigning all the manager's primary lines as proxy lines to the unassigned lines on the assistant phone. BAT continues creating individual manager-assistant proxy lines based on the order of the CSV record until all lines on the assistant phone are assigned or all managers in the CSV record are associated.

When you associate multiple assistants to a manager primary line, BAT assigns assistants to the manager based on the order in the CSV data file. BAT assigns the manager's primary lines based on the first assistant's number of available lines. For example, a manager's phone has two primary lines. The first assistant, who is listed in the CSV data file, has only one available line. Consequently, BAT associates only one primary line for the manager and one proxy line on all the assistant phones that are listed in the CSV record.

Unified CM Assistant Manager Phone Configuration

Table 26-3 lists all possible line configurations for a manager phone that BAT can set up when using manager-assistant associations.

Table 26-3 Manager Phone Line Configuration

Number of Available Lines	Configuration
One line	Line 1—Primary line (Unified CM Assistant controlled) Intercom line (none)
Two lines (Default Unified CM Assistant manager phone template)	Line 1—Primary line (Unified Unified CM Assistant controlled) Line 2—Intercom line (optional)
More than two lines	Last line gets configured as the intercom line. The number of available lines on the assistant phone determines the number of manager lines that get associated with proxy lines.

Unified CM Assistant Assistant Phone Configuration

Table 26-4 lists the default line configuration for the assistant phones that BAT sets up during manager-assistant associations.

Table 26-4 Assistant Phone Line Configurations

Number of Available Lines	Configuration
One line	Line 1—Proxy line Intercom line (none)
Two lines	Line 1—Primary line Line 2—Proxy line Intercom line (none)
Three lines	Line 1—Primary line Line 2—Proxy line Line 3—Intercom line
More than three lines	Line 1—Primary line Line 2—Proxy line Last line gets configured as the intercom line All other lines get configured as proxy lines
Seven lines (Default Unified CM Assistant assistant phone template)	Line 1—Primary line Line 2 through line 6 can get configured as proxy lines to support up to five managers. Line 7—Intercom line

Proxy Line Example for Cisco Unified CM Assistant Manager and Assistant Phones

You associate two managers, each with three existing lines, to an assistant phone with six unassigned lines. BAT sets the following line configurations on the manager and assistant phones.

Manager 1 Phone:

- Line 1—Manager primary line (DN is 2355)
- Line 2—Manager primary line (DN is 2366)
- Line 3—Manager intercom line

Manager 2 Phone:

- Line 1—Manager primary line (DN is 2656)
- Line 2—Manager primary line (DN is 2666)
- Line 3—Manager intercom line

Assistant Phone:

- Line 1—Assistant primary line (DN is 3333)
- Line 2—Proxy line 1 for Manager 1 (DN is 3455)
- Line 3—Proxy line 1 for Manager 2 (DN is 3656))
- Line 4—Proxy line 2 for Manager 1 (DN is 3366)
- Line 5—Proxy line 2 for Manager 2 (DN is 3666)

- Line 6—Available
- Line 7—Assistant intercom line

When you associate a manager phone that has preexisting primary lines, you must ensure that the number of unassigned lines on the assistant phone equals or is greater than the number of primary lines on the manager phone. For instance, BAT does not allow you to create an association between a manager that has a phone with four configured primary lines and an assistant with only three available lines.

Setting Up New Phones for Unified CM Assistant Managers and Assistants with Proxy Lines

To set up new phones for Unified CM Assistant managers and assistants that use proxy lines, use the following procedure.

Before You Begin

1. Run the Unified CM Assistant Configuration Wizard to create the Unified CM Assistant templates, partition, and calling search space.
2. If you want to associate more than five managers to an assistant, you must access the Unified CM Assistant Assistant Template and make a copy with a new name. Add more lines to the template to accommodate the additional managers.

Step 1 Choose **BAT Administrator> Phones > Phones Template**. The Phone Template Configuration window displays.

Note Because BAT Unified CM Assistant templates are write protected, you want to make changes to these templates, you must make a copy of the template and then edit the template with your changes.

See the "Default Settings for Manager Phone Templates for Proxy Lines" section on page 26-3 for descriptions of the manager phone template fields.

See the "Default Settings for Assistant Phone Template for Proxy Lines" section on page 26-3 for descriptions of the assistant phone template fields.

Step 2 Create the CSV data file for manager phones and another file for assistant phones by using these options:

- Use the BAT spreadsheet and choose the **Phones** tab.
- Use a text editor and refer to the manager or assistant template fields as a guide.

Step 3 Use the procedure in the "Adding Phones" section on page 3-1 for detailed steps to insert new phones.

Setting Up Unified CM Assistant Proxy Lines on Existing Phones

To set up lines on existing phones for managers and assistants, use the following procedure.

Step 1 Choose **BAT Administration > Phones > Add Lines.** The Phone Add Lines window displays.

Step 2 If you need to copy and modify the Unified CM Assistant templates for BAT, see these topics for reference:

- Table 26-1Default Settings for Manager Phone Templates for Proxy Lines, page 26-3
- Table 26-2Default Settings for Assistant Phone Template for Proxy Lines, page 26-3

Note If you changed any configuration information (for example, partition names) when you ran the Cisco Unified CM Assistant Configuration Wizard, you must use the same configuration information for the fields when you edit the template.

Step 3 Create the CSV data file for manager phones and another file for assistant phones by using one of these options:

- Use the BAT spreadsheet and choose the **Add Lines** tab.
- Use a text editor and use the manager or assistant template fields as a guide.

Step 4 To set up manager and assistant lines on existing phones, use the procedure in Adding Lines to Existing Phones and UDPs, page 10-7.

Additional Topics

See the "Related Topics" section on page 26-12.

Configuring Phones in Shared Line Mode for Cisco Unified CM Assistant

To configure manager and assistant phones with shared line support, you must perform the following tasks:

1. You must set up the Unified CM Assistant service parameters for shared line support in Cisco Unified CallManager. Refer to the *Cisco Unified CallManager Features and Services Guide* for information.
2. You need a phone button template with five or more lines for the Cisco Unified IP Phone model 7960.
3. Configure the phones for managers and assistants by using the following guidelines:

Manager Phones in Shared Line Mode

Use the procedures for setting up new phones by using BAT in the "Adding Phones" section on page 3-1.

Create a BAT template to add new or update existing manager phones with the following phone settings:

- Assign the Softkey template: Standard Shared Mode Manager.
- Add primary lines to share with assistants, if needed.
- Set up the voice-messaging profile on the primary line.
- Add an incoming intercom line (optional).
- Add speed-dial buttons for outgoing intercom targets (optional).
- Set the user locale.

Assistant Phones in Shared Line Mode

Use the procedures for setting up new phones by using BAT in the "Adding Phones" section on page 3-1.

Create a BAT template to add new or update existing assistant phones with the following phone settings:

- Assign the Softkey template: Standard Assistant

- If you are using a Cisco 14-button expansion module (7914) for additional lines, specify the expansion module type in the BAT template.

Note Cisco Unified IP Phone model 7960 phone button templates include expansion module lines.

- Add a personal primary line.
- Add shared lines for each associated manager. Use the same directory number and partition as the primary line on the manager phone.
- Add an incoming intercom line (optional)
- Add speed dials to the managers intercom lines (optional)
- Set the user locale

1. To add lines to existing manager or assistant phones, see the "Adding Lines to Existing Phones and UDPs" section on page 10-7. Use the line settings as specified in these sections:
   - Manager Phones in Shared Line Mode, page 26-7
   - Assistant Phones in Shared Line Mode, page 26-7
2. After you configure the phones and lines for managers and assistants, you associate the manager and assistant lines for Unified CM Assistant control. Follow the procedures in the "Creating the CSV Data File for Manager-Assistant Associations" section on page 26-9.

Manager and Assistant Shared Line Configurations

BAT associates Cisco Unified CM Assistant line configurations to shared lines that are assigned to the manager and the assistant phones.You set the shared line mode in the manager's configuration when associating managers with assistants.

In shared line mode, the manager's line corresponds to a shared line on the assistant phone. For example, in order to associate two managers with an assistant, you add two lines to the assistant phone that have the same directory numbers and partitions as the primary lines on the manager phones.

Manager 1 Phone:

- Line 1— Primary line (DN is 2355)
- Line 2— Intercom line (optional)

Manager 2 Phone:

- Line 1— Primary line (DN is 2875)
- Line 2— Intercom line (optional)

Assistant's Phone:

- Line 1—Assistant's primary line (DN is 3356)
- Line 2—Shared line with Manager 1 (DN is 2355)
- Line 3—Shared line with Manager 2 (DN is 2875)
- Lines 4 through 6 are available
- Line 7—Intercom line (optional)

You can add lines 4 through 6 as shared lines for other managers.

When you add multiple manager lines to an assistant phone, all lines on the assistant phone must use shared line mode. You cannot mix proxy and shared lines on the assistant phone. Likewise, when a manager has multiple assistants, all associations must use shared line mode.

When you associate multiple assistants to a manager who has shared line mode, BAT assigns Unified CM Assistant associations only to those assistants that are also using shared line mode.

Additional Topics

See the "Related Topics" section on page 26-12.

Creating the CSV Data File for Manager-Assistant Associations

When you use BAT to insert manager-assistant associations to the Cisco Unified CallManager database, you can add new associations or update existing associations.

You have two options for creating a CSV data file for manager-assistant associations:

- Using the BAT Spreadsheet to Add or Update Manager-Assistants Associations, page 26-9
- Using a text editor to create a text file in CSV format by using the "Managers and Assistants File Formats" section on page A-12.

When you create an association for a new manager, you need to enter a device name. When you update a manager with an existing Unified CM Assistant record, consider these fields optional. See the "Manager and Assistant Proxy Line Configurations" section on page 26-3 for information about how BAT assigns line configurations on manager and assistant phones. BAT does not allow you to assign the intercom line of a manager to a proxy line for an assistant if the number of manager lines is greater than or equal to three.

Using the BAT Spreadsheet to Add or Update Manager-Assistants Associations

The BAT spreadsheet includes data file templates with macros to make it easy to add, update, or delete manager-assistant associations. For information about installing and using the BAT spreadsheet, see the "Using the BAT Spreadsheet for Gathering Data" section on page 1-8.

To use the BAT spreadsheet for adding new Unified CM Assistant associations, use the following procedure. You can use two ways to set up the manager-assistant configurations:

- To create manager-assistant associations with the default line configuration, see the "Creating Default Manager-Assistant CSV Data Files" section on page 26-9.

  For the default line configurations for the manager and assistant phones, see Table 26-3 and Table 26-4.
- If you want to assign proxy lines that do not follow the default line configuration, see the "Creating Custom Manager-Assistant CSV Data Files" section on page 26-11.

Creating Default Manager-Assistant CSV Data Files

To create the CSV data file for inserting or updating manager-assistant association for both proxy and shared mode by using the default configuration, use the following procedure.

Procedure

Step 1 Download and open the **BAT.xlt** file to open the BAT spreadsheet. See the"Downloading a File" section on page 2-2.

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

Step 3 To display the manager-assistant association options, click the **Default Managers-Assistants** tab at the bottom of the spreadsheet.

Step 4 Scroll to the right side of the template until you see the radio buttons and choose the type of associations for this transaction:

- **One manager, multiple assistants**
- **One assistant, multiple managers**

Step 5 Complete all mandatory fields and any relevant, optional fields.

If you choose the **One manager, multiple assistants** radio button, enter the following information in each row:

- **Manager ID**—Enter the user ID, up to 30 characters, of the manager.
- **Assistant ID#**—Enter the user IDs, up to 30 characters, for the assistants to whom the manager will be associated.

  The # symbol represents the number of assistants that are assigned to a manager.

Note To add more assistants, click **Add more Assistants**.

If you choose the **One assistant, multiple managers** radio button, enter the following information in each row:

- **Assistant ID**—Enter the user ID, up to 30 characters, of the assistant.
- **Manager ID#**—Enter the user IDs, up to 30 characters, for the managers to whom the assistant will be associated.

  The # symbol represents the number of managers assigned to an assistant.

Note To add more managers, click **Add more Managers**.

Step 6 Choose the operation that you want to perform:

- To create new manager-assistant associations, click **Insert**.
- To delete a manager or an assistant from a manager-assistant association, click **Delete**.

Step 7 To transfer the data from the BAT spreadsheet into a CSV data file, click **Export to BAT Format**.

The system saves the file to C:\XLSDataFiles or to your choice of another existing folder. The filename is

<type of operation>ManagerAssistants-timestamp.txt

where <type of operation> specifies the type of operation that was chosen in Step 6, and "timestamp" represents the precise date and time that the file was created.

Upload the CSV data file to the first node of Cisco Unified CallManager, so BAT can access the CSV data file. See the "Uploading a File" section on page 2-3.

For information on how to read the exported CSV file, in the BAT Insert Managers/Assistants window, click the link to **View Sample File**.

Additional Topics

See the "Related Topics" section on page 26-12.

Creating Custom Manager-Assistant CSV Data Files

When you have existing phones that you want to set up with manager-assistant associations, you can use the Custom Managers-Assistants tab in the BAT spreadsheet. To create the CSV data file for inserting or updating manager-assistant associations for proxy lines on the assistant phones, use the following procedures.

Procedure

Step 1 Download the **BAT.xlt** file from Cisco Unified CallManager server. See the "Downloading a File" section on page 2-2.

Step 2 Open the **BAT.xlt** file. When prompted, click **Enable Macros** to use the spreadsheet capabilities.

Step 3 To display the manager-assistant association options, click the **Custom Managers-Assistants** tab at the bottom of the spreadsheet.

Step 4 Scroll to the right side of the template until you see **Number of Proxy Lines** box**.** In that box, enter the number of proxy lines that you are assigning to an assistant. The spreadsheet adds Proxy Line DN and Manager Line DN Columns based on the number that you enter.

Complete all mandatory fields and any relevant, optional fields.

- **Manager ID**—Enter the user ID of the manager.
- **Device Name**—Enter the device name that are assigned to the manager's phone.
- **Intercom DN**—Enter the directory number for the manager's intercom line. (Optional)
- **Assistant ID**—Enter the user IDs for the assistants to whom the manager will be associated.
- **Device Name**—Enter the device name that are assigned to the assistant's phone.
- **Intercom DN**—Enter the directory number for the assistant's intercom line. (Optional)
- **Proxy Line DN#**—Enter the directory number for the assistant's proxy line.
- **Manager Line DN#**—Enter the directory number for the manager's primary line.

  The # symbol represents the number of proxy lines that are associated to a manager.

Step 5 To transfer the data from the BAT spreadsheet into a CSV data file, click **Export to BAT Format** button.

The system saves the file to C:\XLSDataFiles or to your choice of another existing folder. The filename is Custom Managers-Assistants-timestamp.txt.

Upload the CSV data file to the first node of Cisco Unified CallManager, so BAT can access the CSV data file. See the "Uploading a File" section on page 2-3.

For information on how to read the exported CSV file, in the BAT Insert Managers/Assistants window, click the link to **View Sample File**.

Additional Topics

See the "Related Topics" section on page 26-12.

Related Topics

- Overview of Phones and Lines for Use with Cisco Unified CM Assistant, page 26-1
- Creating the CSV Data File for Manager-Assistant Associations, page 26-9
- Inserting Manager-Assistant Associations to Cisco Unified CallManager, page 27-1
- Configuring Phones in Proxy Line Mode for Cisco Unified CM Assistant, page 26-2
- Configuring Phones in Shared Line Mode for Cisco Unified CM Assistant, page 26-7
- Deleting Manager-Assistant Associations from Cisco Unified CallManager, page 28-1
- Deleting Managers from Cisco Unified CallManager, page 29-1
- Deleting Assistants from Cisco Unified CallManager, page 30-1

For more information related to Cisco Unified CM Assistant, refer to this documentation.

- *Cisco Unified CallManager Features and Services Guide*
- *Cisco Unified CallManager Assistant User Guide*

CHAPTER 27

Inserting Managers/Assistants

You can use Cisco Unified CallManager Bulk Administration (BAT) to manage the Cisco Unified CallManager Assistant feature in Cisco Unified CallManager. BAT allows you to add IP phones for managers and assistants.

The Cisco Unified CM Assistant feature works with several Cisco Unified IP Phone models and device profiles. Cisco Unified CM Assistant provides two modes for configuring managers and assistants lines for use with Cisco Unified CM Assistant features.

- Proxy mode—The manager's primary line associates with a proxy line that has a different directory number on the assistant's phone. See the "Configuring Phones in Proxy Line Mode for Cisco Unified CM Assistant" section on page 26-2.
- Shared line mode—The manager and assistant have a shared line on their phones that uses the same directory number and partition. See the "Configuring Phones in Shared Line Mode for Cisco Unified CM Assistant" section on page 26-7.

You can use BAT to set up the manager and assistant phones with either proxy lines or shared lines.

Inserting Manager-Assistant Associations to Cisco Unified CallManager

To insert new manager-assistant associations or update existing associations, you need a CSV data file. See the "Creating the CSV Data File for Manager-Assistant Associations" section on page 26-9 for information.

When BAT updates manager assistant associations, it does not change existing Cisco Unified CM Assistant line configurations for the intercom directory number or associated devices.

Caution The Manager-Assistant association fails when the assistant phone does not have enough lines to support the minimum Cisco Unified CM Assistant configuration.

Before you Begin

Make sure that you have configured manager and assistant phones by using one of the following two procedures:

- Configuring Phones in Proxy Line Mode for Cisco Unified CM Assistant, page 26-2
- Configuring Phones in Shared Line Mode for Cisco Unified CM Assistant, page 26-7

To add or update new manager-assistant associations to Cisco Unified CallManager database, use the following procedure.

Procedure

Step 1 Choose **Bulk Administration > Managers/Assistants > Insert Managers/Assistants**. The Manager/Assistant Options window displays.

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

Step 3 If the managers use extension mobility to log in, check the **Configure managers as mobile managers** check box.

Step 4 When all the phones have shared lines, check the **Uses shared lines** check box.

Step 5 In Insert Options area, choose the type of CSV data file that you created:

- **Default**—If you created a standard CSV data file, choose the type of associations for this transaction based on the data in the CSV file.
  - **Associate one or more assistants to a manager**
  - **Associate one or more managers to an assistant**
- **Custom—**If you created a custom CSV data file for proxy mode.

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

Step 7 To insert the managers/assistants immediately, click the **Run Immediately** radio button or, to insert the managers/assistants at a later time, click Run Later.

Step 8 To create a job for inserting the managers/assistants records, click **Submit**.

Step 9 Use the Job Scheduler option in the Bulk Administration main menu to schedule and/or activate this job.

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

Note For information on log files, see "BAT Log Files" section on page 54-3.When BAT performs an update to an assistant or manager configuration and the changes are only partially completed—because there were not enough available lines—the whole transaction record fails.

Step 10 For changes to take effect, you must restart Cisco Unified CM Assistant service.

Additional Topics

See the "Related Topics" section on page 27-2.

Related Topics

- Configuring Phones in Proxy Line Mode for Cisco Unified CM Assistant, page 26-2
- Configuring Phones in Shared Line Mode for Cisco Unified CM Assistant, page 26-7
- Creating the CSV Data File for Manager-Assistant Associations
- Scheduling Jobs, page 51-1
- BAT Log Files, page 54-3

CHAPTER 28

Deleting Managers/Assistants

You can use Cisco Unified CallManager Bulk Administration (BAT) to delete a specific manager-assistant association from the Cisco Unified CallManager database. For example, the assistant with the user ID, *jmorgan,* is assigned to two managers with user IDs, *rcraig* and *dbaker*. If you want to change the manager-assistant association, so the assistant, *jmorgan* is only assigned to *rcraig*, you can delete the *jmorgan-dbaker* association by creating a CSV data file with the following entry:

Example

```
jmorgan,dbaker
```

Deleting Manager-Assistant Associations from Cisco Unified CallManager

If you want to delete a manager or an assistant from all manager-assistant associations, see the following sections:

- Deleting Managers from Cisco Unified CallManager, page 29-1
- Deleting Assistants from Cisco Unified CallManager, page 30-1

To delete specific manager-assistant associations from Cisco Unified CallManager, use this procedure.

Before You Begin

You must have a CSV data file that contains the user IDs for the specific managers and assistants associations that you want to delete. See Chapter 26, "Working with Cisco Unified CallManager Assistant".

Procedure

Step 1 Choose **Bulk Administration > Managers/Assistants > Delete Managers/Assistants**. The Delete Managers/Assistants Configuration window displays.

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

Step 3 Choose the type of deletion:

- **Delete associated assistants for one manager**
- **Delete associated managers for one assistant**

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

Step 5 To delete the managers/assistants immediately, click the **Run Immediately** radio button or, to delete the managers/assistants at a later time, click Run Late.

Step 6 Click **Submit** to create a job for deleting the required managers/assistants associations.

Step 7 To schedule and/or activate this job, use the Job Scheduler option in the Bulk Administration main menu.

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 28-2.

Related Topics

- Deleting Managers from Cisco Unified CallManager, page 29-1
- Deleting Assistants from Cisco Unified CallManager, page 30-1

Deleting Managers

When you delete Unified CM Assistant managers, Cisco Unified CallManager maintains information on the manager as a user in the directory. For example, if a manager with the user ID, *rmartinez*, has two assistants with user IDs, *dbell* and *jkent,* you can disassociate *rmartinez* from both assistants by deleting *rmartinez* as a manager in the Cisco Unified CallManager database. The directory still shows *rmartinez* as a user.

Deleting Managers from Cisco Unified CallManager

You can delete managers with all their manager-assistant associations from the Cisco Unified CallManager database and LDAP Directory. To access the Delete Managers option, choose **Bulk Administration > Managers/Assistants > Delete Managers**.

You have two ways for locating existing records to delete:

- Using Query to Delete Manager Associations, page 29-1
- Using a Custom File to Delete Manager Associations, page 29-2.

Using Query to Delete Manager Associations

To delete managers from their associations with assistants from Cisco Unified CallManager directory, use this procedure.

Procedure

Step 1 Choose **BAT Administration > Managers/Assistants > Delete Managers > Query**. The Delete Managers Configuration window displays.

Step 2 From the first Find Managers where drop-down list box, choose one of the following criteria:

- User ID
- First Name
- Middle Name
- Last Name
- Department

From the second Find Managers where drop-down list box, choose one of the following criteria:

- begins with
- contains
- is exactly
- ends with
- is empty
- is not empty

Step 3 Specify the appropriate search text, if applicable.

Tip To find all managers that are registered in the database, click **Find** without entering any search text.

Note To choose managers from more than one department, enter multiple departments in this field. For example, to choose managers from departments 12 and 24, enter **12, 24** in the third box instead of performing two operations.

Step 4 To further define your query and to add multiple filters, check the Search Within Results check box, choose **AND** or **OR** from the drop-down box, and repeat steps 2 and 3.

Step 5 Click **Find**.

A list of discovered managers displays by:

- User ID
- First Name
- Middle Name
- Last Name
- Department

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

Step 7 To delete the managers immediately, click the Run Immediately radio button or, click Run Later to delete the managers at a later time.

Step 8 To create a job for deleting chosen managers, click **Submit**.

Step 9 To schedule and/or activate this job, use the Job Scheduler option in the Bulk Administration main menu.

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 29-3.

Using a Custom File to Delete Manager Associations

You can create a custom file by using a text editor to locate manager associations that you want to delete.

Before You Begin

1. Create a text file that lists user IDs for managers that you want to delete
2. Put each user ID on a separate line.
3. Upload the custom file to the first node of Cisco Unified CallManager server. See the "Uploading a File" section on page 2-3

To delete managers associations by using a custom file, use the following procedure.

Procedure

Step 1 Choose **BAT Administration > Managers/Assistants > Delete Managers > Custom File**. The Delete Managers Configuration window displays.

Step 2 In Select managers where field, keep the identifier, **User ID**.

Step 3 In the second field, in Custom File drop-down list box, choose the name of the custom file that you created for this transaction.

Step 4 Click **Find**.

The list of discovered managers displays.

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

Step 6 To delete the managers immediately, click the **Run Immediately** radio button, or click **Run Later** to delete the managers at a later time.

Step 7 To create a job for deleting chosen managers, click **Submit**.

Step 8 To schedule and/or activate this job, use the Job Configuration window.

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.

Related Topics

- Deleting Manager-Assistant Associations from Cisco Unified CallManager, page 28-1
- Deleting Assistants from Cisco Unified CallManager, page 30-1
- BAT Log Files, page 54-3
- Uploading a File, page 2-3
- Scheduling Jobs, page 51-1

CHAPTER 30

Deleting Assistants

When you delete Unified CM Assistant assistants, Cisco Unified CallManager maintains information on the assistant as a user in the directory. For example, Assistant *thudson* is assigned to two managers, *hart and dstewart*. You can disassociate *thudson* from both managers by deleting *thudson* as an assistant in the Cisco Unified CallManager database. The directory still shows *thudson* as a user.

Deleting Assistants from Cisco Unified CallManager

You have two ways for locating existing records to delete:

- Using Query to Delete Assistants Associations, page 30-1
- Using a Custom File to Delete Assistant Associations, page 30-2.

Using Query to Delete Assistants Associations

To delete assistants from their associations with managers from Cisco Unified CallManager directory, use this procedure.

Procedure

Step 1 Choose **BAT Administration > Managers/Assistants > Delete Assistants > Query**. The Delete Assistants Configuration window displays.

Step 2 From the first Find Assistants where drop-down list box, choose one of the following criteria:

- User ID
- First Name
- Middle Name
- Last Name
- Department

From the second Find Assistants where drop-down list box, choose one of the following criteria:

- begins with
- contains
- is exactly

- ends with
- is empty
- is not empty

Step 3 Specify the appropriate search text, if applicable.

Tip To find all assistants that are registered in the database, click **Find** without entering any search text.

Note To choose assistants from more than one department, enter multiple departments in this field. For example, to choose managers from departments 12 and 24, enter **12, 24** in the third box instead of performing two operations.

Step 4 To further define your query and to add multiple filters, check the Search Within Results check box, choose **AND** or **OR** from the drop-down box, and repeat steps 2 and 3.

Step 5 Click **Find**.

A list of discovered assistants displays by:

- User ID
- First Name
- Middle Name
- Last Name
- Department

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

Step 7 Click the Run Immediately radio button to delete assistants immediately or, click Run Later to delete assistants at a later time.

Step 8 Click **Submit** to create a job for deleting assistants.

Step 9 Use the Job Scheduler option in the Bulk Administration main menu to schedule and/or activate this job.

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 30-3.

Using a Custom File to Delete Assistant Associations

You can create a custom file by using a text editor to locate assistant associations that you want to delete.

Before You Begin

1. Create a text file that lists user ID for assistants that you want to delete, putting each on a separate line.

2. Upload the custom file to the first node of Cisco Unified CallManager server. See the "Uploading a File" section on page 2-3.

To delete assistants associations by using a custom file, use the following procedure.

Procedure

Step 1 Choose **BAT Administration > Managers/Assistants > Delete Assistants > Custom File**. The Delete Assistants Configuration window displays.

Step 2 In Select Assistants where field, keep the identifier, **User ID**.

Step 3 In the second field, in Custom File drop-down list box, choose the name of the custom file that you created for this transaction.

Step 4 Click **Find**.

The list of discovered assistants displays.

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

Step 6 Click the Run Immediately radio button to delete assistants immediately or, click Run Later to delete assistants at a later time.

Step 7 Click **Submit** to create a job for deleting assistants.

Step 8 Use the Job Scheduler option in the Bulk Administration main menu to schedule and/or activate this job.

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 30-3.

Related Topics

- Deleting Assistants from Cisco Unified CallManager, page 30-1
- Deleting Assistants from Cisco Unified CallManager, page 30-1

CHAPTER 31

Generating Reports for Managers/Assistants

Reports for Cisco Unified CM Assistant managers and assistants have a fixed format. You can generate a report by specifying a set of query options for either managers or assistants.

Generating Reports for Unified CM Assistant Managers and Assistants

To generate reports for managers or assistants, use this procedure.

Procedure

Step 1 Choose one of these options:

- **Bulk Administration > Managers/Assistants > Generate Unified CM Assistant Manager Reports**. The Manager Reports window displays.
- **Bulk Administration > Managers/Assistants > Generate Unified CM Assistant Assistant Reports**. The Assistant Reports window displays.

Step 2 You can generate a report for all managers or assistants by not specifying a query, or you can generate a report for specific managers or assistants by using following steps:

a. In Find Managers (or Assistants) where drop-down list box, choose from these query options:

- User ID
- First Name
- Middle Name
- Last Name
- Department

b. In the second drop-down list box, choose from the following options:

- begins with
- contains
- is exactly
- ends with
- is empty

– is not empty

c. In the search field box, enter the value that you want to locate, such as the exact user ID or the last name of a user.

You can add multiple values to the search field box by separating them with a comma as shown in this example: *JohnJ, PaulP, SueS, JoeJ*

d. Click **Find**.

Note To further define your query, you can choose **AND** or **OR** to add multiple filters and repeat steps a through d.

Step 3 Click **Next** to choose details for your type of report. If you want to change the type of query, click **Back**.

Step 4 In the File Name field, enter your name for this report (required).

Step 5 In the File Format field select a file format from the drop-down list box.

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

Step 7 Click the **Run Immediately** radio button to generate manager/assistant report immediately or, click **Run Later** to generate the report at a later time.

Step 8 Click **Submit** to create a job for generating the report.

Step 9 Use the Job Scheduler option in the Bulk Administration main menu to schedule and/or activate this job.

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.

Cisco Unified CallManager Bulk Administration (BAT) saves the report file on the first node of the Cisco Unified CallManager server.

Additional Information

See the "Related Topics" section on page 31-2.

Viewing Report Log Files

BAT generates log files for each report transaction and stores them on the first node of the database server, search for the job by using the Job Scheduler option in the Bulk Administration menu. In the Job Configuration window, click the link in the Log File Name column corresponding to the job for which you want to view the log file for. 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 Information

See the "Related Topics" section on page 31-2.

Related Topics

- Generating Reports for Unified CM Assistant Managers and Assistants, page 31-1

- Viewing Report Log Files, page 31-2
- BAT Log Files, page 54-3
- Scheduling Jobs, page 51-1

Cisco Systems

PART 7

User Device Profiles

CHAPTER 32

User Device Profiles

The User Device Profiles (UDP) option in Cisco Unified CallManager Bulk Administration (BAT) allows you to add or delete large numbers of user device profiles. In addition, you can add or update lines for user device profiles. The system uses UDPs in conjunction with the extension mobility feature.

The following topics explain the options for managing user device profiles in more detail:

Adding User Device Profiles

When you use BAT to add user device profiles to the Cisco Unified CallManager database, you can add multiple lines and other features.

Choose from two options for creating a CSV data file for user device profiles:

- 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).

To add user device profiles to the Cisco Unified CallManager database in bulk, use this procedure.

Procedure

Step 1 Choose **Bulk Administration > User Device Profiles > User Device Profile Template.**

The Find and List UDP Templates window displays. See the "Creating a Cisco Unified CallManager Bulk Administration (BAT) Template for User Device Profiles" section on page 33-2 for information about configuring UDP templates.

Step 2 Create the CSV data file by following the steps for one of these options.

a. **BAT Spreadsheet option**

Open the BAT spreadsheet and create the CSV data file. See the "Using the BAT Spreadsheet to Create User Device Profile CSV Data Files" section on page 32-2.

b. **Text Editor option**

- Choose **Create UDP File Format**.

  The UDP File Format Query window displays. See the "Configuring User Device Profile File Formats" section on page 34-1 for information about configuring file formats for CSV data file.

- Use a text editor and create the CSV data file for user device profiles that follows the file format that you want to use. For more information about creating a text-based CSV file, see Appendix A, "Creating a Text-Based CSV File for User Device Profile."

- Choose **Add File Format**.

  The Add File Format Configuration window displays. See the "Adding a File Format" section on page 35-1 for information about file formats.

Step 3 Choose **Validate User Device Profiles**.

The User Device Profiles Validation window displays. See the "Validating User Device Profiles" section on page 36-1 for information about validating user device profile records.

Step 4 Choose **Insert User Device Profiles**.

The User Device Profiles Insert Configuration window displays. See the "Inserting User Device Profiles for User Devices" section on page 37-1 for information about inserting user device profile records into the Cisco Unified CallManager database.

Additional Topics

See the "Related Topics" section on page 32-10.

Using the BAT Spreadsheet to Create User Device Profile CSV Data Files

When you are adding new user device profiles, you can use the BAT spreadsheet. You can define the file format within the spreadsheet, and the spreadsheet uses the data file formats to display the fields for the CSV data file.

For information about locating and using the BAT spreadsheet, see the "Using the BAT Spreadsheet for Gathering Data" section on page 1-8.

To create the CSV data file by using the BAT spreadsheet for adding new user device profiles, use the following procedure.

Procedure

Step 1 Download the **BAT.xlt** file from the Cisco Unified CallManager server. See the "Downloading a File" section on page 2-2.

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

Step 3 To display the User Device Profiles options, click the **User Device Profile** tab at the bottom of the spreadsheet.

Step 4 To choose the device and line fields that you can define for each user device profile, click **Create File Format**. The Field Selection popup window displays.

Step 5 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 Device Profile Name and Description; therefore, these fields always remain selected.

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

Step 6 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 You can change the order of the items in the Selected Line and Device boxes. Choose an item and use the up arrow to move the field closer to the beginning of the list or chose the down arrow to move the item to the end of the list.

Step 7 To modify the CSV data file format, click **Create**. A message asks whether you want to overwrite the existing CSV format.

Step 8 Click **OK**. New columns for the selected fields display in the BAT spreadsheet in the order that you specified.

Step 9 To locate the Number of Phone Lines box, scroll to the right. The number of lines that you specify here must not exceed the number of lines that are configured in the BAT template or an error will result when you insert the CSV data file and UDP template.

Step 10 You must enter the number of speed-dial buttons in the Number of Speed Dials box. After you enter the number, columns display for each speed-dial number.

Note Do not exceed the number of speed dials that are configured in the User Device Profile template, or an error will result when you insert the CSV data file and UDP template.

Step 11 Enter data for an individual user device profile 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 Table 32-1 for descriptions of the fields in the BAT spreadsheet.

Step 12 To transfer the data from the BAT Excel spreadsheet into a CSV formatted data file, click **Export to BAT Format**.

The system saves the file to C:\XLSDataFiles\ or to your choice of another existing folder on your local workstation. The filename is

<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.

Upload the CSV file to Cisco Unified CallManager server using the "Uploading a File" section on page 2-3.

Note For information on how to read the exported CSV data file, click the link to **View Sample File** in the Insert User Device Profiles window in BAT.

Additional Topics

See the "Related Topics" section on page 32-10.

Field Descriptions for User Device Profile Fields in the BAT Spreadsheet

Table 32-1 describes all the user device profile fields in the BAT spreadsheet. For related procedures, see the "Related Topics" section on page 32-10

Table 32-1 Field Descriptions for User Device Profile in the BAT Spreadsheet

Field	Description
Device Fields (Mandatory Fields)	
Device Profile Name	Enter a unique identifier for the device profile name.
Description	Enter a description such as "Conference Room A" or "John Smith" to help identify the phone or device.
Device Fields (Optional Fields)	
User Locale	Enter the country and language set that you want to associate with this group of IP phones. This choice determines which cultural-dependent attributes exist for this user and which language displays for the user in the Cisco Unified CallManager user windows and phones.
Softkey Template	Enter the softkey template to be used for all phones in this group.
User ID	Enter the user ID for the phone user.
Login User ID	Enter the login user ID for a default profile. If the user device profile is used as a logout profile, specify the login user ID that will be associated with the phone. After the user logs out from this user device profile, the phone will automatically log in to this login user ID.
User Hold Audio Source	Enter the user hold audio source that this group of IP phones or CTI ports should use. The user hold audio source identifies the audio source from which music is played when a user places a call on hold.
Phone Template	Enter the phone template name that you want to associate with this user device profile.
MLPP Indication	This setting specifies whether a device that is capable of playing precedence tones will use the capability when it places an MLPP precedence call.
MLPP Preemption	If available, this setting specifies whether a device that is capable of preempting calls in progress will use the capability when it places an MLPP precedence call.
MLPP Domain	Enter a hexadecimal value for the MLPP domain associated with this device. Must be blank or a value between 0 and FFFFFF.
Line Fields (Optional Fields)	
Directory Number	Enter the directory number for the phone.

Table 32-1 Field Descriptions for User Device Profile in the BAT Spreadsheet

Field	Description
Route Partition	Choose a route partition to which the directory number belongs. The directory number can appear in more than one partition.
Display	Enter the text that you want to display on the called party's phone display, such as the user name (John Smith) or phone location (Conference Room 1). **Note** If this filed is left blank the system uses the value that is entered in the Directory Number field. **Note** The default language specifies English.
Forward All CSS	Choose the calling search space to use when a call is forwarded to the specified destination. **Note** This setting applies to all devices that are using this directory number.
Forward All Destination	Enter the directory number to which all calls are forwarded. **Note** This setting applies to any dialable phone number, including an outside destination unless restricted, and to all devices that are using this directory number.
Forward Busy External CSS	Choose the calling search space to use when a call from an external number is forwarded to the specified destination. **Note** This setting applies to all devices that are using this directory number.
Forward Busy Internal CSS	Choose the calling search space to use when a call from an internal number is forwarded to the specified destination. **Note** This setting applies to all devices that are using this directory number.
Forward Busy Destination External	Enter the directory number to which a call that is coming from an external number is forwarded when the line is in use. **Note** This setting applies to any dialable phone number, including an outside destination unless restricted, and to all devices that are using this directory number.
Forward Busy Destination Internal	Enter the directory number to which a call that is coming from an internal number is forwarded when the line is in use. **Note** This setting applies to any dialable phone number, including an outside destination unless restricted, and to all devices that are using this directory number.
Calling Search Space Forward No Answer External	Choose the calling search space to use when a call from an external number is forwarded to the specified destination. The setting displays only if it is configured in the system. **Note** This setting applies to all devices that are using this directory number.

Table 32-1 Field Descriptions for User Device Profile in the BAT Spreadsheet

Field	Description
Forward No Answer Internal CSS	Choose the calling search space to use a call from an internal number is forwarded to the specified destination. The setting displays only if it is configured in the system. **Note** This setting applies to all devices that are using this directory number.
Forward No Answer Destination External	Enter the directory number to which a call that is coming from an external number is forwarded when the phone is not answered. **Note** This setting applies to any dialable phone number, including an outside destination unless restricted, and to all devices that are using this directory number.
Forward No Answer Destination Internal	Enter the directory number to which a call that is coming from an internal number is forwarded when the phone is not answered. **Note** This setting applies to any dialable phone number, including an outside destination unless restricted, and to all devices that are using this directory number.
Forward No Coverage External CSS	Enter the calling search space to use when a call from an external number is forwarded to the specified destination. The setting displays only if it is configured in the system. **Note** This setting applies to all devices that are using this directory number.
Forward No Coverage Internal CSS	Enter the calling search space to use when a call from an internal number is forwarded to the specified destination. The setting displays only if it is configured in the system. **Note** This setting applies to all devices that are using this directory number.
Forward No Coverage Destination External	Enter the directory number to which a call that is coming from an external number is forwarded when the phone does not have coverage. **Note** This setting applies to any dialable phone number, including an outside destination unless restricted, and to all devices that are using this directory number.
Forward No Coverage Destination Internal	Enter the directory number to which a call that is coming from an internal number is forwarded when the phone does not have coverage. **Note** This setting applies to any dialable phone number, including an outside destination unless restricted, and to all devices that are using this directory number.
Calling Search Space Forward on Failure External/Internal	(CTI ports only) Enter the calling search space to use when a call from an internal or external call is forwarded to the specified destination. The setting appears only if it is configured in the system. **Note** This setting applies to all devices that are using this directory number.

Table 32-1 Field Descriptions for User Device Profile in the BAT Spreadsheet

Field	Description
Forward on Failure Destination External/Internal	(CTI ports only) Enter the directory number to which a call coming from an internal or an external number should be forwarded when a phone or CTI application fails.
Call Forward No Answer Ring Duration	Enter the number of seconds (between 1 and 300) to allow the call to ring, before forwarding the call to the destination number entered in the Forward No Answer Destination field. Leave this field blank to use the value that is set in the Cisco Unified CallManager service parameter, Forward No Answer Timer.
Route Filter	Enter a name in the Route Filter Name field. The name can contain up to 50 alphanumeric characters and can contain any combination of spaces, periods (.), hyphens (-), and underscore characters (_). Ensure each route filter name is unique to the route plan. Use concise and descriptive names for your route filters. The CompanynameLocationCalltype format usually provides a sufficient level of detail and is short enough to enable you to quickly and easily identify a route filter. For example, CiscoDallasMetro identifies a route filter for toll free, inter-local access and transport area (LATA) calls from the Cisco office in Dallas.
E164	Always use a unique E.164 number. Do not use null value.
Voice Mail Profile	Enter this parameter to make the pilot number the same as the directory number for this line. This action proves useful if you do not have a voice-messaging server configured for this phone.
Line Calling Search Space	Enter partitions that are searched for numbers that are called from this directory number. **Note** Changes cause an update of the call pickup names that are listed in the Call Pickup Group field. The setting applies to all devices that are using this directory number.
AAR Group	Enter the automated alternate routing (AAR) group for this device. The AAR group provides the prefix digits that are used to route calls that are otherwise blocked due to insufficient bandwidth. Set AAR Group to <None> to prevent rerouting blocked calls.
Line User Hold Audio Source	Enter the music on hold audio source to be played when the user presses Hold and places a call on hold.
Line Network Hold Audio Source	Enter the music on hold audio source to be played when the system places a call on hold while the user transfers a call or initiates a conference or call park.

Table 32-1 Field Descriptions for User Device Profile in the BAT Spreadsheet

Field	Description
Auto Answer	Enter one of the following values to activate the Auto Answer feature for this directory number: • Auto Answer Off <Default> • Auto Answer with Headset • Auto Answer with Speakerphone (Intercom) **Note** Make sure that the headset or speakerphone is not disabled when you choose Auto Answer with Headset or Auto Answer with Speakerphone.
No Answer Ring Duration (CFNA)	Enter the number of seconds to allow the call to ring before forwarding the call to the Forward No Answer Destination.
Call Pickup Group	Enter the Pickup Group Name to specify the call pickup group, which can answer incoming calls to this line by dialling the appropriate pickup group number. To use the BAT phone template entry, leave this field blank.
Target Destination (MLPP)	Enter the number to which MLPP precedence calls should be directed if this directory number receives a precedence call and neither this number nor its call forward destination answers the precedence call. Values can include numeric characters, pound (#) ,and asterisk (*).
Target CSS (MLPP)	From the drop-down list box, choose the calling search space to associate with the alternate party target (destination) number.
No Answer Ring Duration (MLPP)	Enter the number of seconds (between 4 and 30) after which an MLPP precedence call will be directed to this directory number's alternate party if this directory number and its call forwarding destination have not answered the precedence call. Leave this setting blank to use the value that is set in the Cisco Unified CallManager enterprise parameter, Precedence Alternate Party Timeout.
Line Text Label	Enter text that identifies this directory number for a line/phone combination. **Note** The default text specifies English
External Phone Number Mask	Enter the phone number (or mask) that is sent for Caller ID information when a call is placed from this line. You can enter a maximum of 30 numbers and "X" characters. The Xs represent the directory number and must appear at the end of the pattern. For example, if you specify a mask of 972813XXXX, an external call from extension 1234 displays a caller ID number of 9728131234.

Table 32-1 Field Descriptions for User Device Profile in the BAT Spreadsheet

Field	Description
Maximum Number of Calls	You can configure up to 200 calls for a line on a device in a cluster, with the limiting factor being the device. As you configure the number of calls for one line, the calls available for another line decrease. The default specifies 4. If the phone does not allow multiple calls for each line, the default specifies 2. For CTI route points, you can configure up to 10,000 calls for each port. The default specifies 5000 calls. Use this field in conjunction with the Busy Trigger field.
Busy Trigger	This setting, which works in conjunction with Maximum Number of Calls and Call Forward Busy, determines the maximum number of calls to be presented at the line. If maximum number of calls is set for 50 and the busy trigger is set to 40, then incoming call 41 gets rejected with a busy cause (and will get forwarded if Call Forward Busy is set). If this line is shared, all the lines must be busy before incoming calls get rejected. Use this field in conjunction with Maximum Number of Calls for CTI route points. The default specifies 4500 calls.
Message Waiting Lamp Policy	Use this field to configure the handset lamp illumination policy. Choose one of the following options: • Use System Policy (The directory number refers to the service parameter "Message Waiting Lamp Policy" setting.) • Light and Prompt • Prompt Only • Light Only • None

Table 32-1 Field Descriptions for User Device Profile in the BAT Spreadsheet

Field	Description
Ring Setting (Phone Idle)	Choose the ring setting for the line appearance when an incoming call is received and no other active calls exist on that device. Choose one of the following options: • Use system default • Disable • Flash only • Ring once • Ring
Ring Setting (Phone Active)	Choose the ring setting that is used when this phone has another active call on a different line. Choose one of the following options: • Use system default • Disable • Flash only • Ring once • Ring • Beep only

Related Topics

- Adding User Device Profiles, page 32-1
- Inserting User Device Profiles for User Devices, page 37-1
- Deleting User Device Profiles, page 38-1
- Exporting User Device Profile Records, page 39-3
- Updating Lines for User Device Profiles, page 40-1
- Adding Lines to Existing Phones and UDPs, page 10-7
- Generating Reports for User Device Profiles, page 42-1

CHAPTER 33

User Device Profile Template

Use the procedures in this chapter for creating and modifying user device profiles.

This chapter has the following procedure:

Finding a User Device Profile Template

Because you might have several user device profile (UDP) templates, Cisco Unified CallManager lets you locate specific template on the basis of specific criteria. Use the following procedure to locate templates.

Note During your work in a browser session, your find/list search preferences are stored in the cookies on the client machine. If you navigate to other menu items and return to this menu item, or if you close the browser and then reopen a new browser window, your Cisco Unified CallManager search preferences are retained until you modify your search.

Procedure

Step 1 Choose **Bulk Administration > User Device Profiles > User Device Profile Template**.

The Find and List UDP Templates window displays. Use the two drop-down list boxes to search for a template.

Step 2 From the first Find UDP Template where drop-down list box, choose one of the following criteria:

- Profile Name
- Profile Description
- Device Type

From the second Find UDP Template where drop-down list box, choose one of the following criteria:

- begins with

- contains
- is exactly
- ends with
- is empty
- is not empty

Step 3 Specify the appropriate search text, if applicable, and click **Find**.

Tip To find all UDP templates that are registered in the database, click **Find** without entering any search text.

A list of discovered templates displays by:

- Name
- Description
- Device Type
- Profile Type

Step 4 From the list of records, click the template name that matches your search criteria.

The UDP Template Configuration window displays.

Additional Information

See the "Related Topics" section on page 33-5

Creating a Cisco Unified CallManager Bulk Administration (BAT) Template for User Device Profiles

Use this procedure to create a template to add user device profiles in bulk.

Procedure

Step 1 Choose **Bulk Administration > User Device Profiles > User Device Profile Template**.

Step 2 Click **Add New**. The UDP Template Configuration window displays.

Step 3 From the **Device Type** drop-down list box, choose the model of user device profile. Click **Next**.

Step 4 In the **User Device Profile Template Name** field, enter a unique name, which can contain up to 50 characters.

Depending on the model of device, some of the following fields do not display.

- **User Hold Audio Source**—Choose the audio source that is played when the user puts a call on hold.
- **User Locale**—Choose the country and language set for with this profile.
- **Phone Button Template**—Choose a phone button template for this profile.
- **Softkey Template**—Choose the appropriate softkey template for this profile.

- **MLPP Indication**—To specify whether the device can play precedence tones when placing an MLPP precedence call, choose one of the following:
  - Default—To inherit the MLPP indication from the device pool.
  - Off—Does not send MLPP indication tones.
  - On—Sends indication of an MLPP precedence call.
- **MLPP Preemption**—To specify whether the device can preempt calls in progress when placing an MLPP precedence call, choose one of the following:
  - Default—To inherit the MLPP preemption setting from the device pool.
  - Off—Does not preempt calls when it places an MLPP precedence call.
  - On—preempts calls in progress when it places an MLPP precedence call.

Note Do not configure a device with MLPP Indication set to *Off* while MLPP Preemption is set to *On*.

- **MLPP Domain—**Enter a hexadecimal value for the MLPP domain associated with this device. Must be blank or a value between 0 and FFFFFF.
- **Expansion Module Information**—Choose the type of expansion module if installed in the phone or choose <None> for Module 1 and Module 2.
- **Login User ID**—Enter the login user ID for a default profile. After the user logs out from using the user device profile, the user device profile will automatically log in to this login user ID and use the default profile.

Tip You can obtain help in finding a valid login user ID by choosing the Select Login User ID link below the Login User ID field. A separate dialog box pops up. In the Login User ID field, enter the first few characters of the login user ID that you want to use, and all login user IDs that match the pattern that you entered will display in the Selected login user ID field. Choose the desired ID and click OK.

Step 5 Check the **Ignore Presentation Indicators (Internal Calls Only)** check box, as needed.

Step 6 Click **Save**. The UDP Template Configuration window displays.

Step 7 Depending on the phone button template that you chose, links display to add lines, speed dials settings, subscribed Cisco IP phone service settings, and busy lamp field speed dial settings.

For some Cisco Unified IP Phone models, you can add Cisco Unified IP Phone services and Speed Dials to the template. See Chapter 3, "Phone Template" for more information in adding or lines, IP services, and speed dials for BAT templates.

Additional Information

See the "Related Topics" section on page 33-5

Modifying a Template

You can modify the properties of a template when you want to change only a few fields for the same device.

To modify and update details in an existing BAT template, use the following procedure.

Procedure

Step 1 Find the UDP template you want to modify using the"Finding a User Device Profile Template" section on page 33-1.

Step 2 From the list of displayed templates, click the template name you want to modify. The chosen template details display in the UDP Template Configuration window.

Step 3 Verify that this is the template that you want to modify.

Step 4 Modify the details in the template fields as needed.

Step 5 Click **Save** to save the changes to the existing template.

Additional Topics

See the "Related Topics" section on page 33-5.

Copying a Template

You can copy the properties of a template into a new template when you want to change only a few fields.

Note The new template that you create must be the same device type as the original template, such as Cisco IP User Device Profile model 7960.

Use the following procedure to copy an existing BAT template.

Procedure

Step 1 Find the UDP template you want to copy using the"Finding a User Device Profile Template" section on page 33-1.

Step 2 From the list of displayed templates, click the template name you want to copy. The chosen template details display in the UDP Template Configuration window.

Note You can also copy the template by clicking the icon in the Copy column corresponding to the template you want to copy.

Step 3 Verify that this is the template that you want to copy and click **Copy**. The template reproduces and creates a copy. The copy duplicates all the values that were specified in the original template.

Step 4 In the User Device Profile Template Name field, enter a new template name, up to 50 alphanumeric characters.

Step 5 Update the fields as needed for the new template.

Step 6 Click **Save**. The template that is added to BAT displays in the Templates column on the left.

Additional Topics

See the "Related Topics" section on page 33-5.

Deleting Templates

You can delete BAT templates when you no longer require them. Use this procedure to delete a template.

Procedure

Step 1 Find the UDP template you want to delete using the"Finding a User Device Profile Template" section on page 33-1.

Step 2 From the list of displayed templates, click the template name you want to delete. The chosen template details display in the UDP Template Configuration window.

Note You can also delete the template by checking the check box next to the template name and clicking **Delete Selected.**

Step 3 Verify that this is the template that you want to delete and click **Delete**. A message displays that asks you to confirm the delete operation.

Step 4 Click **OK** to delete the template. The template name disappears from the list of templates in the Find and List UDP Templates window.

Additional Topics

See the "Related Topics" section on page 33-5.

Related Topics

- Finding a User Device Profile Template, page 33-1
- Creating a Cisco Unified CallManager Bulk Administration (BAT) Template for User Device Profiles, page 33-2
- Modifying a Template, page 33-4

User Device Profile File Format

When you use a text editor to create your CSV data file, you must use a file format to identify the device and line fields within the CSV data file.You have these options for the file format:

- Default User Device Profile—Contains a predetermined set of user device profile device and line fields.
- Simple User Device Profile—Contains basic device and line fields for user device profiles.
- Customized—Contains device and line fields that you choose and order yourself.

Before creating the CSV file in the text editor, you need to choose an existing file format or create a new file format. You can then enter the values as specified in the file format in the text-based CSV data file.

Configuring User Device Profile File Formats

The following topics provide information about configuring file formats for CSV data files that are created by using a text editor.

Finding a UDP File Format

To find a user device profile file format, use the following procedure.

Step 1 Choose **Bulk Administration > User Device Profiles > UDP File Format > Create UDP File Format**.

The UDP File Format Query window displays.

Step 2 From the Find UDP File Format where Format Name drop-down list box, choose one of the following criteria:

- begins with
- contains
- is exactly

- ends with
- is empty
- is not empty

Step 3 Specify the appropriate search text, if applicable, and click **Find**.

Tip To find all UDP templates that are registered in the database, click **Find** without entering any search text.

A list of discovered templates displays by name of the file format.

Step 4 From the list of records, click the file format name that matches your search criteria.

The UDP File Format Configuration window displays.

Additional Information

See the "Related Topics" section on page 34-5

Creating a UDP File Format

To create your UDP file format for the text-based CSV data file, use the following procedure.

Procedure

Step 1 Choose **Bulk Administration > User Device Profiles > Create a File Format**. The Update File Format Query window displays.

Step 2 Click **Add new**. The Update File Format Configuration window displays.

Step 3 In the UDP File Format Name field, enter a name for this customized format.

Step 4 Under Device Fields, choose the device field names that you want to define for each user device profile. Click a device field name in the Device Field box and click the arrow to move the field to the Selected Device Fields box.

A CSV data file must include Device Profile Name, and Description; therefore, these fields always remain selected.

Tip You can select several random field names in the list by holding down the Ctrl key, then clicking the arrow to select them together. You can select a range of items by using the Shift key.

Step 5 Click line field names in the Line Field box and click the arrow to move the fields to the Selected Line Fields box.

Note Directory Number is a mandatory field if you select line fields in the file format.

Tip You can change the order of the items in the Selected Line Fields and Selected Device Fields boxes. Select an item and then use the up arrow to move the field closer to the beginning of the list or use the down arrow to move it to the end of the list.

Step 6 Enter the maximum number of lines, speed dials, IP Phone Services, and IP Phone Service Parameters, you want to include in the CSV file, in their corresponding text boxes.

Note You can enter zero for maximum number of speed dials, IP Phone Services, and IP Phone Service Parameters, if you do not want to include them in the CSV file. But, the maximum number of lines should not be zero if line fields are chosen in the file format.

Step 7 To save your customized file format, click **Save**. The name of the file format displays in the UDP File Format Query window.

Additional Topics

See the "Related Topics" section on page 34-5.

Copying a File Format

To copy an existing format for the CSV data file, use the following procedure.

Procedure

Step 1 Find the UDP File Format you want to copy by using the "Finding a UDP File Format" section on page 34-1.

Step 2 In the Search Results area, click the file format name that you want to copy. The File Format Configuration window displays.

Step 3 To make a copy of the chosen file format, click **Copy**.

Note You can also copy a file format by clicking the icon in the Copy column corresponding to the format you want to copy, in the UDP File Format Query window.

Step 4 In the File Format Name field, enter a new name for the copied format.

Step 5 Modify the copied format by using one of these methods:

- Add new fields by choosing them from the Device Fields or Line Fields box, and then clicking the arrow to move the chosen fields into the Selected Device Field or Selected Line Fields box.
- Remove chosen fields by choosing them from the Selected Device Fields or Selected Line Fields box, and then clicking the arrow to move the chosen fields into the Device Field or Line Fields box.
- Change the order of the fields by choosing a field name in the Selected Device Field or Selected Line Fields box and using the up or down arrow to change its location.

Step 6 After making your changes, click **Save** to save the copied file format with changes in the list.

Additional Topics

See the "Related Topics" section on page 34-5.

Modifying a File Format

To modify an existing format for the CSV data file, use the following procedure.

Procedure

Step 1 Find the UDP File Format you want to update by using the "Finding a UDP File Format" section on page 34-1.

Step 2 In the Search result area, click the file format name that you want to modify. The File Format Configuration window displays.

Step 3 Modify the copied format by using one of these methods:

- Add new fields by choosing them from the Device Fields or Line Fields box, and then clicking the arrow to move the chosen fields into the Selected Device Field or Selected Line Fields box.
- Remove the chosen fields by choosing them from the Selected Device Fields or Selected Line Fields box, and then clicking the arrow to move the chosen fields into the Device Field or Line Fields box.
- Change the order of the fields by choosing a field name in the Selected Device Field or Selected Line Fields box and using the up or down arrow to change its location.

Step 4 After making your changes, click **Save** to save the changes to the file format.

Additional Topics

See the "Related Topics" section on page 34-5.

Deleting a File Format

To delete an existing file format for the CSV data file, use the following procedure.

Procedure

Step 1 Find the UDP File Format you want to delete by using the "Finding a UDP File Format" section on page 34-1.

Step 2 In the Search result area, click the file format name that you want to delete. The File Format Configuration window displays. Verify that you want to delete this file.

Step 3 To remove the file format from the File Format Name list, click **Delete**. A message asks you to confirm that you want to delete the file format. Click **OK** to continue. The file format name is removed from the list.

Note You can also delete a file format by checking the corresponding check box and clicking **Delete**. You can delete all the file formats by clicking **Select All** and then clicking **Delete Selected**.

Additional Topics

See the "Related Topics" section on page 34-5.

Related Topics

- Configuring User Device Profile File Formats, page 34-1
- Adding a File Format, page 35-1

CHAPTER 35

Adding User Device Profile File Format

After you have entered all the values into the text-based CSV data file in the order that the file format specified, you need to upload the text-based CSV data file to the first node in Cisco Unified CallManager. For more information on uploading files, see "Uploading a File" section on page 2-3. You must then associate the file format with the text-based CSV data file.

Adding a File Format

To associate the file format with the text-based CSV data file, use the following procedure.

Procedure

Step 1 Choose **Bulk Administration > User Device Profile > UDP File Format > Add File Format**. The Add File Format Configuration window displays.

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

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

Step 4 To add the matching file format with the CSV data file, click **Submit**.

A job is created in the Job Scheduler option in the Bulk Administration menu. Use Job Configuration window to modify the job schedule.

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

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

Related Topics

- Adding a File Format, page 35-1
- Uploading a File, page 2-3
- Scheduling Jobs, page 51-1
- BAT Log Files, page 54-3

Related Topics

CHAPTER 36

Validating User Device Profiles

When you choose Validate User Device Profiles, the system runs a validation routine to check that the CSV data file has all required fields, such as device profile name and directory number, populated and checks for discrepancies with the first node database.

Before You Begin

- You must have a user device profile template for the devices that you are adding. You can use a user device profile template with multiple lines to add user device profiles that have a single line. See the "Creating a Cisco Unified CallManager Bulk Administration (BAT) Template for User Device Profiles" section on page 33-2.
- You must have a CSV data file that contains the unique details for the user device profiles. See these options:
  - "Using the BAT Spreadsheet to Create User Device Profile CSV Data Files" section on page 32-2.
  - "Validating User Device Profiles" section on page 36-1.

Validating User Device Profiles

To validate your CSV data file user device profile records, use the following procedure.

Procedure

Step 1 Choose **Bulk Administration > User Device Profiles > Validate User Device Profiles**.

The User Device Profiles Validation window displays.

Step 2 Choose the Insert option that corresponds to your CSV data file:

- **Validate UDP Specific Details—**If you are validating User Device Profile records that use a file format.
- **Validate UDP All Details—**If you are validating user device profile records from an export file that was generated by using the All Details option.

Step 3 In the File Name field, choose the CSV data file that you created for this specific bulk transaction.

Step 4 For Validate UDP Specific Details option, in the UDP Template Name field, choose the Cisco Unified CallManager Bulk Administration (BAT) User Device Profile template that you created for this type of bulk transaction.

Step 5 To verify the chosen CSV data file with the database, click **Submit**.

A job is created in the Job Scheduler option in the Bulk Administration menu. Use Job Configuration window to modify the job schedule. 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.

Related Topics

- Creating a Cisco Unified CallManager Bulk Administration (BAT) Template for User Device Profiles, page 33-2
- Using the BAT Spreadsheet to Create User Device Profile CSV Data Files, page 32-2
- Scheduling Jobs, page 51-1
- BAT Log Files, page 54-3

CHAPTER 37

Generating UDPs

You can use Cisco Unified CallManager Bulk Administration (BAT) to set up extension mobility quickly by generating and inserting profiles for all IP phone users. BAT generates user device profiles for all phones, regardless of the number of devices that the user controls. For example, if a user controls two devices, BAT generates two separate user device profiles, one for each device and associates them to the same user. BAT sets one of the generated user device profiles as the default user device profile for the user. BAT generates user device profiles for all IP phones based on the phone button template for each phone model.

Note You do not use a user device profile template or a CSV data file to perform this action. When BAT generates these user device profiles, they are associated with the user.

Inserting User Device Profiles for User Devices

To generate user device profiles for all users, use the following procedure.

Procedure

Step 1 Choose **Bulk Administration > User Device Profiles > Insert User Device Profiles**. The User Device Profiles Insert Configuration window displays.

Step 2 Click Insert User Device Profiles Specific Details radio button to insert UDP records that use a customized file format. Continue with steps 4 and 5.

Step 3 Click Insert User Device Profiles All Details radio button to insert UDP records from an exported UDP file that was generated by using the All Details option.

Step 4 In the File Name drop-down list box, choose the CSV data file that you created for this specific bulk transaction.

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

Note When you are inserting a file that was generated with the export utility, use the appended suffixes to guide you in choosing a phone template with the correct line configuration. The export utility appends a numerical suffix_n for each line that is configured on a phone. For example, an export file with the name “sales_7960_1_3.txt” indicates that all phone records in this file have lines 1 and 3 configured.

If you did not enter individual MAC addresses in the CSV data file, you must check the **Create Dummy MAC Address** check box. If you are adding CTI ports, the dummy MAC address option provides a unique device name for each CTI port in the form of dummy MAC addresses.

This field automatically generates dummy MAC addresses in the following format: XXXXXXXXXXXX
where X represents any 12-character, hexadecimal (0-9 and A-F) number.

- If you do not know the MAC address of the phone that will be assigned to the user, choose this option. When the phone is plugged in, a MAC address registers for that device.
- If you supplied MAC addresses or device names in the data input file, do not choose this option.

You can update the phones or devices later with the correct MAC address by manually entering this information into Cisco Unified CallManager Administration or by using Unified CM Auto-Register Phone Tool. See the "Introducing Cisco Unified CM Auto-Register Phone Tool" section on page 52-2 for more information about Unified CM Auto-Register Phone Tool. Skip to Step 8.

Note If you are changing the phone settings for existing phones in the template, check the **Override the existing configuration** check box. The user device profile information also gets updated when this check box is checked.

Note If you want BAT to generate and insert user device profile records for all phones based on the user's current IP Phone, choose **Based on devices controlled by users** radio button.

Note If you want the device to use the generated user device profile as the logout profile, check the **Set User Device Profile as Log Out Profile for the device** check box.

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

Step 7 Click the **Run Immediately** radio button to insert the UDP records immediately or, click **Run Later** to insert at a later time.

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

Step 9 Use the Job Scheduler option in the Bulk Administration main menu to schedule and activate this job.

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.

Note If any information for a record fails, BAT does not insert that user device profile record.

Additional Topics

See the "Related Topics" section on page 37-2.

Related Topics

- Inserting User Device Profiles for User Devices, page 37-1

- Scheduling Jobs, page 51-1
- Introducing Cisco Unified CM Auto-Register Phone Tool, page 52-2
- BAT Log Files, page 54-3

CHAPTER 38

Deleting User Device Profiles

Use these procedures to delete a group of user device profiles (UDPs) from the Cisco Unified CallManager database.

You can locate existing phone records by these two methods:

- Using Query to Delete UDP, page 38-1.
- Using a Custom File to Delete UDPs, page 38-2

Using Query to Delete UDP

To locate the records that you want to delete, you must define a query filter. To delete UDPs from Cisco Unified CallManager, use the following procedure.

Procedure

Step 1 Choose **Bulk Administration > User Device Profiles > Delete User Device Profiles > Query**.

The Delete User Device Profiles Configuration window displays.

Step 2 From the Find drop-down list box, choose one of the following options:

- User
- Autogenerated
- All

Step 3 From the first Device Profiles where drop-down list box, choose one of the following criteria:

- Profile Name
- Description
- Device Type

Step 4 From the second Device Profiles where drop-down list box, choose one of the following criteria:

- begins with
- contains
- is exactly
- ends with

- is empty
- is not empty

Step 5 Specify the appropriate search text, if applicable.

Tip To find all UDPs that are registered in the database, click **Find** without entering any search text.

Step 6 To further define your query and to add multiple filters, check the Search Within Results check box, choose **AND** or **OR** from the drop-down box, and repeat steps 2 and 5.

Step 7 Click **Find**.

A list of discovered templates displays by:

- Device Profile Name
- Description
- Device Type
- Profile Type

Step 8 In the Job Information area, enter the Job description.

Step 9 Click the Run Immediately radio button to delete UDP records immediately or, click Run Later to delete them at a later time.

Step 10 Click **Submit** to create a job for deleting the phone records.

Step 11 Use the Job Scheduler option in the Bulk Administration main menu to schedule and/or activate this job.

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.

Caution If you do not enter any information in the query text box, the system deletes all UDP records. Because the delete action is final, you cannot retrieve deleted records.

Additional Topics

See the "Related Topics" section on page 38-3.

Using a Custom File to Delete UDPs

You can create a custom file of UDPs that you want to delete by using a text editor. You can have device profile name, device profile description, and directory number in the same custom file, but you cannot have directory numbers in the same file. You need to create separate files—one file that contains the device names and MAC addresses and another file that contains the directory numbers.

Note You cannot delete UDPs with shared lines by using a custom file.

Before You Begin

1. Create a text file that lists one of these details for the UDPs that you want to delete:

  - Profile names
  - Profile description
  - Directory numbers

2. Put each item on a separate line in the text file.
3. Upload the custom files to the Cisco Unified CallManager server first node. See "Uploading a File" section on page 2-3.

To delete UDPs that are listed in a custom file, use the following procedure.

Procedure

Step 1 Choose **Bulk Administration > User Device Profiles > Delete User Device Profiles > Custom File**.

The Delete User Device Profiles Configuration window displays.

Step 2 In the Delete drop-down list box choose one of the following options:

- User
- Autogenerated
- All

Step 3 In the Device Profiles where drop-down list box, choose the type of custom file that you have created from one of the following criteria:

- Profile Name
- Profile Description
- Directory Number

Step 4 In the list of custom files, choose the filename of the custom file for this delete.

Step 5 Click **Find**.

Step 6 A list of UDPs matching your search criteria displays.

Step 7 Click **Submit** to create a job to delete the UDPs.

Use the Job Scheduler option in the Bulk Administration main menu to schedule and/or activate this job. 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 38-3.

Related Topics

- Using Query to Delete UDP, page 38-1
- Using a Custom File to Delete UDPs, page 38-2
- Uploading a File, page 2-3
- Scheduling Jobs, page 51-1
- Introducing Cisco Unified CM Auto-Register Phone Tool, page 52-2

- BAT Log Files, page 54-3

CHAPTER 39

Using User Device Profile Export

You can choose between two file format names when you are exporting user device profile records:

- All User Device Profile Details: To export all the line attributes, services and User IDs that are associated with the user device profile.
- Specific User Device Profile Details: To export a limited set of details that are associated with the user device profile

All User Device Profile Details Format

For phones that have different line configurations, such as multiple partitions or calling search spaces, use the All User Device Profile Details format.

Table 39-1 lists the fields that are exported when you choose the All User Device Profile Details file format.

Table 39-1 Exported Fields in the All User Device Profile Details File Format

Field Types	Exported Fields
Device Fields	User Device Profile Name, Description, Device Pool, Calling Search Space, AAR Calling Search Space, Media Resource Group List, User Hold Audio Service, Network Hold Audio Source, Login User ID, User Locale, Network Locale, Phone Button Template, Expansion Module Type I, Expansion Module Type II, Softkey Template, Phone Load Name, Module 1 Load Name, Module 2 Load Name, MLPP Indication, MLPP Preemption, MLPP Domain
Model Specific Device Fields	Information, Directory, Messages, Services, Authentication Server, Proxy Server, Idle, Idle Timer, Enable Extension Mobility, Logout Profile, Login User ID, Login Time, Logout Time

Table 39-1 Exported Fields in the All User Device Profile Details File Format

Field Types	Exported Fields
Line Fields	Directory Number, Partition, Voice Mail Profile, Line CSS, AAR Group, Line User Hold Audio Source, Line Network Hold Audio Source, Auto Answer, Forward All to Voice Mail, Forward All Destination, Forward All CSS, Forward Busy External to Voice Mail, Forward Busy External Destination, Forward Busy External CSS, Forward No Answer External to Voice Mail, Forward No Answer External Destination, Forward No Answer External CSS, Forward On Failure to Voice Mail, Forward On Failure Destination, Forward on Failure CSS, Call pickup group, Forward Busy Internal to Voice Mail, Forward Busy Internal Destination, Forward Busy Internal CSS, Forward No Answer Internal to Voice Mail, Forward No Answer Internal Destination, Forward No Answer Internal CSS, Forward No Call Coverage External to Voice Mail, Forward No Call Coverage External Destination, Forward No Call Coverage External CSS, Forward No Call Coverage Internal to Voice Mail, Forward No Call Coverage Internal Destination, Forward No Call Coverage Internal CSS, Display, External Phone Number Mask, Message Waiting Lamp Policy, Ring Setting When Idle, Line Text Label, Ring Setting When Active, No Answer Ring Duration, MLPP Target Destination, MLPP Calling Search Space, MLPP No Answer Ring Duration, Max Num Calls, Busy Trigger, Call Info Display Mask, Alerting Name
User Fields	User ID
Speed Dials	Speed Dial Number, Speed Dial Label
Services	Service Name, Subscribed Service Name, Parameter Name, Parameter Value

Specific User Device Profile Format

To export a limited set of details that are associated with the user device profile, use the Default User Device Profile format. You can choose specific query options to customize the export file.

Table 39-2 lists the fields that can be exported when you choose the Default User Device Profile format. For more information about related procedures, see the "Related Topics" section on page 39-4

Table 39-2 Exported Fields in the Default User Device Profile File Format

Field Types	Exported Fields
Device Fields	MAC Address, Description, Login User ID
Line Fields	Directory Number,Display,Line Text Label,Forward Busy External,Forward Busy Internal,Forward No Answer External,Forward No Answer Internal,Forward No Coverage External,Forward No Coverage Internal,Call pickup group
Speed Dials	Speed Dials

Additional Information

See the "Related Topics" section on page 39-4.

Exporting User Device Profile Records

To export user device profiles from Cisco Unified CallManager, use this procedure.

Procedure

Step 1 Choose one of the following options:

- **Bulk Administration > User Device Profiles > Export User Device Profiles > Specific Details**. The Export User Device Profiles Query window displays.
- **Bulk Administration > User Device Profiles > Export User Device Profiles > All Details**. The Export User Device Profiles Configuration window displays.

Step 2 For **All Details** option, choose the type of device or specific model from the Device Type drop-down list box. Skip to Step 4.

Step 3 For **Specific Details** option, you can customize the export file and set any of the following detail options:

a. Choose Device Type and Device Protocol from the drop-down list boxes.

b. In the first Find a User Device Profile drop-down list box, choose from the following options:
   - Profile Name
   - Profile Description

c. In the second drop-down list box, choose from the following options:
   - begins with
   - contains
   - is exactly
   - ends with
   - is empty
   - is not empty

d. In the search field box, enter the value that you want to locate, such as a specific profile name or profile description.

e. You can click the Search Within Results check box and choose **AND** or **OR** to add multiple filters and repeat b. through d. to further define your query.

f. Click **Find**. The search results display.

g. Click **Next**.

h. Choose file format from the File Format drop-down list box.

Step 4 In the File Name field, enter the file name that you want to use.

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

Step 6 Click the Run Immediately radio button to export user device profiles immediately or, click Run Later to export at a later time.

Step 7 Click **Submit** to create a job for exporting user device profiles.

Step 8 Use the Job Scheduler option in the Bulk Administration main menu to schedule and/or activate this job.

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 Information

See the "Related Topics" section on page 39-4.

Related Topics

- Specific User Device Profile Format, page 39-2
- All User Device Profile Details Format, page 39-1
- Exporting User Device Profile Records, page 39-3
- Scheduling Jobs, page 51-1
- BAT Log Files, page 54-3

CHAPTER 40

Updating Lines for User Device Profiles

To update line attributes for a specific group of devices or user device profiles, use the Update Lines option. Lines for a phone and a user device profile get updated at the same time when both are part of the query result.

Note When a phone is deleted from the Cisco Unified CallManager database, the directory number remains in the database. To manage these orphan directory numbers, you can use the Update Lines option to search for unassigned directory numbers and delete or update these directory numbers.

Updating Lines for User Device Profiles

Use the following procedures to update lines for User Device Profiles:

- Using Query to Update Lines, page 40-1
- Field Descriptions for Updating Lines, page 40-3

Using Query to Update Lines

To update lines, use the following procedure.

Procedure

Step 1 Choose **Bulk Administration > User Device Profiles > Add/Update Lines > Update Lines**.

The Update Lines Query window displays.

Note You can update all lines by not specifying a query. Skip to "Field Descriptions for Updating Lines" section on page 40-3.

Step 2 From the first Find Line where drop-down list box, choose one of the following criteria:

- Directory Number
- Route Pattern
- Line Description

- Calling Search Space (Phone)
- Calling Search Space (Line)
- Device Pool
- Device Description
- Line Position
- Unassigned DN
- Call Pickup Group

Note To locate and delete orphaned directory numbers, use "Unassigned DN."

Step 3 From the second Find Line where drop-down list box, choose one of the following criteria:

- begins with
- contains
- is exactly
- ends with
- is empty
- is not empty

Step 4 In the search field list box, choose or enter the value that you want to locate. For example, you can choose the Line Partition from the list or enter a range of directory numbers.

Tip To find all lines that are registered in the database, click **Find** without entering any search text.

Step 5 To further define your query and to add multiple filters, check the Search Within Results check box, choose **AND** or **OR** from the drop-down box, and repeat steps 2 and 4.

Step 6 To display the records that are going to be affected, click **Find**.

A list of discovered lines displays by:

- Pattern/Directory Number
- Partition
- Description

Step 7 Click **Next**. The Update Lines window shows the type of query that you chose at the top. If you want to change the type of query, click **Back**.

Step 8 Specify the setting that you want to update for all the records that you have defined in your query. You can choose multiple parameters to update. See the "Field Descriptions for Updating Lines" section on page 40-3 for descriptions of the parameters.

Step 9 In the Job Information area, enter the Job description.

Step 10 Click the Run Immediately radio button to insert lines immediately or, click Run Later to insert at a later time.

Step 11 Click **Submit** to create a job for inserting the phone records.

Step 12 Use the Job Configuration window to schedule and/or activate this job.

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

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

Note If any information for a line record fails, Cisco Unified CallManager Bulk Administration (BAT) does not update that line record.

Additional Topics

See the "Related Topics" section on page 40-10.

Field Descriptions for Updating Lines

Table 40-1 provides the field descriptions for updating line details.

Values that display in some fields display from Cisco Unified CallManager. You must configure these values by using Cisco Unified CallManager Administration. For related procedures, see the "Related Topics" section on page 40-10.

Table 40-1 Field Descriptions for Updating Line Details

Field	Description
Directory Number Information	
Route Partition	Choose a route partition to which the directory number belongs. **Note** The directory number can appear in more than one partition.
Alerting Name	Enter the name that must display during an alert to a shared directory number. For non-shared directory numbers, during alerts, the system uses the name entered in the Display field.
Directory Number Settings	
Voice Mail Profile	Choose this parameter to make the pilot number the same as the directory number for this line. This choice proves useful if you do not have a voice-messaging server that is configured for this phone.
Calling Search Space (Line)	Choose the partitions that are searched for numbers that are called from this directory number. **Note** Changes cause an update of the Pickup Group Names that are listed in the Call Pickup Group field. The setting applies to all devices that are using this directory number.
Presence Group	

Table 40-1 Field Descriptions for Updating Line Details (continued)

Field	Description
AAR Group	Choose the automated alternate routing (AAR) group for this device. The AAR group provides the prefix digits that are used to route calls that are otherwise blocked due to insufficient bandwidth. Set AAR Group to <None> to prevent rerouting blocked calls.
User Hold Audio Source	Choose the music on hold audio source that plays when the user presses the Hold button or softkey to put a call on hold.
Network Hold Audio Source	Choose the music on hold audio source that plays when the system places a call on hold such as when user transfers a call or initiates a conference or call park.
Auto Answer	Choose this parameter if you want all lines that are updated here to use the auto answer feature. With auto answer, Cisco Unified CallManager automatically answers calls when a headset is in use. A zip tone plays to alert the user that an incoming call connected.
Call Forward and Call Pickup Settings	
Calling Search Space Forward All	Choose the calling search space to use when a call is forwarded to the specified destination. **Note** This setting applies to all devices that are using this directory number.
Forward All Destination	Enter the directory number to which all calls are forwarded. **Note** This setting applies to any dialable phone number, including an outside destination unless restricted, and to all devices that are using this directory number.
Forward All to Voice Mail	Check this check box to forward all calls to the number that you chose in the voice-messaging profile. Checking this check box makes the values in the Forward All Destination field and Calling Search Space check box not relevant.
Calling Search Space Forward Busy External	Choose the calling search space to use when a call from an external number is forwarded to the specified destination. **Note** This setting applies to all devices that are using this directory number.
Calling Search Space Forward Busy Internal	Choose the calling search space to use when a call from an internal number is forwarded to the specified destination. **Note** This setting applies to all devices that are using this directory number.

Table 40-1 Field Descriptions for Updating Line Details (continued)

Field	Description
Forward Busy Destination External	Enter the directory number to which a call that is coming from an external number is forwarded when the line is in use. **Note** This setting applies to any dialable phone number, including an outside destination unless restricted, and to all devices that are using this directory number.
Forward Busy Destination Internal	Enter the directory number to which a call that is coming from an internal number is forwarded when the line is in use. **Note** This setting applies to any dialable phone number, including an outside destination unless restricted, and to all devices that are using this directory number.
Forward Busy to Voice Mail External	Check this check box to forward calls from an external number to the number that you chose in the voice-messaging profile when the line is in use. Checking this check box makes the values in the Forward Busy Destination field and Calling Search Space check box not relevant.
Forward Busy to Voice Mail Internal	Check this check box to forward calls from an internal number to the number that you chose in the voice-messaging profile when the line is in use. Checking this check box makes the values in the Forward Busy Destination field and Calling Search Space check box are not relevant.
Calling Search Space Forward No Answer External	Choose the calling search space to use when a call from an external number is forwarded to the specified destination. The setting displays only if it is configured in the system. **Note** This setting applies to all devices that are using this directory number.
Calling Search Space Forward No Answer Internal	Choose the calling search space to use a call from an internal number is forwarded to the specified destination. The setting displays only if it is configured in the system. **Note** This setting applies to all devices that are using this directory number.
Forward No Answer Destination External	Enter the directory number to which a call that is coming from an external number is forwarded when the phone is not answered. **Note** This setting applies to any dialable phone number, including an outside destination unless restricted, and to all devices that are using this directory number.

Table 40-1 Field Descriptions for Updating Line Details (continued)

Field	Description
Forward No Answer Destination Internal	Enter the directory number to which a call that is coming from an internal number is forwarded when the phone is not answered. **Note** This setting applies to any dialable phone number, including an outside destination unless restricted, and to all devices that are using this directory number.
Forward No Answer to Voice Mail External	Check this check box to forward unanswered calls from an external number to the number that you chose in the voice-messaging profile. Checking this check box makes the values in the Forward No Answer Destination field and Calling Search Space check box are not relevant.
Forward No Answer to Voice Mail Internal	Check this check box to forward unanswered calls from an internal number to the number that you chose in the voice-messaging profile. Checking this check box makes the values in the Forward No Answer Destination field and Calling Search Space check box are not relevant.
Calling Search Space Forward No Coverage External	Choose the calling search space to use when a call from an external number is forwarded to the specified destination. The setting displays only if it is configured in the system. **Note** This setting applies to all devices that are using this directory number.
Calling Search Space Forward No Coverage Internal	Choose the calling search space to use when a call from an internal number is forwarded to the specified destination. The setting displays only if it is configured in the system. **Note** This setting applies to all devices that are using this directory number.
Forward No Coverage Destination External	Enter the directory number to which a call that is coming from an external number is forwarded when the phone does not have coverage. **Note** This setting applies to any dialable phone number, including an outside destination unless restricted, and to all devices that are using this directory number.

Table 40-1 Field Descriptions for Updating Line Details (continued)

Field	Description
Forward No Coverage Destination Internal	Enter the directory number to which a call that is coming from an internal number is forwarded when the phone does not have coverage. **Note** This setting applies to any dialable phone number, including an outside destination unless restricted, and to all devices that are using this directory number.
Forward No Coverage to Voice Mail External	Check this check box to forward calls from an external number to the number that you chose in the voice-messaging profile when the phone does not have coverage. Checking this check box makes the values in the Forward No Answer Destination field and Calling Search Space check box are not relevant.
Forward No Coverage to Voice Mail Internal	Check this check box to forward calls from an external number to the number that you chose in the voice-messaging profile when the phone does not have coverage. Checking this check box makes the values in the Forward No Answer Destination field and Calling Search Space check box are not relevant.
Calling Search Space Forward on CTI Failure External/Internal	(CTI ports only) Choose the calling search space to use when a call from an internal or external call is forwarded to the specified destination. The setting appears only if it is configured in the system. **Note** This setting applies to all devices that are using this directory number.
Forward on CTI Failure Destination External/Internal	(CTI ports only) Enter the directory number to which a call coming from an internal or an external number should be forwarded when a phone or CTI application fails.
Forward on CTI Failure to Voice Mail External/Internal	(CTI ports only) Check this check box to forward failed calls from external or internal numbers to the number that you chose in the voice-messaging profile.
Call Forward No Answer Ring Duration	Enter the number of seconds (between 1 and 300) to allow the call to ring, before forwarding the call to the destination number entered in the Forward No Answer Destination field. **Note** Leave this field blank to use the value that is set in the Cisco Unified CallManager service parameter, Forward No Answer Timer.
Call Pickup Group	Choose a pickup group to specify the call pickup group, which can answer incoming calls to this directory number by dialing the appropriate pickup group number.

Table 40-1 Field Descriptions for Updating Line Details (continued)

Field	Description
MLPP Alternate Party Settings	
Target (Destination) MLPP	Enter the number to which MLPP precedence calls should be directed if this directory number receives a precedence call and neither this number nor its call forward destination answers the precedence call. Values can include numeric characters, pound(#), and asterisk (*).
MLPP Calling Search Space	From the drop-down list box, choose the calling search space to associate with the alternate party target (destination) number.
MLPP No Answer Ring Duration	Enter the number of seconds (between 4 and 30) after which an MLPP precedence call will be directed to this directory number's alternate party if this directory number and its call forwarding destination have not answered the precedence call. Leave this setting blank to use the value that is set in the Cisco Unified CallManager enterprise parameter, Precedence Alternate Party Timeout.
Line null on Device null	
Display (Internal Caller ID)	Use this field only if you do not want the directory number to show on the line appearance. Enter text that identifies this directory number for a line/phone combination. Suggested entries include boss's name, department's name, or other appropriate information to identify multiple directory numbers to secretary/assistant who monitors multiple directory numbers.
Line Text Label	Enter text that identifies this directory number for a line/phone combination. **Note** The default language specifies English
External Phone Number Mask	Enter the phone number (or mask) that is sent for Caller ID information when a call is placed from this line. You can enter a maximum of 30 numbers and "X" characters. The Xs represent the directory number and must appear at the end of the pattern. For example, if you specify a mask of 972813XXXX, an external call from extension 1234 displays a caller ID number of 9728131234.

Table 40-1 Field Descriptions for Updating Line Details (continued)

Field	Description
Message Waiting Lamp Policy	Use this field to configure the handset lamp illumination policy. Choose one of the following options: • Use System Policy (The directory number refers to the service parameter "Message Waiting Lamp Policy" setting.) • Light and Prompt • Prompt Only • Light Only • None Setting applies only to the current device unless you check the check box at right (called Update Shared Device Settings) and click the **Propagate selected** button. (The check box at right displays only if other devices share this directory number
Ring Setting When Idle	Choose the type of ring for an incoming call on a phone.
Ring Setting when Active	Choose the type of ring for an incoming call on a phone, which is used when this phone has another active call on a different line.
Multiple Call/Call Waiting Settlings	
Maximum Number of Calls	You can configure up to 184 calls for a line on a device in a cluster, with the limiting factor being the device. As you configure the number of calls for one line, the calls available for another line decrease. The default specifies 4. If the phone does not allow multiple calls for each line, the default specifies 2. For CTI route points, you can configure up to 10,000 calls for each port. The default specifies 5000 calls. Use this field in conjunction with the Busy Trigger field.
Busy Trigger	This setting, which works in conjunction with Maximum Number of Calls and Call Forward Busy, determines the maximum number of calls to be presented at the line. If maximum number of calls is set for 50 and the busy trigger is set to 40, then incoming call 41 gets rejected with a busy cause (and will get forwarded if Call Forward Busy is set). If this line is shared, all the lines must be busy before incoming calls get rejected. Use this field in conjunction with Maximum Number of Calls for CTI route points. The default specifies 4500 calls.
Forwarded Call Information Display	

Table 40-1 Field Descriptions for Updating Line Details (continued)

Field	Description
Caller Name	Check this check box to include the caller's name in the display when a forwarded call is received. Default leaves this check box checked.
Caller Number	Check this check box to include the caller's number in the display when receiving a forwarded call.
Redirected Number	Check this check box to include the redirected number in the display when receiving a forwarded call.
Dialed Number	Check this check box to include the dialed number in the display when a forwarded call is received. The default setting leaves this check box checked.

Note To complete the procedure, go to the "Using Query to Update Lines" section on page 40-1.

Related Topics

- Using Query to Update Lines, page 40-1
- Field Descriptions for Updating Lines, page 40-3
- Scheduling Jobs, page 51-1
- BAT Log Files, page 54-3

CHAPTER 41

Adding Lines in UDP

You can add lines to a group of existing user device profiles. When you use the template to add new lines, you cannot change phone services or speed dials. Cisco Unified CallManager Bulk Administration (BAT) ignores those fields on the template when you add lines to existing devices.

To add lines to existing phones or user device profiles, use the following procedure.

Before You Begin

- You must have a BAT template for this transaction. See the "Adding or Updating Lines in a BAT Template" section on page 3-4.
- You must have a CSV data file for this transaction. See the "Using the BAT Spreadsheet to Create User Device Profile CSV Data Files" section on page 32-2 for information.

Adding Lines to Existing UDPs

Use the following procedure to add lines to a group of existing user device profiles.

Procedure

Step 1 Choose **Bulk Administration > User Device Profiles > Add/Update Lines > Add Lines**.

The UDP Add Lines Configuration window displays.

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

Step 3 If you are changing the phone settings for existing phones in the template, check the **Override the existing configuration** check box. The user device profile information also gets updated when this check box is checked.

Step 4 In the Template Name field, choose the User Device Profile template to use for this bulk transaction.

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

Step 6 Click the Run Immediately radio button to insert the phone records immediately or, click Run Later to insert the phone records at a later time.

Step 7 Click **Submit** to create a job for inserting the phone records.

Step 8 Use the Job Scheduler option in the Bulk Administration main menu to schedule and/or activate this job.

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 41-4.

Using the BAT Spreadsheet to Add Lines to Existing UDPs

To create the CSV data file by using the BAT spreadsheet for adding lines to existing UDPs, use the following procedure.

For information about installing and using the BAT spreadsheet, see the "Using the BAT Spreadsheet for Gathering Data" section on page 1-8.

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 fields, click the **Add Lines** tab at the bottom of the spreadsheet.

Step 4 Enter data for an individual device profile 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. Table 41-1 describes the fields for adding lines in the BAT spreadsheet.

Step 5 To transfer the data from the BAT Excel spreadsheet into a CSV formatted data file, click **Export to BAT Format**.

The system saves the file to C:\XLSDataFiles\ or you can use Browse to save your file in another existing folder on your local workstation. The filename is

<tabname>-<timestamp>.txt

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

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

Upload the CSV file to Cisco Unified CallManager Server first node. See "Uploading a File" section on page 2-3.

Note 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.

Additional Topics

See the "Related Topics" section on page 41-4.

Field Descriptions for Adding Lines By Using the BAT Spreadsheet

Table 41-1 provides the field descriptions when you are adding lines by using the BAT spreadsheet. For related procedures, see the "Related Topics" section on page 41-4.

Table 41-1 Field Descriptions for Adding Lines by Using the BAT Spreadsheet

Field	Description
MAC Address/Device Name	Enter the MAC address for phones, VGC virtual phones, and VGC phones. Enter a unique identifier for CTI ports and H.323 clients. Enter the device name for UDPs
Line Index	Enter a number between 1 and 34 for the line index of a phone.
Directory Number	Enter a directory number, up to 24 numerals and special characters, for this line.
Display	Enter the text that you want to display on the called party's phone display, such as the user name (John Smith) or phone location (Conference Room 1). **Note** If this filed is left blank the system uses the value that is entered in the Directory Number field. **Note** The default language specifies English.
Line Text Label	Enter text that identifies this directory number for a line/phone combination. **Note** The default language specifies English
Forward Busy External	Enter the directory number to which a call that is coming from an external number is forwarded when the line is in use. **Note** This setting applies to any dialable phone number, including an outside destination unless restricted, and to all devices that are using this directory number.
Forward No Answer External	Enter the directory number to which a call that is coming from an external number is forwarded when the phone is not answered. **Note** This setting applies to any dialable phone number, including an outside destination unless restricted, and to all devices that are using this directory number.

Table 41-1 Field Descriptions for Adding Lines by Using the BAT Spreadsheet

Field	Description
Forward No Coverage External	Enter the directory number to which a call that is coming from an external number is forwarded when the phone does not have coverage. **Note** This setting applies to any dialable phone number, including an outside destination unless restricted, and to all devices that are using this directory number.
Forward Busy Internal	Enter the directory number to which a call that is coming from an internal number is forwarded when the line is in use. **Note** This setting applies to any dialable phone number, including an outside destination unless restricted, and to all devices that are using this directory number.
Forward No Answer Internal	Enter the directory number to which a call that is coming from an internal number is forwarded when the phone is not answered. **Note** This setting applies to any dialable phone number, including an outside destination unless restricted, and to all devices that are using this directory number.
Forward No Coverage Internal	Enter the directory number to which a call that is coming from an internal number is forwarded when the phone does not have coverage. **Note** This setting applies to any dialable phone number, including an outside destination unless restricted, and to all devices that are using this directory number.
Call Pickup Group	Enter a Pickup Group Name to specify the call pickup group, which can answer incoming calls to this line by dialing the appropriate pickup group number.

Related Topics

- Adding Lines to Existing UDPs, page 41-1
- Using the BAT Spreadsheet to Add Lines to Existing UDPs, page 41-2
- Field Descriptions for Adding Lines By Using the BAT Spreadsheet, page 41-3
- Adding or Updating Lines in a BAT Template, page 3-4

CHAPTER 42

Generating Reports for UDPs

Cisco Unified CallManager Bulk Administration (BAT) provides reports to help you manage records effectively. You can create and save reports that provide information about phones, users, user device profiles, managers and assistants, and gateway records. You can save these reports with a filename and store them in a folder on the first node server to review and print.

You can customize BAT reports for phones and for user device profiles to meet your particular needs by choosing items from a list of device fields and line fields. You can also choose how to arrange the fields in the report. The system generates the report in the CSV file format. Because reports for users, managers, assistants, and gateways have a fixed format, you cannot customize them.

Example

You need to have a list of all the directory numbers with their forwarding destinations by phone model. You can generate a Phone Report for the Cisco Unified IP Phone model 7960 and choose these query details: Device Name, Directory Number, Forward Busy Destination, Forward No Answer Destination, and Label. You can arrange the report fields, so the Label field follows the Directory Number field and precedes the two forward destination numbers.

Additional Information

See the "Related Topics" section on page 42-3.

Generating Reports for User Device Profiles

To generate reports for User Device Profiles (UDP), use this procedure.

Procedure

Step 1 Choose **Bulk Administration > User Device Profiles > Generate UDP Reports**.

The Find and List Device Profiles window displays.

Step 2 From the Find drop-down list box, choose one of the following options:

- User
- Autogenerated
- All

Step 3 From the first Device Profiles where drop-down list box, choose one of the following criteria:

- Profile Name

- Description
- Device Type

Step 4 From the second Device Profiles where drop-down list box, choose one of the following criteria:

- begins with
- contains
- is exactly
- ends with
- is empty
- is not empty

Step 5 Specify the appropriate search text, if applicable.

Tip To find all UDPs that are registered in the database, click **Find** without entering any search text.

Step 6 To further define your query and to add multiple filters, check the Search Within Results check box, choose **AND** or **OR** from the drop-down box, and repeat steps 2 and 5.

Step 7 Click **Find**.

A list of discovered templates displays by:

- Name
- Description
- Device Type
- Profile Type

Step 8 Click **Next** to choose details for your type of report. The Device Profile Report Configuration window displays and shows the Query that you chose. If you want to change the type of query, click **Back**.

Step 9 In the Report File Name field, enter your name for this report (required).

Step 10 In the Available Device Fields drop-down list box, choose a device item and click the arrow to move the item into the Selected Fields for this Report list. You can choose one or more fields to include in your report. For a list of device and live fields, see the "Reports for Phones and IP Telephony Devices" section on page 12-3.

Step 11 Arrange the order of the items in the Selected Device Fields for this Report list by choosing an item and clicking the Up arrow or Down arrow to move the item to another position in the list.

Step 12 In the Available Line Fields drop-down list box, choose a line item and click the arrow to move the item into the Selected Fields for this Report list. You can choose one or more fields to include in your report.

Step 13 Arrange the order of the line items in the Selected Line Fields for this Report list by choosing an item and clicking the Up arrow or Down arrow to move the item to another position in the list.

Note You must specify at least one device or line field to generate a report.

Step 14 In the Additional IP Services Fields area, check the check boxes for Speed Dial Services and/or IP phone Services, as needed.

Step 15 In the Job Information area, enter the Job description.

Step 16 Click the **Run Immediately** radio button to generate report for UDPs immediately or, click **Run Later** generate reports at a later time.

Step 17 Click **Submit** to create a job for generate report for UDPs.

Step 18 Use the Job Scheduler option in the Bulk Administration main menu to schedule and/or activate this job.

For more information on jobs, see 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 42-3.

Related Topics

- Generating Reports for User Device Profiles, page 42-1
- Reports for Phones and IP Telephony Devices, page 12-3
- Scheduling Jobs, page 51-1
- BAT Log Files, page 54-3

PART 8

Gateways

CHAPTER 43

Gateway Template

You can use Cisco Unified CallManager Bulk Administration (BAT) to configure some Cisco gateways and ports in the Cisco Unified CallManager database in batches, rather than to add each gateway and port individually.

The following topics provide information and procedures for these tasks:

Adding Cisco Gateways

You can use BAT to add the Cisco gateways to the Cisco Unified CallManager database.

Before adding the VG200 gateways, you must first configure the gateway by using the Cisco IOS software command line interface (CLI). For gateway configuration procedures and commands, refer to the configuration documentation that is supplied with the gateway.

When using BAT to add the Cisco VG200 gateways to the Cisco Unified CallManager database, you can configure the following types of trunks or ports:

- Foreign Exchange Station (FXS) ports for analog devices
- Foreign Exchange Office (FXO) for loopstart or groundstart trunks
- T1 Primary Rate Interface (PRI) trunks for ISDN services in North America—Currently available only for Cisco VG200 gateways
- E1 Primary Rate Interface (PRI) trunks for ISDN services in Europe—Currently available only for Cisco VG200 gateways.
- Digital Access T1 protocol trunks

To add Cisco VG200 gateways to Cisco Unified CallManager, perform the following tasks:

1. Create a Cisco VG200 gateway template to define common values for a set of gateways and ports. See the "Creating a Cisco VG200 Gateway Template" section on page 43-4.

2. Create a CSV data file to define individual values for each gateway and port that you want to add. See the "Creating CSV Data Files for Cisco VG200 Gateways" section on page 44-1.
3. Insert gateways and ports in the Cisco Unified CallManager database. See the "Inserting Gateways to Cisco Unified CallManager" section on page 44-4.

To insert Cisco Catalyst 6000 (FXS) gateway and ports to Cisco Unified CallManager, you must perform the following tasks:

1. Create a Cisco Catalyst 6000 (FXS) gateway template. See the "Creating a Cisco Catalyst 6000 (FXS) Gateway Template" section on page 43-8
2. To define common values for a set of FXS ports, create a Cisco Catalyst 6000 (FXS) ports template. See the "Field descriptions for FXS/FXO Port Configuration" section on page 43-13.
3. To define individual values for the FXS ports that you want to add, create a CSV data file. See the Creating the CSV Data File for Cisco Catalyst 6000 (FXS) Ports, page 44-3.
4. To insert the FXS ports in the Cisco Unified CallManager database, see the "Inserting Gateways to Cisco Unified CallManager" section on page 44-4.

Before using BAT to add the FXS ports for the analog interface modules, you must install the Cisco Catalyst 6000 gateway by performing these tasks:

1. Configure the gateway by using Cisco IOS software command line interface. See the documentation that was supplied with your gateway for configuration instructions.
2. Use Cisco Unified CallManager Administration to add the Cisco Catalyst 6000 gateway in the Cisco Unified CallManager database. In Cisco Unified CallManager Administration, choose **Device > Gateway** and click **Add New**. Choose the Cisco Catalyst 6000 24 Port FXS Gateway and device protocol and then click **Next**. For more information, refer to the *Cisco Unified CallManager Administration Guide*.

You can use BAT to add FXS ports on the Cisco Catalyst 6000 (FXS) analog interface modules for analog devices. You must configure a Gateway Directory Number template to associate with these FXS ports and a Catalyst 6000 (FXS) ports template before adding these ports to the Cisco Unified CallManager database.

Additional Topics

See the "Related Topics" section on page 43-36.

Finding a Gateway Template

Because you might have several gateway templates, Cisco Unified CallManager lets you locate specific template on the basis of specific criteria. Use the following procedure to locate templates.

Note During your work in a browser session, your find/list search preferences are stored in the cookies on the client machine. If you navigate to other menu items and return to this menu item, or if you close the browser and then reopen a new browser window, your Cisco Unified CallManager search preferences are retained until you modify your search.

Procedure

Step 1 Choose **Bulk Administration > Gateways > Gateway Template**.

The Find and List Gateway window displays.

Step 2 From the first Find Gateways where drop-down list box, choose one of the following criteria:

- Name
- Description
- DN/Route Pattern
- Calling Search Space
- Device Pool
- Route Group Name
- Device Type

Step 3 From the second Find Gateways where drop-down list box, choose one of the following criteria:

- begins with
- contains
- is exactly
- ends with
- is empty
- is not empty

Step 4 Specify the appropriate search text, if applicable.

Tip To find all gateways that are registered in the database, click **Find** without entering any search text.

Step 5 Choose **Show** from the third drop-down list box to show the end points associated with gateways, and click **Find**.

A list of discovered templates displays by:

- Device Name
- Description
- Device Pool
- Status
- IP Address

Step 6 From the list of records, click the device name that matches your search criteria.

The Gateway Configuration window displays.

Additional Information

See the "Related Topics" section on page 43-36

Adding or Editing a Gateway Template

Use the following procedure to create a new VG200 or Cisco Catalyst 6000 (FXS) Ports template:

Procedure

Step 1 Choose **Bulk Administration > Gateways > Gateway Template**. The Find and List Gateway Template window displays.

- To edit an existing gateway template, see the "Finding a Gateway Template" section on page 43-2 and select the gateway you want to edit.

  See "Field Descriptions for VG200 Gateway Template" section on page 43-9 and "Field Descriptions for Cisco Catalyst 24 Port FXS Gateway Template" section on page 43-10.
- To add a new gateway, click **Add New**. The Add a New Gateway window displays.

Step 2 Complete one of the following procedures:

- To create a VG200 template, see the "Creating a Cisco VG200 Gateway Template" section on page 43-4.
- To create Cisco Catalyst 6000 (FXS) Ports template, see "Creating a Cisco Catalyst 6000 (FXS) Gateway Template" section on page 43-8.

Creating a Cisco VG200 Gateway Template

You must create a Cisco VG200 template and then add endpoint identifiers for the network modules.

You must use a BAT template to configure the following endpoint identifiers:

- Foreign Exchange Station (FXS) ports
- Foreign Exchange Office (FXO) trunks
- T1 PRI trunks
- E1 PRI trunks
- T1 CAS trunks

Before You Begin

Use the following procedure to add a VG200 Gateway template.

Procedure

Step 1 Choose **Bulk Administration > Gateways > Gateway Template.**

The Find and List Gateway window displays.

Step 2 Click **Add New**. The Add a New Gateway window displays.

Step 3 From the Gateway Type drop-down list box, choose Cisco VG200 and click **Next**. The Gateway Configuration window displays.

Step 4 Enter values for all the fields. See "Field Descriptions for VG200 Gateway Template" section on page 43-9:

Step 5 Click **Save**. When the insert completes, a new field displays on the pane.

Step 6 In the Subunit field(s), choose the appropriate type for each subunit field:

- VIC-2FXS—Foreign Exchange Station (FXS) voice interface card

- VIC-2FXO—Foreign Exchange Office (FXO) voice interface card
- VWIC-1MFT-T1—Voice WAN interface card with one endpoint for T1 CAS or T1 PRI
- VWIC-2MFT-T1—Voice WAN interface card with two endpoints for T1 CAS or T1 PRI
- VWIC-1MFT-E1—Voice WAN interface card with one endpoint for E1 PRI
- VWIC-2MFT-E1—Voice WAN interface card with two endpoints for E1 PRI

Step 7 Click **Save**. When the Status indicates that the update completed, the endpoint identifiers display as links to the right of the subunit drop-down list boxes.

Step 8 Click an endpoint identifier (for example, 1/0/0) to configure device protocol information and add ports for the installed types of VICs.

For detailed instructions, see the following procedures:

- Adding FXS Ports to VG200 Gateway Template, page 43-5
- Adding FXO Ports to an VG200 Gateway Template, page 43-6
- Adding Digital Access T1 (T1-CAS) Ports to an VG200 Gateway Template, page 43-7
- Adding a T1 PRI or E1 PRI Device to an VG200 Gateway Template, page 43-7

Step 9 To reset the gateway and apply the changes, click **Reset**.

Step 10 Continue configuring endpoint information and ports as needed.

Adding Ports to a VG200 Gateway Template

The device protocols and port types that can be configured on VG200 gateways vary by the type of installed voice interface cards. This section contains the following procedures:

- Adding FXS Ports to VG200 Gateway Template, page 43-5
- Adding FXO Ports to an VG200 Gateway Template, page 43-6
- Adding Digital Access T1 (T1-CAS) Ports to an VG200 Gateway Template, page 43-7
- Adding a T1 PRI or E1 PRI Device to an VG200 Gateway Template, page 43-7

Adding FXS Ports to VG200 Gateway Template

You can use Foreign Exchange Station (FXS) ports to connect to any POTS device. Use this procedure to add FXS ports on a VG200 gateway template.

Before You Begin

You must add an VG200 gateway template before configuring ports. See the "Creating a Cisco VG200 Gateway Template" section on page 43-4 for instructions.

Procedure

Step 1 To find the gateway template to which you want to add FXS ports, see "Finding a Gateway Template" section on page 43-2

Step 2 From the Gateway Template Configuration window, click the endpoint identifier for the FXS VIC that you want to configure.

The window refreshes and displays the Gateway Template Configuration window with the end-point icons.

Step 3 Enter the appropriate **Gateway Information** and **Port Information** settings. See the following sections for details about these fields:

- Field descriptions for FXS/FXO Port Configuration, page 43-13
- POTS Port Configuration Settings, page 43-33

Step 4 Click **Save**.

Note After you insert a POTS port, the window refreshes and displays the POTS port information at the bottom of the window. An **Add a new DN** link displays in the Directory Number Information area in the left panel.

Step 5 Click **Add a new DN** to add directory numbers to the POTS port or, if you configured another type of port, go to Step 7.

Note See "Adding or Updating Lines in a BAT Template" section on page 3-4 for information about adding and configuring DNs.

Step 6 To return to the main VG200 Gateway Template Configuration window for the gateway to which you just added the ports, choose **Back to MGCP Configuration** in the Related Links drop-down list box and click **Go**.

Step 7 To reset the gateway and apply the changes, click **Reset**.

Step 8 Repeat Step 2 through Step 6 to add additional FXS ports.

Additional Information

See the "Related Topics" section on page 43-36.

Adding FXO Ports to an VG200 Gateway Template

You can use Foreign Exchange Office (FXO) ports for connecting to a central office or PBX. Use this procedure to add and configure FXO ports for loop start or ground start on an VG200 gateway template.

Note Cisco Unified CallManager assumes all loop-start trunks lack positive disconnect supervision. Configure trunks with positive disconnect supervision as ground start, so active calls can be maintained during a Cisco Unified CallManager server failover.

Before You Begin

You must add a VG200 gateway template before configuring ports. See the "Creating a Cisco VG200 Gateway Template" section on page 43-4 for instructions.

Procedure

Step 1 To find the gateway template to which you want to add FXS ports, see "Finding a Gateway Template" section on page 43-2

Step 2 From the Gateway Configuration window, click the endpoint identifiers of the FXO port that you want to configure.

Step 3 From the Port Type drop-down list box, choose either **Ground Start** or **Loop Start**.

Note You must choose the same port type for both endpoint identifiers of the VIC-2FXO port. If you choose different port types, a message displays.

Step 4 Enter the appropriate **Gateway Configuration** and **Port Information** settings described in "Field descriptions for FXS/FXO Port Configuration" section on page 43-13

Step 5 Click **Save**.

Step 6 To return to the main VG200 gateway configuration window for the gateway to which you just added the ports, choose **Back to MGCP Configuration** in the Related Links drop-down list box and click **Go**.

Step 7 To reset the gateway and apply the changes, click **Reset**.

Step 8 To add more FXO ports, repeat Step 2 though Step 5.

Additional Information

See the "Related Topics" section on page 43-36.

Adding Digital Access T1 (T1-CAS) Ports to an VG200 Gateway Template

Use this procedure to add Digital Access T1 (T1-CAS) ports to an VG200 gateway.

Step 1 To find the gateway template to which you want to add FXS ports, see "Finding a Gateway Template" section on page 43-2

Step 2 From the Gateway Configuration window, click the endpoint identifier of the Digital Access T1 (T1-CAS) port that you want to configure.

In the Device Protocol drop-down list box that displays, choose **Digital Access T1** and click **Next**.

Step 3 Enter the appropriate Gateway Configuration settings. See the "Field Descriptions for Digital Access T1 Trunks on a Cisco VG200 Gateway Template" section on page 43-16 for details.

Step 4 Click **Save**.

Step 5 To reset the gateway and apply the changes, click **Reset**.

Step 6 See the "Port Configuration Settings" section on page 43-32 for the appropriate settings for the port type that you choose.

Additional Information

See the "Related Topics" section on page 43-36.

Adding a T1 PRI or E1 PRI Device to an VG200 Gateway Template

Step 1 To find the gateway template to which you want to add FXS ports, see "Finding a Gateway Template" section on page 43-2

Step 2 From the Gateway Configuration window, click the endpoint identifier of the T1 PRI or E1 PRI port that you want to configure.

Step 3 Configure the T1 PRI or E1 PRI device protocol settings. See the "Field Descriptions for T1 PRI or E1 PRI Trunks on a Cisco VG200 Gateway Template" section on page 43-19 for detailed field descriptions.

Step 4 Click **Save**.

Step 5 To reset the gateway and apply the changes, click **Reset**.

Additional Information

See the "Related Topics" section on page 43-36.

Creating a Cisco Catalyst 6000 (FXS) Gateway Template

To create a Cisco Catalyst 6000 FXS gateway template, use this procedure. You must complete all fields unless otherwise noted.

Step 1 Choose **Bulk Administration > Gateways > Gateway Template.**

The Find and List Gateway window displays.

Step 2 Click **Add New**. The Add a New Gateway window displays.

Step 3 From the Gateway Type drop-down list box, choose Cisco Catalyst 6000 24 Port FXS Gateway. The Gateway Configuration window displays.

Step 4 In the Template Name field, enter a unique name for this template.

Step 5 Enter the settings for the fields. See the "Field Descriptions for Cisco Catalyst 24 Port FXS Gateway Template" section on page 43-10 for more information.

Step 6 Click **Save**.

Step 7 Click **Add a New Port**.

A port configuration dialog opens in a separate window.

Step 8 From the drop-down list box, choose **POTS** as the port type depending on the gateway model that you are configuring."Field Descriptions for T1 PRI or E1 PRI Trunks on a Cisco VG200 Gateway Template" section on page 43-19

Step 9 Enter the appropriate port configuration settings as described in the "POTS Port Configuration Settings" section on page 43-33.

Step 10 Click **Save.**

If you have inserted POTS ports, the window refreshes and displays the POTS port in the list on the left side of the window. An **Add DN** link displays to the right of the new port.

Step 11 To add a directory numbers to an FXS port, click **Add DN**.

For information about adding and configuring directory numbers, see the "Adding or Updating Lines in a BAT Template" section on page 3-4 and the.

Step 12 Click **Save**. When the Status indicates that the update completed, the template displays on the Find and List Gateways window. To go back to the Find and List window, choose **Back to Find and List** from the **Related Links** drop-down list box in the top, right corner of the window.

Additional Topics

See the "Related Topics" section on page 43-36.

Gateway Configuration Settings

See the following sections for tables that list detailed descriptions for all gateway configuration fields:

- Field Descriptions for VG200 Gateway Template, page 43-9
- Field Descriptions for Cisco Catalyst 24 Port FXS Gateway Template, page 43-10
- Field descriptions for FXS/FXO Port Configuration, page 43-13
- Field Descriptions for Digital Access T1 Trunks on a Cisco VG200 Gateway Template, page 43-16
- Field Descriptions for T1 PRI or E1 PRI Trunks on a Cisco VG200 Gateway Template, page 43-19

For detailed information about port configuration settings, see the "Port Configuration Settings" section on page 43-32.

Field Descriptions for VG200 Gateway Template

Table 43-1 provides detailed descriptions for VG200 gateway template configuration settings. For related procedures, see the "Related Topics" section on page 43-36.

Table 43-1 VG200 Gateway Configuration Settings

Field	Description
Template Name	Enter a name of up to 64 characters that identifies the Cisco VG200 gateway template.
Description	Enter a description that clarifies the purpose of the device.
Cisco Unified CallManager Group	From the drop-down list box, choose a Cisco Unified CallManager redundancy group. A Cisco Unified CallManager redundancy group includes a prioritized list of up to three Cisco Unified CallManagers. The first Cisco Unified CallManager in the list serves as the primary Cisco Unified CallManager. If the primary Cisco Unified CallManager is not available or fails, the gateway attempts to connect with the next Cisco Unified CallManager in the list and so on.
Configured Slots, VICs, and Endpoints **Note** You must specify the beginning port number for some VICs. For example, if the VIC in Subunit 0 begins at 0 and has two ports (0 and 1), the VIC in Subunit 1 must begin at a port number greater than 1 and have two ports (2 and 3 or 4 and 5). **Note** VG200 gateway has only one slot.	

Table 43-1 VG200 Gateway Configuration Settings (continued)

Field	Description
Module in Slot 1	For the available slot on the VG200 gateway, choose from the following type of modules: • NM-1V—Network Module-1Voice has one voice interface card (VIC) in Sub-Unit 0 for FXS or FXO. • NM-2V—Network Module-2Voice has two VICs, one in Sub-Unit 0 and one in Sub-Unit 1 for either FXS or FXO. • NM-HDV—Network Module-High Density Voice has one VIC in Sub-Unit 0 either for T1 CAS or T1 PRI, or for E1 PRI. • None—No network modules are installed.
Product-Specific Configuration	
Model-specific configuration fields defined by the gateway manufacturer	The gateway manufacturer specifies the model-specific fields under product-specific configuration. Because they are dynamically configured, they can change without notice. To view field descriptions and help for product-specific configuration items, click the "**i**" information icon to the right of the **Product Specific Configuration** heading to display help in a popup dialog box. If you need more information, refer to the documentation for the specific gateway that you are configuring or contact the manufacturer.

Field Descriptions for Cisco Catalyst 24 Port FXS Gateway Template

Table 43-2 lists configuration settings for Cisco Catalyst 6000 24 port FXS Gateway template. For related procedures, see the "Related Topics" section on page 43-36.

Table 43-2 Cisco Catalyst 6000 24 Port FXS Gateway Configuration Settings

Field	Description
Description	Enter the purpose of the device.
Device Pool	From the drop-down list box, choose the appropriate device pool. The device pool specifies a collection of properties for this device including CallManager Group, Date/Time Group, Region, and Calling Search Space for auto-registration of devices.
Media Resource Group List	This list provides a prioritized grouping of media resource groups. An application chooses the required media resource, such as a Music On Hold server, from among the available media resources according to the priority order that a Media Resource Group List defines.

Table 43-2 Cisco Catalyst 6000 24 Port FXS Gateway Configuration Settings (continued)

Field	Description
Calling Search Space	From the drop-down list box, choose the appropriate calling search space. The calling search space specifies a collection of partitions that are searched to determine how a collected (originating) number should be routed. You can configure the number of calling search spaces that display in this drop-down list box by using the Max List Box Items enterprise parameter. If more calling search spaces exist than the Max List Box Items enterprise parameter specifies, the ellipsis button (**...**) displays next to the drop-down list box. Click the **...** button to display the Select Calling Search Space window. Enter a partial calling search space name in the **List items where Name contains** field. Click the desired calling search space name in the list of calling search spaces that displays in the **Select item to use** box and click **OK**. **Note** To set the maximum list box items, choose **System > Enterprise Parameters** and choose **Unified CMAdmin Parameters**.
AAR Calling Search Space	Choose the appropriate calling search space for the device to use when it performs automated alternate routing (AAR). The AAR calling search space specifies the collection of route partitions that are searched to determine how to route a collected (originating) number that is otherwise blocked due to insufficient bandwidth.
Location	Choose the appropriate location for this device. The location specifies the total bandwidth that is available for calls to and from this location. A location setting of None means that the locations feature does not keep track of the bandwidth that this device consumes.
AAR Group	Choose the automated alternate routing (AAR) group for this device. The AAR group provides the prefix digits that are used to route calls that are otherwise blocked due to insufficient bandwidth. An AAR group setting of None specifies that no rerouting of blocked calls will be attempted.
Network Locale	From the drop-down list box, choose the locale that is associated with the gateway. The network locale identifies a set of detailed information to support the hardware in a specific location. The network locale contains a definition of the tones and cadences that the device uses in a specific geographic area. **Note** Choose only a network locale that is already installed and supported by the associated devices. The list contains all available network locales for this setting, but not all are necessarily installed. If the device is associated with a network locale that it does not support in the firmware, the device will fail to come up.

Table 43-2 Cisco Catalyst 6000 24 Port FXS Gateway Configuration Settings (continued)

Field	Description
Port Selection Order	Choose the order in which ports are chosen. If you are not sure which port order to use, choose TOP_DOWN: • TOP_DOWN—Selects ports in descending order, from port 1 to port 8. • BOTTOM_UP—Selects ports in ascending order, from port 8 to port 1.
Load Information	Enter the appropriate firmware load information for the gateway. The values that you enter here override the default values for this gateway.
Transmit UTF-8 for Calling Party Name	This device uses the user locale setting of the device's device pool to determine whether to send unicode and whether to translate received unicode information. For the sending device, if you check this check box and the user locale setting in the device's device pool matches the terminating phone's user locale, the device sends unicode. If the user locale settings do not match, the device sends ASCII. The receiving device translates incoming unicode characters based on the user locale setting of the sending device's device pool. If the user locale setting matches the terminating phone's user locale, the phone displays the characters. **Note** The phone may display junk characters if the two ends of the trunk configure user locales that do not belong to the same language group.
Multilevel Precedence and Preemption (MLPP) Information	
MLPP Domain	From the drop-down list box, choose an MLPP domain to associate with this device. If you leave the value <*None*>, this device inherits its MLPP domain from the value that was set for the device's device pool. If the device pool does not have an MLPP Domain setting, this device inherits its MLPP Domain from the value that was set for the MLPP Domain Identifier enterprise parameter.
MLPP Indication	This device type does not have this setting.
MLPP Preemption	This setting does not have this device type.

Table 43-2 Cisco Catalyst 6000 24 Port FXS Gateway Configuration Settings (continued)

Field	Description
Product-Specific Configuration	
Model-specific configuration fields that the gateway manufacturer defines	The gateway manufacturer specifies the model-specific fields under product-specific configuration. Because they are dynamically configured, they can change without notice. To view field descriptions and help for product-specific configuration items, click the "**i**" information icon to the right of the **Product Specific Configuration** heading to display help in a popup dialog box. If you need more information, refer to the documentation for the specific gateway that you are configuring or contact the manufacturer.

Field descriptions for FXS/FXO Port Configuration

Table 43-3 provides detailed descriptions for FXS/FXO port configuration settings. For related procedures, see the "Related Topics" section on page 43-36.

For the VG200 gateway, not all switch emulation types support the network side. How you configure the gateway switch type determines whether you may or may not be able to set network side.

Table 43-3 FXS/FXO Port Configuration Settings

Field	Description
Device Information	
End-Point Name	For VG200 gateways, this display-only field contains a string that Cisco Unified CallManager generates that uniquely identifies the VG200 analog interface.
Description	Enter a description that clarifies the purpose of the device.
Device Pool	From the drop-down list box, choose the appropriate device pool. The device pool specifies a collection of properties for this device including CallManager Group, Date/Time Group, Region, and Calling Search Space for auto registration of devices.
Media Resource Group List	This list provides a prioritized grouping of media resource groups. An application chooses the required media resource, such as a Music On Hold server, from among the available media resources according to the priority order that is defined in a Media Resource Group List.

Table 43-3 FXS/FXO Port Configuration Settings (continued)

Field	Description
Calling Search Space	From the drop-down list box, choose the appropriate calling search space. A calling search space comprises a collection of route partitions that are searched to determine how a collected (originating) number should be routed. You can configure the number of calling search spaces that display in this drop-down list box by using the Max List Box Items enterprise parameter. If more calling search spaces exist than the Max List Box Items enterprise parameter specifies, the ellipsis button (**...**) displays next to the drop-down list box. Click the **...** button to display the Select Calling Search Space window. Enter a partial calling search space name in the **List items where Name contains** field. Click the desired calling search space name in the list of calling search spaces that displays in the **Select item to use** box and click **OK**. **Note** To set the maximum list box items, choose **System > Enterprise Parameters** and enter a value for Max List Box Items in the Unified CMAdmin Parameters pane.
AAR Calling Search Space	Choose the appropriate calling search space for the device to use when it performs automated alternate routing (AAR). The AAR calling search space specifies the collection of route partitions that are searched to determine how to route a collected (originating) number that is otherwise blocked due to insufficient bandwidth.
Location	Choose the appropriate location for this device. The location specifies the total bandwidth that is available for calls to and from this location. A location setting of None means that the locations feature does not keep track of the bandwidth that this device consumes.
AAR Group	Choose the automated alternate routing (AAR) group for this device. The AAR group provides the prefix digits that are used to route calls that are otherwise blocked due to insufficient bandwidth. An AAR group setting of None specifies that no rerouting of blocked calls will be attempted.
Network Locale	From the drop-down list box, choose the locale that is associated with the gateway. The network locale identifies a set of detailed information to support the hardware in a specific location. The network locale contains a definition of the tones and cadences that the device uses in a specific geographic area. **Note** Choose only a network locale that is already installed and that the associated devices support. The list contains all available network locales for this setting, but not all are necessarily installed. If the device is associated with a network locale that it does not support in the firmware, the device will fail to come up.

Table 43-3 FXS/FXO Port Configuration Settings (continued)

Field	Description
Transmit UTF-8 for Calling Party Name	This device uses the user locale setting of the device's device pool to determine whether to send Unicode and whether to translate received Unicode information. For the sending device, if you check this check box and the user locale setting in the device's device pool matches the terminating phone's user locale, the device sends Unicode. If the user locale settings do not match, the device sends ASCII. The receiving device translates incoming Unicode characters based on the user locale setting of the sending device's device pool. If the user locale setting matches the terminating phone's user locale, the phone displays the characters. **Note** The phone may display junk characters if the two ends of the trunk configure user locales that do not belong to the same language group.
Multilevel Precedence and Preemption (MLPP) Information	
MLPP Domain	From the drop-down list box, choose an MLPP domain to associate with this device. If you leave the value <*None*>, this device inherits its MLPP domain from the value set for the device's device pool. If the device pool does not have an MLPP Domain setting, this device inherits its MLPP Domain from the value set for the MLPP Domain Identifier enterprise parameter.
Port Information (POTS)	
Port Direction	Choose the direction of calls that are passing through this port: • Inbound—Use for incoming calls only. • Outbound—Use for outgoing calls. • Bothways—Use for inbound and outbound calls (default).
Prefix DN (for FXS ports)	Enter the prefix digits that are appended to the digits that this trunk receives on incoming calls. The Cisco Unified CallManager adds prefix digits after first truncating the number in accordance with the Num Digits setting.
Num Digits (for FXS ports)	Enter the number of significant digits to collect, from 0 to 32. Cisco Unified CallManager counts significant digits from the right (last digit) of the number called. Use this field for the processing of incoming calls and to indicate the number of digits starting from the last digit of the called number that is used to route calls coming into the PRI span. See Prefix DN.
Expected Digits (for FXS ports)	Enter the number of digits that are expected on the inbound side of the trunk. For this rarely used field, leave zero as the default value if you are unsure.

Table 43-3 FXS/FXO Port Configuration Settings (continued)

Field	Description
SMDI Port Number (0-4096)	Use this field for analog access ports that connect to a voice-messaging system. Set the SMDI Port Number equal to the actual port number on the voice-messaging system to which the analog access port connects. **Note** Voice-mail logical ports typically must match physical ports for the voice-messaging system to operate correctly.
Unattended Port	Check this check box to indicate an unattended port on this device.
Port Information (Loop Start and Ground Start) (for FXO ports)	
Port Direction	Choose the direction of calls that pass through this port: • Inbound—Use for incoming calls only. • Outbound—Use for outgoing calls. • Both Ways—Use for inbound and outbound calls.
Attendant DN	Enter the directory number to which you want incoming calls routed; for example, zero or a directory number for an attendant.
Product-Specific Configuration	
Model-specific configuration fields defined by the gateway manufacturer	The gateway manufacturer specifies the model-specific fields under product-specific configuration. Because they are dynamically configured, they can change without notice. To view field descriptions and help for product-specific configuration items, click the "**?**" information icon to the right of the **Product Specific Configuration** heading to display help in a popup dialog box. If you need more information, refer to the documentation for the specific gateway that you are configuring or contact the manufacturer.

Field Descriptions for Digital Access T1 Trunks on a Cisco VG200 Gateway Template

Table 43-4 provides detailed field descriptions for adding or updating values for the T1 CAS trunks on a Cisco VG200 gateway.

Some fields display the values that were configured in Cisco Unified CallManager Administration.

In the BAT user interface, field names that have an asterisk require an entry. Consider an entry in fields without an asterisk as optional.

For related procedures, see the "Related Topics" section on page 43-36.

Table 43-4 Digital Access T1 (T1-CAS) Configuration Settings

Field	Description
End-Point Name	For VG200 gateways, this display-only field contains a string that Cisco Unified CallManager generates that uniquely identifies the VG200 digital interface. For example: S1/DS1-0@VG200-2 S1 indicates slot 1, DS1-0 designates the digital interface, and @VG200-2 designates the VG200 template name.
Description	Enter a description that clarifies the purpose of the device.
Device Pool	From the drop-down list box, choose the appropriate device pool. The device pool specifies a collection of properties for this device including CallManager Group, Date/Time Group, Region, and Calling Search Space for auto-registration of devices.
Call Classification	This parameter determines whether an incoming call that is using this gateway is considered off the network (OffNet) or on the network (OnNet). When the Call Classification field is configured as Use System Default, the setting of the Cisco Unified CallManager clusterwide service parameter, Call Classification, determines whether the gateway is OnNet or OffNet. This field provides an OnNet or OffNet alerting tone when the call is OnNet or OffNet, respectively.
Media Resource Group List	This list provides a prioritized grouping of media resource groups. An application chooses the required media resource, such as a Music On Hold server, from among the available media resources according to the priority order that is defined in a Media Resource List.
Calling Search Space	From the drop-down list box, choose the appropriate calling search space. A calling search space designates a collection of route partitions that are searched to determine how a collected (originating) number should be routed. You can configure the number of calling search spaces that display in this drop-down list box by using the Max List Box Items enterprise parameter. If more calling search spaces exist than the Max List Box Items enterprise parameter specifies, the ellipsis button (**...**) displays next to the drop-down list box. Click the **...** button to display the Select Calling Search Space window. Enter a partial calling search space name in the **List items where Name contains** field. Click the desired calling search space name in the list of calling search spaces that displays in the **Select item to use** box and click **OK**. **Note** To set the maximum list box items, choose **System > Enterprise Parameters** and choose **Unified CMAdmin Parameters**.

Table 43-4 Digital Access T1 (T1-CAS) Configuration Settings (continued)

Field	Description
AAR Calling Search Space	Choose the appropriate calling search space for the device to use when automated alternate routing (AAR) is performed. The AAR calling search space specifies the collection of route partitions that are searched to determine how to route a collected (originating) number that is otherwise blocked due to insufficient bandwidth.
Location	Choose the appropriate location for this device. The location specifies the total bandwidth that is available for calls to and from this location. A location setting of None means that the locations feature does not keep track of the bandwidth that this device consumes.
AAR Group	Choose the automated alternate routing (AAR) group for this device. The AAR group provides the prefix digits that are used to route calls that are otherwise blocked due to insufficient bandwidth. An AAR group setting of None specifies that no rerouting of blocked calls will be attempted.
MLPP Domain	From the drop-down list box, choose an MLPP domain to associate with this device. If you leave the value <*None*>, this device inherits its MLPP domain from the value that was set for the device's device pool. If the device pool does not have an MLPP Domain setting, this device inherits its MLPP Domain from the value that was set for the MLPP Domain Identifier enterprise parameter.
Handle DTMF Precedence Signals	Check this box to enable this gateway to interpret special DTMF signals as MLPP precedence levels.
Load Information	Enter the appropriate firmware load information for the gateway. The values that you enter here override the default values for this gateway.
Port Selection Order	Choose the order in which channels or ports are allocated for outbound calls from first (lowest number port) to last (highest number port) or from last to first. Valid entries include TOP_DOWN (first to last) or BOTTOM_UP (last to first). If you are not sure which port order to use, choose TOP_DOWN.
Digit Sending	Choose one of the following digit sending types for out-dialing: • DTMF—Dual-tone multifrequency. Normal touchtone dialing • MF—Multifrequency • PULSE—Pulse (rotary) dialing

Table 43-4 Digital Access T1 (T1-CAS) Configuration Settings (continued)

Field	Description
Network Locale	From the drop-down list box, choose the locale that is associated with the gateway. The network locale identifies a set of detailed information to support the hardware in a specific location. The network locale contains a definition of the tones and cadences that the device uses in a specific geographic area. **Note** Choose only a network locale that is already installed and supported by the associated devices. The list contains all available network locales for this setting, but not all are necessarily installed. If the device is associated with a network locale that it does not support in the firmware, the device will fail to come up.
SMDI Base Port	Enter the first SMDI port number of the T1 span. If you set this parameter to a nonzero value and this gateway belongs to an unknown type of route list, route group, or route list, hunting does not continue past this span.
Product-Specific Configuration	
Model-specific configuration fields that the gateway manufacturer defines	The gateway manufacturer specifies the model-specific fields under product-specific configuration. Because they are dynamically configured, they can change without notice. To view field descriptions and help for product-specific configuration items, click the "**?**" information icon to the right of the **Product Specific Configuration** heading to display help in a popup dialog box. If you need more information, refer to the documentation for the specific gateway that you are configuring or contact the manufacturer.

Additional Topics

See the "Related Topics" section on page 43-36.

Field Descriptions for T1 PRI or E1 PRI Trunks on a Cisco VG200 Gateway Template

Table 43-5 provides field descriptions for adding or updating values for T1 PRI or E1 PRI trunks on a Cisco VG200 gateway.

Some fields display the values that were configured in Cisco Unified CallManager Administration.

In the BAT user interface, field names that have an asterisk require an entry. Consider an entry in fields without an asterisk as optional.

For related procedures, see the "Related Topics" section on page 43-36.

Table 43-5 Field Descriptions for T1 PRI or E1 PRI Trunks

Field	Description
Device Information	
Endpoint Name	For VG200 gateways, this display-only field contains a string that is generated by Cisco Unified CallManager that uniquely identifies the VG200 endpoint. For example: S1/DS1-0@VG200-2 S1 indicates slot 1, DS1-0 designates the digital interface, and @VG200-2 designates the VG200 domain name.
Description	Enter a description for the end-point that you are configuring.
Device Pool	Choose the device pool for this group of gateways/ports. A device pool defines sets of common characteristics for devices, such as region, date/time group, Cisco Unified CallManager group, and calling search space for auto-registration.
Call Classification	From the drop-down list box, choose an option to configure the device as on net, off net, or system default. If you chose 'Use System Default' at the device level, the system uses the value of the service parameter to determine whether the device is internal (on net) or external (off net).
Network Locale	Choose the network locale that you want to associate with this gateway. The Network Locale comprises a set of tones and cadences that Cisco gateways and phones use when communicating with the PSTN and other networks in a specific geographical area.
Media Resource Group List	Choose the media resource group list (MRGL) for this group of gateways/ports. An MRGL specifies a list of prioritized media resource groups. An application can choose required media resources from among the available ones according to the priority order that is defined in the MRGL.

Table 43-5 Field Descriptions for T1 PRI or E1 PRI Trunks (continued)

Field	Description
Location	Choose the location for this group of gateways/ports. A location indicates the remote location that is accessed by using restricted bandwidth connections.
AAR Group	Choose the automated alternate routing (AAR) group for this device. The AAR group provides the prefix digits that are used to route calls that are otherwise blocked due to insufficient bandwidth. An AAR group setting of None specifies that no rerouting of blocked calls will be attempted.
Load Information	Enter the appropriate load information for the custom software for gateway. The values that you enter here override the default values for this gateway. To use the default load, leave this field blank.
Transmit UTF-8 for Calling Party Name	This device uses the user locale setting of the device's device pool to determine whether to send Unicode and whether to translate received Unicode information. For the sending device, if you check this check box and the user locale setting in the device's device pool matches the terminating phone's user locale, the device sends Unicode. If the user locale settings do not match, the device sends ASCII. The receiving device translates incoming Unicode characters based on the user locale setting of the sending device's device pool. If the user locale setting matches the terminating phone's user locale, the phone displays the characters. The phone may display junk characters if the two ends of the trunk configure user locales that do not belong to the same language group.
Multilevel Precedence and Preemption (MLPP) Information	
MLPP Domain (e.g., "0000FF")	Enter a hexadecimal value for the MLPP domain that is associated with this device. Ensure that the value is blank or a value between 0 and FFFFFF.

Table 43-5 Field Descriptions for T1 PRI or E1 PRI Trunks (continued)

Field	Description
Interface Information	
PRI Protocol Type	Choose the communications protocol for the span: For E1 PRI spans, you have these options: • PRI AUSTRALIAN—Australian ISDN • PRI EURO—European ISDN • PRI ISO QSIG E1—European inter-PBX signaling protocol For T1 PRI spans you have several options, depending on the carrier or switch: • PRI 4ESS —AT&T interexchange carrier, Lucent Definity switch • PRI 5E8 Custom—Cisco Unified IP Phone, Nortel Meridian switch, Lucent Definity switches • PRI 5E8 Teleos—Madge Teleos box • PRI 5E8 Intecom—Intecom PBX • PRI5E9—AT&T family local exchange switch or carrier • PRI NI2—Sprint local exchange switch or carrier • PRI DMS-100—Sprint local exchange switch or carrier • PRI DMS-250—MCI and Sprint local exchange switch or carrier • PRI ETSI SC—European local exchange carrier on T1; also, Japanese local exchange. • PRI ISO QSIG T1—Inter-PBX signaling protocol
Protocol Side	Choose the appropriate protocol side. This setting specifies whether the gateway connects to a Central Office/Network device or to a User device. Make sure that the two ends of the PRI connection use opposite settings. For example, if you connect to a PBX and the PBX uses User as its protocol side, choose Network for this device. Typically, use User for Central Office (CO) connections.

Table 43-5 Field Descriptions for T1 PRI or E1 PRI Trunks (continued)

Field	Description
Channel Selection Order	Choose the order in which channels or ports are enabled from first (lowest number port) to last (highest number port) or from last to first. Valid entries include TOP_DOWN (last to first) or BOTTOM_UP (first to last). If you are not sure which port order to use, choose TOP_DOWN. The default specifies BOTTOM_UP.
Channel IE Type	Choose one of the following values to specify whether channel selection is presented as a channel map or a slot map: • Number—B-channel usage always presents a channel map format. • Slotmap—B-channel usage always presents a slotmap format. • Use Number When 1B—Channel usage presents a channel map for one B-channel but presents a slotmap if more than one B-channel exists. This represents the default value.
PUnified CMType	Specify the digital encoding format. Choose one of the following formats: • a-law: Use for Europe and the rest of the world. • mu-law: Use for North America, Hong Kong, Taiwan, and Japan.
Delay for First Restart	For this optional field, enter the rate, in 1/8-second increments, at which the spans are brought in service. The delay occurs when many PRI spans are enabled on a system and the Inhibit Restarts at PRI Initialization check box is unchecked. The default value specifies 32. For example, set the first five cards to 0 and set the next five cards to 16. (Wait 2 seconds before bringing them in service.)
Delay Between Restarts	Enter the time, in 1/8-second increments, between restarts. The delay occurs when a PRI RESTART is sent if the Inhibit Restarts check box is unchecked. The default value specifies 4.

Table 43-5 Field Descriptions for T1 PRI or E1 PRI Trunks (continued)

Field	Description
Inhibit Restarts at PRI Initialization	A restart message confirms the status of the ports on a PRI span. If RESTARTS are not sent, Cisco Unified CallManager assumes that the ports are in service. By default, the box gets checked. When the D-channel successfully connects with another PRI trunk D-channel, it sends restarts when this box is unchecked.
Enable Status Poll	Check the check box to enable the Cisco Unified CallManager advanced service parameter, Change B-Channel Maintenance Status. This service parameter allows you to take individual B-channels out of service while the B-channels are active. Uncheck this check box to disable the service parameter Change B-Channel Maintenance Status. Default leaves this field unchecked.
Unattended Ports	Check this check box to indicate an unattended port on this device.
Call Routing Information - Inbound Calls	
Significant Digits	This field represents the number of final digits that a PRI span should retain on inbound calls. A trunk with significant digits enabled truncates all but the final few digits of the address that is provided on an inbound call. Enable or disable this check box depending on whether you want to collect significant digits: • If you do not check the check box, Cisco Unified CallManager does not truncate the inbound number. • If you check the check box, you also need to choose the number of significant digits to collect. By default, the box remains checked.
Calling Search Space	Choose the calling search space for this group of phones/ports. A calling search space specifies the collection of Route Partitions that are searched to determine how a dialed number should be routed.

Table 43-5 Field Descriptions for T1 PRI or E1 PRI Trunks (continued)

Field	Description
AAR Calling Search Space	Choose the appropriate calling search space for the device to use when it performs automated alternate routing (AAR). The AAR calling search space specifies the collection of route partitions that are searched to determine how to route a collected (originating) number that is otherwise blocked due to insufficient bandwidth.
Prefix DN	For this optional field, enter the prefix digits that are appended to the digits that this trunk receives on incoming calls. Cisco Unified CallManager adds prefix digits after first truncating the number in accordance with the Num Digits setting.
Call Routing Information - Outbound Calls	
Calling Line ID Presentation	Choose whether you want the Cisco Unified CallManager to transmit or block the caller's phone number. Choose *Default* if you do not want to change calling line ID presentation. Choose *Allowed* if you want Cisco Unified CallManager to send "Calling Line ID Allowed." Choose *Restricted* if you want Cisco Unified CallManager to send "Calling Line ID Restricted."
Calling Party Selection	Any outbound call on a gateway can send directory number information. Choose which directory number is sent: • Originator—Send the directory number of the calling device. This number serves as the default value. • First Redirect Number—Send the directory number of the redirecting device. • Last Redirect Number—Send the directory number of the last device that redirected the call.

Table 43-5 Field Descriptions for T1 PRI or E1 PRI Trunks (continued)

Field	Description
Calling Party IE Number Type Unknown	Choose the format for the type of number in calling party directory numbers. Cisco Unified CallManager sets the calling directory number (DN) type. Cisco recommends that you do not change the default value unless you have advanced experience with dialing plans, such as NANP or the European dialing plan. You may need to change the default in Europe because Cisco Unified CallManager does not recognize European national dialing patterns. You can also change this setting when you are connecting to PBXs that are using routing as a non-national type number. Choose one of the following options: • CallManager—The Cisco Unified CallManager sets the directory number type. This option represents the default value. • International—Use when you are dialing outside the dialing plan for your country. • National—Use when you are dialing within the dialing plan for your country. • Unknown—This option specifies that the dialing plan is unknown.

Table 43-5 Field Descriptions for T1 PRI or E1 PRI Trunks (continued)

Field	Description
Called Party IE Number Type Unknown	Choose the format for the type of number in called party directory numbers. Cisco Unified CallManager sets the called directory number (DN) type. Cisco recommends that you do not change the default value unless you have extensive experience with dialing plans, such as NANP or the European dialing plan. You may need to change the default in Europe because Cisco Unified CallManager does not recognize European national dialing patterns. You can also change this setting when you are connecting to PBXs that use routing as a non-national type number. Choose one of the following options: • CallManager—For the default setting, the Cisco Unified CallManager sets the directory number type. • International—Use when you are dialing outside the dialing plan for your country. • National—Use when you are dialing within the dialing plan for your country. • Unknown—This option specifies that the dialing plan is unknown.

Table 43-5 Field Descriptions for T1 PRI or E1 PRI Trunks (continued)

Field	Description
Called Numbering Plan	Choose the format for the numbering plan in called party directory numbers. Cisco Unified CallManager sets the called DN numbering plan. Cisco recommends that you do not change the default value unless you have extensive experience with dialing plans, such as NANP or the European dialing plan. You may need to change the default in Europe because Cisco Unified CallManager does not recognize European national dialing patterns. You can also change this setting when you are connecting to PBXs that are using routing as a non-national type number. Choose one of the following options: • CallManager—For the default setting, the Cisco Unified CallManager sets the Numbering Plan in the directory number. • ISDN—Use when you are dialing outside the dialing plan for your country. • National Standard—Use when you are dialing within the dialing plan for your country. • Private—Use when you are dialing within a private network. • Unknown—This option specifies that the dialing plan is unknown.

Table 43-5 Field Descriptions for T1 PRI or E1 PRI Trunks (continued)

Field	Description
Calling Numbering Plan	Choose the format for the numbering plan in calling party directory numbers. Cisco Unified CallManager sets the calling DN numbering plan. Cisco recommends that you do not change the default value unless you have extensive experience with dialing plans, such as NANP or the European dialing plan. You may need to change the default in Europe because Cisco Unified CallManager does not recognize European national dialing patterns. You can also change this setting when you are connecting to PBXs that are using routing as a non-national type number. Choose one of the following options: • CallManager—For the default setting, the Cisco Unified CallManager sets the Numbering Plan in the directory number. • ISDN—Use when you are dialing outside the dialing plan for your country. • National Standard—Use when you are dialing within the dialing plan for your country. • Private—Use when you are dialing within a private network. • Unknown—This option specifies that the dialing plan is unknown.
Number of Digits to Strip	Choose the number of digits, from 0 to 32, to strip on outbound calls. The default value specifies 0. For example, 8889725551234 is dialed; the number of digits to strip is 3. In this example, Cisco Unified CallManager strips 888 from the outbound number.

Table 43-5 Field Descriptions for T1 PRI or E1 PRI Trunks (continued)

Field	Description
Caller ID DN	Enter the pattern, from 0 to 24 digits, that you want to use for caller ID. For example, in North America • 555XXXX = Variable caller ID, where X equals an extension number. The CO appends the number with the area code if you do not specify it. • 5555000 = Fixed caller ID, for when you want the Corporate number to be sent instead of the exact extension from which the call is placed. The CO appends the number with the area code if you do not specify it.
SMDI Base Port	Enter the first SMDI port number of the T1 span.
PRI Protocol Type Specific Information	
Display IE Delivery	For this optional field, check the check box to enable delivery of the display information element (IE) in SETUP and CONNECT messages for the calling and called party name delivery service. By default, the box remains unchecked.
Redirecting Number IE Delivery—Outbound	For this optional field, check the check box to include the Redirecting Number IE in the SETUP message to indicate the first redirecting number and the redirecting reason of the call when a call is forwarded. By default, the box remains unchecked. This setting applies to the SETUP message only on all protocols for digital access gateways.
Redirecting Number IE Delivery—Inbound	For this optional field, check the check box to include the Redirecting Number IE in the SETUP message to indicate the first redirecting number and the redirecting reason of the call when a call is forwarded. By default, the box remains unchecked. This setting applies to the SETUP message only on all protocols for digital access gateways.

Table 43-5 Field Descriptions for T1 PRI or E1 PRI Trunks (continued)

Field	Description
Send Extra Leading Character in Display IE	Check this check box to include a special leading character byte (non ASCII, nondisplayable) in the DisplayIE field. Uncheck this check box to exclude this character byte from the DisplayIE field. This check box only applies to the DMS-100 protocol and the DMS-250 protocol. Default leaves this setting disabled (unchecked).
Setup of Non-ISDN Progress Indicator IE Enable	For this optional field, you may need to specify a value in this field to force ringback on some PBXs. The default specifies unchecked. Check this check box only if users are not receiving ringback tones on outbound calls. When this setting is enabled, Cisco Unified CallManager sends Q.931 setup messages out digital (that is, non-H.323) gateways with the Progress Indicator field set to non-ISDN. This message notifies the destination device that the Cisco Unified CallManager gateway is non-ISDN and that the destination device should play inband ringback. This problem usually associates with Cisco Unified CallManagers that connect to PBXs through digital gateways.
MCDN Channel Number Extension Bit Set to Zero	This field applies to DMS-100 protocol only. Check the check box to indicate that an Interface Identifier is present. By default, the box remains unchecked.
Send Calling Name in Facility IE	This field applies to DMS-100 protocol only. Enter the value that you obtained from the PBX provider. Valid values range from 0 to 255.
Interface Identifier Present	This field applies to DMS-100 protocol only. Check the check box to indicate that an Interface Identifier is present. By default, the box remains unchecked.
Interface Identifier Value	This field applies to DMS-100 protocol only. Enter the value that you obtained from the PBX provider. Valid values range from 0 to 255.

Table 43-5 Field Descriptions for T1 PRI or E1 PRI Trunks (continued)

Field	Description
Connected Line ID Presentation	Choose whether you want the Cisco Unified CallManager to allow or block the connected party's phone number. Choose *Default* if you do not want to change the connected line ID presentation. Choose *Allowed* if you want Cisco Unified CallManager to send "Connected Line ID Allowed." Choose *Restricted* if you want Cisco Unified CallManager to send "Connected Line ID Restricted."
UUIE Configuration	
Passing Precedence Level Through UUIE	Check this check box to enable passing MLPP information through the PRI 4ESS UUIE field. This box is used for working along with DRSN switch. The system makes this check box available only if the PRI Protocol Type value of PRI 4ESS is specified for this gateway. The default value specifies unchecked.
Security Access Level	Enter the value for the security access level. Valid values include 00 through 99. The system makes this field available only if the Passing Precedence Level Through UUIE check box is checked. The default value specifies 2.
Product-Specific Configuration	
The gateway manufacturer specifies the model-specific fields under product-specific configuration. To view field descriptions and help for product-specific configuration items, click the "**?**" information icon to the right of the **Product Specific Configuration** heading to display help in a popup window. If you need more information, refer to the documentation for the specific gateway that you are configuring.	

Port Configuration Settings

See the following sections for tables that list detailed descriptions for all port type configuration fields:

- POTS Port Configuration Settings, page 43-33
- Field Descriptions for E & M Ports for Digital Access T1, page 43-34

For detailed information about gateway configuration settings, see the Gateway Configuration Settings, page 43-9.

Additional Topics

See the "Related Topics" section on page 43-36.

POTS Port Configuration Settings

Table 43-6 describes the POTS port configuration settings. For related procedures, see the "Related Topics" section on page 43-36.

Table 43-6 POTS Port Configuration Settings

Field	Description
Port Type	From the Port Type drop-down list box, choose **POTS**.
Beginning Port Number Ending Port Number	Choose whether you want to add and configure all available ports, a single port, or a range of ports by setting values for the **Beginning Port Number** and **Ending Port Number** fields: • To specify a range of ports, choose appropriate values for **Beginning Port Number** and **Ending Port Number**. • To create a single port, choose the same number in the **Beginning Port Number** and **Ending Port Number** fields. • To add all available ports, choose **All Ports** for both the **Beginning Port Number** and **Ending Port Number** fields.
Port Direction	Choose the direction of calls that pass through this port: • Inbound—Use for incoming calls only. • Outbound—Use for outgoing calls. • Bothways—Use for inbound and outbound calls (default).
Audio Signal Adjustment into IP Network	This field specifies the gain or loss that is applied to the received audio signal relative to the port application type. **Note** Improper gain setting may cause audio echo. Use caution when you are adjusting this setting.
Audio Signal Adjustment from IP Network	This field specifies the gain or loss that is applied to the transmitted audio signal relative to the port application type. **Note** Improper gain setting may cause audio echo. Use caution when you are adjusting this setting.
Prefix DN	Enter the prefix digits that are appended to the digits that this trunk receives on incoming calls. The Cisco Unified CallManager adds prefix digits after it truncates the number in accordance with the Num Digits setting.
Num Digits	Enter the number of significant digits to collect, from 0 to 32. Cisco Unified CallManager counts significant digits from the right (last digit) of the number that is called. Use this field for the processing of incoming calls and to indicate the number of digits starting from the last digit of the called number that are used to route calls that are coming into the PRI span. See Prefix DN.

Table 43-6 POTS Port Configuration Settings (continued)

Field	Description
Expected Digits	Enter the number of digits that are expected on the inbound side of the trunk. For this rarely used field, leave zero as the default value if you are unsure.
Call Restart Timer (1000-5000 ms)	Call Restart Timer (1000-5000 ms); ms indicates time in milliseconds.
Offhook Validation Timer (100-1000 ms)	Offhook Validation Timer (100-1000 ms); ms indicates time in milliseconds.
Onhook Validation Timer (100-1000 ms)	Onhook Validation Timer (100-1000 ms); ms indicates time in milliseconds.
Hookflash Timer (100-1500 ms)	Hookflash Timer (100-1500 ms); ms indicates time in milliseconds.
SMDI Port Number (0-4096)	Use this field for analog access ports that connect to a voice-messaging system. Set the SMDI Port Number equal to the actual port number on the voice-messaging system to which the analog access port connects. **Note** Voice-mail logical ports typically must match physical ports for the voice-messaging system to operate correctly.
Product-Specific Configuration	
Model-specific configuration fields that the gateway manufacturer defines	The gateway manufacturer specifies the model-specific fields under product-specific configuration. Because they are dynamically configured, they can change without notice. To view field descriptions and help for product-specific configuration items, click the "**?**" information icon to the right of the **Product Specific Configuration** heading to display help in a popup dialog box. If you need more information, refer to the documentation for the specific gateway that you are configuring or contact the manufacturer.

Additional Information

See the "Related Topics" section on page 43-36.

Field Descriptions for E & M Ports for Digital Access T1

Use the following field descriptions when you are adding or updating values for E&M ports for the T1 CAS trunks on a Cisco VG200 gateway.

Some fields display the values that were configured in Cisco Unified CallManager Administration.

In the BAT user interface, field names that have an asterisk require an entry. Consider an entry in fields without an asterisk as optional.

Table 43-7 describes the E & M port configuration settings. For related procedures, see the "Related Topics" section on page 43-36.

Table 43-7 E & M Port Configuration Settings

Field	Description
Port Type	From the Port Type drop-down list box, choose **EANDM**.
Beginning Port Number Ending Port Number	Choose whether you want to add and configure all available ports, a single port, or a range of ports by setting values for the **Beginning Port Number** and **Ending Port Number** fields: • To specify a range of ports, choose appropriate values for **Beginning Port Number** and **Ending Port Number**. • To create a single port, choose the same number in the **Beginning Port Number** and **Ending Port Number** fields. • To add all available ports, choose **All Ports** for both the **Beginning Port Number** and **Ending Port Number** fields.
Port Details	
Port Direction	Choose the direction of calls that pass through this port: • Inbound—Use for incoming calls only. • Outbound—Use for outgoing calls. • Both Ways—Use for inbound and outbound calls.
Calling Party Selection	Any outbound call on a gateway can send directory number information. Choose which directory number is sent: • Originator—Send the directory number of the calling device. • First Redirect Number—Send the directory number of the redirecting device. • Last Redirect Number—Send the directory number of the last device to redirect the call. • First Redirect Number (External)—Send the directory number of the first redirecting device with the external phone mask applied. • Last Redirect Number (External)—Send the directory number of the last redirecting device with the external phone mask applied.
Caller ID Type	This description will be provided in Release 5.0(2) of Cisco Unified CallManager Administration.
Caller ID DN	Enter the pattern that you want to use for calling line ID, from 0 to 24 digits. For example, in North America: • 555XXXX = Variable calling line ID, where X equals an extension number. The CO appends the number with the area code if you do not specify it. • 5555000 = Fixed calling line ID, where you want the Corporate number to be sent instead of the exact extension from which the call is placed. The CO appends the number with the area code if you do not specify it.

Table 43-7 E & M Port Configuration Settings (continued)

Field	Description
Prefix DN	Enter the prefix digits that are appended to the called party number on incoming calls. The Cisco Unified CallManager adds prefix digits after first truncating the number in accordance with the Num Digits setting.
Num Digits	Choose the number of significant digits to collect, from 0 to 32. Cisco Unified CallManager counts significant digits from the right (last digit) of the number that is called. Use this field if you check the Sig Digits check box. Use this field for the processing of incoming calls and to indicate the number of digits starting from the last digit of the called number that are used to route calls that are coming into the PRI span. See Prefix DN and Sig Digits.
Expected Digits	Enter the number of digits that are expected on the inbound side of the trunk. If you are unsure, leave zero as the default value for this rarely used field.
Unattended Port	Check this check box to indicate an unattended port on this device.
Product-Specific Configuration	
Model-specific configuration fields that the gateway manufacturer defines	The gateway manufacturer specifies the model-specific fields under product-specific configuration. Because they are dynamically configured, they can change without notice. To view field descriptions and help for product-specific configuration items, click the "**?**" information icon to the right of the **Product Specific Configuration** heading to display help in a popup dialog box. If you need more information, refer to the documentation for the specific gateway that you are configuring or contact the manufacturer.

Related Topics

- Adding Cisco Gateways, page 43-1
- Finding a Gateway Template, page 43-2
- Adding or Editing a Gateway Template, page 43-3
- Gateway Configuration Settings, page 43-9
- Port Configuration Settings, page 43-32
- Deleting Cisco Gateways, page 45-1
- Generating Reports for Cisco Gateways, page 46-1

Inserting Gateways

Use the following topics to insert gateways into Cisco Unified CallManager database:

Creating CSV Data Files for Cisco VG200 Gateways

You can use the BAT spreadsheet to create a CSV data file for VG200 gateways and ports. See the following section:

You can use a text editor to create a text file in CSV format for VG200 gateways and ports. See the following section:

Using the BAT Spreadsheet for CSV Data Files for Cisco VG200 T1 CAS, T1 PRI, E1 PRI, FXS, or FXO Gateways and Ports

Use the BAT spreadsheet to create the CSV data file that contains the details, such as domain name, MGCP description, and port identifier, for individual T1 CAS, T1 PRI, E1 PRI, FXS or FXO ports.

For information about installing and using the BAT spreadsheet, see the "Using the BAT Spreadsheet for Gathering Data" section on page 1-8.

To create a text-based CSV data file for VG200 gateways, see the "T1 CAS, T1 PRI, or E1 PRI Trunks File Format" section on page A-14 for information and examples.

To create a text-based CSV data file for VG200 gateways, see the "FXO or FXS Trunks CSV File Format" section on page A-14 for information and examples.

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 Click the **VG200 T1-Pri T1-Cas E1-Pri FXSFXO** tab.

Step 4 For T1 CAS endpoints only, scroll to the right until you see the Number of Port Identifiers field. Enter the number of port identifiers that you want to add for each Cisco VG200 gateway. If you want only one port identifier, skip this step.

Step 5 In each row, provide the information for the following fields:

- **MGCP Domain Name**—Enter a name, from 1 to 64 characters that identifies the gateway. Use the Domain Name System (DNS) host name if it is configured to resolve correctly; otherwise, use the host name as defined on the Cisco MGCP gateway.

  The host name must match exactly the host name that is configured on the Cisco IOS gateway. For example, if the host name is configured on the gateway to resolve to vg200-1 and the IP domain name is not configured, enter the host name in this field (in this case, vg200-1). If the host name is configured on the gateway as vg200-1 and the IP domain name is configured on the gateway as cisco.com, enter vg200-1.cisco.com in this field.
- **MGCP Description**—Enter a description, up to 100 characters for the gateway. Use a specific description that helps you locate the gateway.
- **Port Description**—Enter a description for port 1, up to 50 characters. Use a description to help identify the port in a list of ports. This applies to the description field for port 2 through port 4.
- **Port Directory Number**—Enter the directory number, up to 24 numerals and special characters, for this port. This applies to the directory number field for port 2 through port 4.

Note Port 1 Directory Number and Partition fields are required for FXS ports only. For FXO ports, leave these fields blank.

- **Slot—**Enter the slot number that you are trying to configure. For VG200, it is always 1.
- **Subunit—**Enter an integer for the subunit value
- **Port Number**—Enter an integer for the Port Number.

Note For T1 CAS only, the ports that you specify here must be the same ports that you specified in the VG200 template. In the CSV data file, you can specify none, some, or all ports that were configured in the template. Do not configure any ports in the CSV data file that were not also configured in the template, or an error will result when you attempt to insert the BAT VG200 template and the CSV file.

For example, if you configured ports 1,2,3, and 4 in the template, you could configure none of the ports, or ports 1, 2, 3, and 4, or only ports 1 and 2 in the CSV file, and the insertion would be accepted. But if you configured ports 5 and 6 in the CSV file when they are not configured in the template, you will receive an insertion error in BAT.

Step 6 To transfer the data from the BAT Excel spreadsheet into a CSV file, click **Export to BAT Format**.

The system saves the file to C:\XLSDataFiles (or to your choice of another existing folder) as VG200Gateways#timestamp.txt

where “timestamp” represents the precise date and time that the file was created.

Tip 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 spreadsheet, the system treats the empty row as the end of the file. Data that is entered after a blank line does not get converted to the BAT format.

You must upload the CSV data file to the first node of the Cisco Unified CallManager server, so BAT can access the data input file. For more information, see “Uploading and Downloading Files” section on page 2-1.

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

Additional Information

See the “Related Topics” section on page 44-5.

Creating the CSV Data File for Cisco Catalyst 6000 (FXS) Ports

To create the CSV data file that contains the details for each individual Cisco Catalyst 6000 (FXS) port, such as directory number, description of port, use the BAT spreadsheet.

For information about installing and using the BAT spreadsheet, see the “Using the BAT Spreadsheet for Gathering Data” section on page 1-8.

To create a text-based CSV data file for Catalyst 6000 (FXS) ports, see the “Creating a Text-Based CSV File for Cisco Catalyst 6000 FXS Ports” section on page A-15 for information and examples.

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 Click the **Catalyst 6000 (FXS) Ports** tab.

Step 4 Enter information for each port record in a row. Complete all mandatory fields and any relevant, optional fields. Each column heading specifies the length of the field.

- **MAC Address**—Enter the 12-character MAC address for the gateway.
- **Port Number**—Enter the numeric port number (1 through 24) that you want to add to the gateway.
- **Directory Number**—Enter a directory number, up to 24 numerals and special characters, for this port. You must enter a directory number if you have specified a partition.(Optional)
- **Partition**—Enter the route partition, up to 50 characters, to which you want this port to belong. Do not specify a partition unless you also have specified a directory number. (Optional)

Caution The system treats blank rows in the spreadsheet as End of File and discards subsequent records.

Step 5 To transfer the data from the BAT Excel spreadsheet into a CSV file, click **Export to BAT Format**.

The system saves the file to C:\XLSDataFiles\ (or to your choice of another existing folder).

You must upload the CSV data file to the first node of the Cisco Unified CallManager server, so BAT can access the data input file. For more information, see "Uploading and Downloading Files" section on page 2-1.

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

Additional Information

See the "Related Topics" section on page 44-5.

Inserting Gateways to Cisco Unified CallManager

To add Cisco gateways and ports to Cisco Unified CallManager, use this procedure.

Before You Begin

- If you want to insert a Cisco VG200 gateway, you must have a Cisco VG200 gateway template for the trunks or ports and a CSV data file for the VG200 gateway ports. See "Creating a Cisco VG200 Gateway Template" section on page 43-4 and "Creating CSV Data Files for Cisco VG200 Gateways" section on page 44-1.
- If you want to insert a Cisco Catalyst 6000 Ports, you must have a Cisco Catalyst 6000 Ports template and a CSV data file that contains port details for this bulk transaction. See "Creating a Cisco Catalyst 6000 (FXS) Gateway Template" section on page 43-8 and "Creating the CSV Data File for Cisco Catalyst 6000 (FXS) Ports" section on page 44-3.

Procedure

Step 1 Choose **Bulk Administration > Gateways > Insert Gateways**. The Select the Gateway window displays.

Step 2 Choose type of gateway you want to insert from the Gateway Type drop-down list box. The Insert Gateway Configuration window displays.

Step 3 In the File Name field drop-down list box, choose the name of the CSV data file that contains the Cisco VG200 gateway information to be added.

Step 4 In the Gateway Template Name field, choose the name of the VG200 or the FXS gateway template that you created for this type of bulk transaction.

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

Step 6 Click the Run Immediately radio button to insert the gateway immediately or, click Run Later to insert at a later time.

Step 7 Click **Submit** to create a job for inserting the gateways.

Step 8 Use the Job Scheduler option in the Bulk Administration main menu to schedule and/or activate this job.

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 Information

See the "Related Topics" section on page 44-5.

Related Topics

- Creating CSV Data Files for Cisco VG200 Gateways, page 44-1
- Creating the CSV Data File for Cisco Catalyst 6000 (FXS) Ports, page 44-3
- Inserting Gateways to Cisco Unified CallManager, page 44-4

CHAPTER 45

Deleting Cisco Gateways

To locate the records that you want to delete, you must define a query filter. Use the following procedure to delete a group of gateways from the Cisco Unified CallManager database.

Using the Delete Gateway Configuration window, you can only delete Cisco VG200 and Cisco Catalyst 6000 gateways.

Deleting Cisco Gateways

To delete gateways from Cisco Unified CallManager, use the following procedure.

Procedure

Step 1 Choose **Bulk Administration > Gateways > Delete Gateways**.

The Find and List Gateway Configuration window displays.

Step 2 From the Find Gateways where drop-down list box, choose one of the following options:

- Name
- Description
- DN/Route Pattern
- Calling Search Space
- Device Pool
- Device Type

Step 3 From the second Find Gateways Report where drop-down list box, choose one of the following criteria:

- begins with
- contains
- is exactly
- ends with
- is empty
- is not empty

Step 4 From the third drop-down list box, choose **Show** to display the associated endpoints.

Step 5 Specify the appropriate search text, if applicable.

Tip To find all gateways that are registered in the database, click **Find** without entering any search text.

Step 6 To further define your query, you can choose **AND** or **OR** to add multiple filters and repeat steps 2 through 5.

Step 7 Click **Find**.

A list of discovered templates displays by:

- Device Name
- Description
- Device Pool
- Status
- IP address

Step 8 In the Job Information area, enter the Job description.

Step 9 Click the Run Immediately radio button to delete gateways immediately or, click Run Later to delete them at a later time.

Step 10 Click **Submit** to create a job for deleting the gateway records.

Step 11 Use the Job Scheduler option in the Bulk Administration main menu to schedule and/or activate this job.

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.

Caution If you do not enter any information in the query text box, the system deletes all gateway records. Because the delete action is final, you cannot retrieve deleted records.

Additional Topics

See the "Related Topics" section on page 45-2.

Related Topics

- Deleting Cisco Gateways, page 45-1
- Inserting Gateways to Cisco Unified CallManager, page 44-4
- Scheduling Jobs, page 51-1
- BAT Log Files, page 54-3

CHAPTER 46

Generating Reports for Cisco Gateways

Reports for VG200 Gateways have a fixed format. You can generate a report for all VG200 Gateways or for a limited set of gateways.

Note The system does not make reports available for the Catalyst 6000 (FXS) gateway.

Generating Reports for Cisco Gateways

To generate a report for VG200 Gateways, use this procedure.

Procedure

Step 1 Choose **Bulk Administration > Gateways > Generate Gateway Reports**.

The Find and List Gateway window displays.

Step 2 From the Find Gateways Report where drop-down list box, choose one of the following options:

- Name
- Description
- DN/Route Pattern
- Calling Search Space
- Device Pool
- Device Type

Step 3 From the second Find Gateways Report where drop-down list box, choose one of the following criteria:

- begins with
- contains
- is exactly
- ends with
- is empty
- is not empty

Step 4 From the third drop-down list box, choose **Show** to display the associated endpoints.

Step 5 Specify the appropriate search text, if applicable.

Tip To find all gateways that are registered in the database, click **Find** without entering any search text.

Step 6 To further define your query, you can choose **AND** or **OR** to add multiple filters and repeat steps 2 through 5.

Step 7 Click **Find**.

A list of discovered templates displays by:

- Device Name
- Description
- Device Pool
- Status
- IP address

Step 8 Click **Next** to choose details for your type of report. The Gateway Report Configuration window displays and shows the query that you chose. If you want to change the type of query, click **Back**.

Step 9 In the File Name field, enter your name for this report (required).

Step 10 Choose the file format from the drop-down list box.

Step 11 In the Job Information area, enter the Job description.

Step 12 Click the Run Immediately radio button to generate a report immediately or, click Run Later to generate reports at a later time.

Step 13 Click **Submit** to create a job for deleting assistants.

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.

You can search and download the report file using the Upload/Download Files option in the Bulk Administration menu. See Chapter 2, "Uploading and Downloading Files."

Additional Information

See the "Related Topics" section on page 46-3.

Viewing Report Log Files

Cisco Unified CallManager Bulk Administration (BAT) generates log files for each report transaction and stores them on the first node of Cisco Unified CallManager server. You can find the link to log files for this job from the Job configuration window for this job. For more details, see Chapter 51, "Scheduling Jobs."

Additional Information

See the "Related Topics" section on page 46-3.

Related Topics

- Generating Reports for Cisco Gateways, page 46-1
- Viewing Report Log Files, page 46-2
- Uploading and Downloading Files, page 2-1
- Scheduling Jobs, page 51-1
- BAT Log Files, page 54-3

Cisco Systems

PART 9

Forced Authorization Codes and Client Matter Codes

CHAPTER 47

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

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**.

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.

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 are updating 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

CHAPTER 48

Deleting Forced Authorization Codes and Client Matter Codes

You can delete codes from the system by using a custom file that contains the codes that you want to delete. You can edit a custom file where you previously inserted or updated authorization codes, or you can create a new CSV file where you manually enter the codes that you want to delete.

To delete Forced Authorization Codes and Client Matter Codes, use the following procedures.

Deleting Code Settings

If you plan to edit an existing CSV file, you must update the file, so only the lines that contain the codes that you want to delete remain in the file.

Example for CMC (Existing CSV File)

You obtain a file that contains the following information, and you decide to delete the client matter codes, 5550, 5551, and 5555:

- 5550,Phil Jones DDS
- 5551,Southwest Shades
- 5552,Happy Pharmaceuticals
- 5553,Weddings by Joyce
- 5554,Peterson Plumbing
- 5555,Acme Toys
- 5556,Chicago Paralegals

Before you delete the entries, the file must contain only the following entries:

- 5550,Phil Jones DDS
- 5551,Southwest Shades
- 5555,Acme Toys

Example for CMC (New CSV File)

If you create a new file to delete the codes, list only the codes, separated by lines, as shown in the following example:

5550

5551

5555

Example for FAC (Existing CSV File)

You obtain a file that contains the following information, and you decide to delete the authorization codes that are assigned to John, Dave, and Bill:

- 1233,Sandy Brown,30
- 1234,John Smith,20
- 1235,Dave Green,30
- 1236,John David,20
- 1237,Alex Anderson,30
- 1238,Bill Jones,20
- 1239,Jennifer Summers,20

Before you can delete the entries for John, Dave, and Bill, the file must contain only the following entries:

- 1234,John Smith,20
- 1235,Dave Green,30
- 1238,Bill Jones,20

Example for FAC (New File)

If you create a new file to delete the codes, list only the codes, separated by lines, as shown in the following example:

1234

1235

1238

To delete batches of codes, see the "Deleting Forced Authorization Codes and Client Matter Codes" section on page 48-2.

Additional Topics

See the "Related Topics" section on page 48-3.

Deleting Forced Authorization Codes and Client Matter Codes

Before you Begin

- Perform one of the following tasks:
- Create a new file for codes that you want to delete, as described in the "Example for CMC (New CSV File)" section on page 48-2 and "Example for FAC (Existing CSV File)" section on page 48-2.

- On the Cisco Unified CallManager server download the appropriate CSV files from the first node of the Cisco Unified CallManager server. For more information, see "Uploading a File" section on page 2-3.
- In Notepad, open and edit the existing CSV file to delete the entries.
- Upload the modified CSV files to the first node of the Cisco Unified CallManager server. For more information, see "Uploading a File" section on page 2-3:

Procedure

Step 1 In Cisco Unified CallManager Administration, choose one of the following options, depending on whether you plan to delete client matter codes or forced authorization codes:

- For CMC—**Bulk Administration > Client Matter Codes > Delete Client Matter Codes**
- For FAC—**Bulk Administration > Forced Authorization Codes > Delete Forced Authorization Codes**

Step 2 Choose a custom file from the drop-down list box and click **Find**.

Step 3 The Find and List Client Matter Codes window or Find and List Forced Authorization window displays.

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

Step 5 Click the Run Immediately radio button to delete CMC or FAC immediately or click Run Later to delete CMC or FAC at a later time.

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

Note Make sure that you browse the entire list of the displayed results before submitting the job for deletion.

Step 7 Use the Job Scheduler option in the Bulk Administration main menu to schedule and/or activate this job.

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 48-3.

Related Topics

- Deleting Code Settings, page 48-1

Cisco Systems

PART 10

Call Pickup Groups

CHAPTER 49

Working With Call Pickup Groups

Call pickup groups allow you to pick up incoming calls within your own groups or in other groups when you dial the appropriate pickup group number.

This chapter contains information on the following topics:

Important BAT Considerations

Before you use BAT to configure call pickup groups, review the following information:

- When you add call pickup group settings for the first time, you can create a CSV file through BAT.xlt or create a custom, text-based CSV file.
- To update call pickup group settings, you can edit an existing CSV file or create a custom, text-based CSV file.
- Designate a single line for each pickup group name (and corresponding setting). For example, use the following format when you enter information for pickup groups:
  - (Pickup Group Name, Pickup Group Number, Partition, Other Pickup Group Name-Member1... Other Pickup Group Name-Member10)
  - Marketing,7815,Part1,Marketing,Managers,Training
- When you add new pickup groups, you must complete all required fields like the pickup group name and pickup group number. If the procedure specifies an entry as mandatory, you must provide the information in the file.
- 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.
- Upload the appropriate CSV files to the first node of the Cisco Unified CallManager cluster. 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 49-4.

Additional Information

See the "Related Topics" section on page 49-6.

Creating a CSV File by Using BAT.xlt

To create a CSV file for call pickup groups by using BAT.xlt, perform the following procedure:

Procedure

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

Step 2 Choose **Bulk Administration > Upload/Download Files**. The Find and List Files window opens.

Step 3 Click Find and download the BAT.xlt file. For more details on uploading or downloading files, see Chapter 2, "Uploading and Downloading Files."

Step 4 Copy **BAT.xlt** to a local machine where Microsoft Excel is installed.

Step 5 In Microsoft Excel, open **BAT.xlt**.

Step 6 Click the Call Pickup Group tab.

Step 7 Use Table 49-1 to enter call pickup group settings in the columns.

Step 8 Repeat Step 7 until you enter all pickup groups.

Step 9 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. To choose a different location to save the CSV file, click **Browse** and select the desired location.

Step 10 Upload the CSV file to the first node of the Cisco Unified CallManager cluster. For more information see the "Uploading a File" section on page 2-3

Step 11 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 49-4.

Additional Information

See the "Related Topics" section on page 49-6.

Using a Text Editor to Create the CSV Data File for Call Pickup Groups

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 call pickup groups, see the "Creating a Text-Based CSV File for Call Pickup Groups" section on page A-19.

Additional Information

See the "Related Topics" section on page 49-6.

Editing an Existing Call Pickup Group 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 call pickup groups information, download the appropriate CSV file from the first node of the Cisco Unified CallManager cluster. For more information see the "Downloading a File" section on page 2-2:

Step 2 In Notepad, open and edit the existing CSV file; delete existing settings, add new call pickup groups, or update existing settings by using the text-based representation in Table 49-1.

For example, to update a call pickup group CSV file, you may enter Marketing,,,Marketing,Managers,Training, where Marketing is the mandatory pickup group name. Marketing, Managers, and Training are the other pickup group names associated to the pickup group Marketing.

Caution You can change any part of an existing record, but you must include the pickup group name. When you update the Pickup Groups, existing Other Pickup Groups will be disassociated. Do not leave Other Pickup Group as blank fields. Enter all Other Pickup Groups, that you want to associate with Pickup Group, continuously.

Step 3 Upload the CSV files to the first node of the Cisco Unified CallManager cluster. For more information see the "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 49-4.

Additional Information

See the "Related Topics" section on page 49-6.

Call Pickup Group CSV File Settings

Use Table 49-1 in conjunction with the following sections:

- Creating a CSV File by Using BAT.xlt, page 49-2
- Using a Text Editor to Create the CSV Data File for Call Pickup Groups, page 49-3
- Editing an Existing Call Pickup Group CSV File, page 49-3
- Deleting Call Pickup Groups, page 50-1

For more information about related procedures, see the "Related Topics" section on page 49-6.

Table 49-1 Configuration Settings for Call Pickup Group

Setting/Column	Description
For CPG CSV file	
Pickup Group Name	For this mandatory field, enter a unique call pickup group name of no more than 50 alphanumeric characters.
Pickup Group Number	For this mandatory field, enter a pickup group number of no more than 24 digits that the user will enter to pick up incoming calls.
Partition	Choose a route partition to which the directory number (pickup group number) belongs. **Note** The directory number (pickup group) can appear in more than one partition. **Note** The combination of Pickup Group Number and Partition should be unique. This field is optional.
Other Pickup Group Name-Member(x)	Enter the name of the other pickup group to be associated with the new pickup group. This optional field allows each pickup group to be associated with maximum of ten other pickup groups.

Using BAT to Update the Cisco Unified CallManager Database

To update the Cisco Unified CallManager database, you must insert the call pickup group 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 call pickup group CSV file and upload it on the first node on the Cisco Unified CallManager server. See the "Uploading a File" section on page 2-3

For more information see the following sections:

- Creating a CSV File by Using BAT.xlt, page 49-2
- Using a Text Editor to Create the CSV Data File for Call Pickup Groups, page 49-3

- Editing an Existing Call Pickup Group CSV File, page 49-3
- Call Pickup Group CSV File Settings, page 49-4

Procedure

Step 1 In BAT, choose **Bulk Administration > Call Pickup Group > Insert Call Pickup Groups.**

The Insert Pickup Groups window displays.

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

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 pickup groups, check the **Override the existing configuration** check box, as described in Table 49-2.

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

Step 5 Click the Run Immediately radio button to insert pickup groups immediately or, click Run Later to insert at a later time.

Step 6 Click **Submit** to create a job for deleting assistants.

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 Information

See the "Related Topics" section on page 49-6.

BAT Settings for Updating the Cisco Unified CallManager Database

Use Table 49-2 in conjunction with the "Using BAT to Update the Cisco Unified CallManager Database" section on page 49-4. For more information about related procedures, see the "Related Topics" section on page 49-6.

Table 49-2 Settings in BAT for Inserting CSV Files

Setting in BAT	Description
File Name	From the drop-down list box, choose the call pickup file that you want to insert.
Override the existing configuration	This check box applies if you are updating pickup groups for existing settings. Checking this check box overwrites the other pickup group name- members with the information that is contained in the file that you want to insert. If you do not check the check box, an error, which writes to the log file, indicates that the other pickup group name already exists; therefore, no updates occur. **Note** For each pickup group, ensure the combination of Pickup Group Number and Partition is unique. **Note** While updating pickup groups, Pickup Group Number and Partition values will be ignored and existing Other Pickup Groups will be disassociated.

Additional Information

See the "Related Topics" section on page 49-6.

Related Topics

- Important BAT Considerations, page 49-1
- Creating a CSV File by Using BAT.xlt, page 49-2
- Using a Text Editor to Create the CSV Data File for Call Pickup Groups, page 49-3
- Editing an Existing Call Pickup Group CSV File, page 49-3
- Deleting Call Pickup Groups, page 50-1
- Call Pickup Group CSV File Settings, page 49-4
- Using BAT to Update the Cisco Unified CallManager Database, page 49-4
- BAT Settings for Updating the Cisco Unified CallManager Database, page 49-5
- Creating a Text-Based CSV File for Call Pickup Groups, page A-19

CHAPTER 50

Deleting Call Pickup Groups

You can delete Call pickup groups by creating a query to locate the pickup group records you want to delete.

Deleting Call Pickup Groups

Use the following procedure to delete call pickup groups.

Procedure

Step 1 In BAT, choose **Bulk Administration > Call Pickup Group > Delete Call Pickup Groups**

The Find and List Call Pickup Groups window displays.

Step 2 In first Find Call Pickup Groups where drop-down list box, choose from the following options:

- Pickup Group Number
- Pickup Group Name
- Partition

Step 3 From the second Find Call Pickup Groups where drop-down list box, choose one of the following criteria:

- begins with
- contains
- is exactly
- ends with
- is empty
- is not empty

Step 4 Specify the appropriate search text, if applicable.

Step 5 To add multiple filters, check the Search Within Results check box and select, **AND** or **OR.** To further define your query, repeat Step 2 through Step 4.

Step 6 To add the defined filter to the query, click **Find**.

Step 7 In the Job Information area, enter the Job description.

Step 8 Click the Run Immediately radio button to delete pickup groups immediately or, click Run Later to delete at a later time.

Step 9 Click **Submit** to create a job for deleting pickup groups.

Note If you do not enter any information in the query text box, the system creates a job for deleting all pickup group records.

Caution Confirm that you want to delete all the pickup groups displayed in the result set by browsing the entire set of results, before submitting a job for deleting call pickup groups.

Step 10 Use the Job Scheduler option in the Bulk Administration main menu to schedule and/or activate this job.

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.

Related Topics

- Important BAT Considerations, page 49-1
- Creating a CSV File by Using BAT.xlt, page 49-2
- Using a Text Editor to Create the CSV Data File for Call Pickup Groups, page 49-3
- Editing an Existing Call Pickup Group CSV File, page 49-3
- Call Pickup Group CSV File Settings, page 49-4
- Using BAT to Update the Cisco Unified CallManager Database, page 49-4
- BAT Settings for Updating the Cisco Unified CallManager Database, page 49-5

PART 11

Scheduling Jobs

CHAPTER 51

Scheduling Jobs

You can schedule bulk transactions and specify a time when they need to start these transactions.

All jobs that are submitted through the Bulk Administration menu in the Cisco Unified CallManager Administration, queue up on the Bulk Provisioning Service (BPS). Depending on the start time specified for a job, the transaction starts running. If no start time is mentioned, the transactions execute in the order that they are received.

The following topics provide information about activating BPS and scheduling jobs:

Activating Bulk Provisioning Service

Before submitting a job for execution BPS should be activated.

Use the following procedure to activate BPS.

Procedure

Step 1 From Cisco Unified CallManager Serviceability window, choose **Tools > Service Activation**.

The Service Activation window displays.

Step 2 From the Service drop-down list box, choose the server that is running Cisco Unified CallManager.

Step 3 In the Database and Admin Services area, check the check box corresponding to Cisco Bulk Provisioning Service.

Note If the service is already activated, the Activation Status will display as Activated.

Step 4 Click **Update**.

Step 5 The window refreshes and the Activation Status corresponding to Bulk Provisioning Service displays **Activated**.

Note BPS starts automatically after it is activated. See the "Starting/Stopping/Restarting BPS" section on page 51-2 to stop, start, or restart the service.

Note Every time that the service is started, BPS synchronizes with Cisco Unified CallManager database.

Starting/Stopping/Restarting BPS

BPS starts automatically after it is activated by using Cisco Unified CallManager Serviceability. This section describes the procedures to stop or restart the BPS.

Procedure

Step 1 In Cisco Unified CallManager Serviceability, choose **Tools > Control Center - Feature Services.**

The Control Center–Feature Services window displays.

Step 2 Choose the Cisco Unified CallManager server from the Servers drop-down list box.

Cisco Bulk Provisioning Service displays in list under Service Name column, in the Database and Admin Services area.

Note If BPS was activated using "Activating Bulk Provisioning Service" section on page 51-1, the Status displays as Activated.

Step 3 Check the check box corresponding to BPS.

Step 4 If you want to restart BPS, click **Restart**.

The service restarts, and the message, Service Successfully Restarted, displays.

Step 5 If you want to stop BPS, click **Stop**.

The service stops, and the message, Service Successfully Stopped, displays.

Step 6 If you want to start the stopped BPS, click **Start**.

The service starts, and the message, Service Successfully Started, displays.

Deactivating BPS

You can deactivate BPS when you do not require it. This section describes the procedure to deactivate BPS service and log out of the tool.

Procedure

Step 1 In Cisco Unified CallManager Serviceability, choose **Tools > Service Activation**.

The Service Activation window displays.

Step 2 Choose the Cisco Unified CallManager server from the Servers drop-down list box.

Cisco Bulk Provisioning Service displays in the list under Service Name column, in the Database and Admin Services area.

Step 3 Uncheck the check box corresponding to the Cisco Bulk Provisioning Service and click **Update**.

The service deactivates, and the Status column displays the status as Deactivated.

Finding a Job

Use the following procedure to find jobs that are already submitted to BPS through the Bulk Administration menu on Cisco Unified CallManager Administration.

Procedure

Step 1 Choose **Bulk Administration > Job Scheduler**. The Find and List Job window displays.

Step 2 From the first Find Job where drop-down list box, choose one of the following options.

- User
- Status
- Job ID
- Description
- Scheduled Date Time

Step 3 From the second Find Job where drop-down list box, choose one of the following options.

- begins with
- contains
- is exactly
- ends with
- is empty
- is not empty

Step 4 From the third drop-down list box, choose **Show** to display completed jobs.

Step 5 Specify the appropriate search text, if applicable.

Tip To find all jobs that are registered in the database, click **Find** without entering any search text.

Step 6 To further define your query, you can choose **AND** or **OR** to add multiple filters and repeat steps 2 through 5.

Step 7 Click **Find**.

A list of discovered jobs displays by:

- Job Id

- Scheduled Date Time
- Submit Date Time
- Sequence
- Description
- Status
- Last User

Note The Status displays Hold if Run Later radio button was selected while scheduling the job. The Status displays Pending if Run Immediately radio button was selected. The Status displays Completed for completed jobs and it displays Incomplete for jobs that had an error and could not be completed.

Step 8 Click the Job ID for the job in process or on hold, that you want to schedule and/or activate. The job Configuration window displays.

Additional Topics

See the"Related Topics" section on page 51-6

Scheduling Jobs

Use the following procedure to schedule submitted jobs.

Procedure

Step 1 Find the job you want to schedule using the "Finding a Job" section on page 51-3.

Step 2 In the Job Configuration window, enter the settings for scheduling and activating the job as described in Table 51-1.

Table 51-1 Job Configuration Settings

Field	Description
Job Id	Displays the job ID that is created when the job is submitted.
Job Status	Displays the status of the job from one of the following options: • Hold • Pending • Completed • Incomplete
Scheduled Date Time	Choose the month, date, year from the drop-down list boxes. Enter the time when you want the job to be scheduled.

Table 51-1 Job Configuration Settings

Field	Description
Submit Date Time	Displays the date and time when the job was submitted.
Sequence	Choose from the drop-down list box, the sequence in which the job should be run. You can choose a number between 1 and 20. **Note** If the scheduled date and time is same for two or more jobs, then the jobs are queued in BPS according the sequence number. If the scheduled date and time, and Sequence is same, then the jobs are queued depending on the submitted date and time.
Job Description	Displays the description you entered when the job was created.
Frequency	Choose from the following options, the frequency of the transaction: • Once • Monthly • Weekly • Daily • Hourly For example, if you choose Daily, the transaction will be repeated daily at the time entered in the Schedule Time and Date field.
Job End Time	Displays the end time for recurring (frequency) job.
last Modified By	Displays the user ID of the administrator who last modified this job.

Step 3 Click **Activate job** to activate the job at the scheduled time or click **Save** to save the configuration settings to activate the job at a later time.

The Find and List Jobs window displays.

Note If a Job is saved, but not activated then status of the job will be displayed as Hold. These jobs will not be processed by BPS unless they are activated.

Step 4 Click the job ID for the job you have activated. In the Job Configuration window, the following information displays in the Job Results area, for all jobs that are complete, incomplete, stop requested, or processing.

- Job Launched Date
- Job Result Status
- Number of records Processed

- Number of Records Failed
- Total Number of Records
- Log File Name

Note Click on the link in the Log File Name column to view the log file for this transaction.

Step 5 To go back to the list of jobs, choose Back to Find/List from the Related Links drop-down list box and click **Go**.

Related Topics

- Activating Bulk Provisioning Service, page 51-1
- Starting/Stopping/Restarting BPS, page 51-2
- Deactivating BPS, page 51-2
- Finding a Job, page 51-3
- Scheduling Jobs, page 51-4

PART 12

Cisco Unified CallManager Auto-Register Phone Tool

CHAPTER 52

Working with the Cisco Unified CallManager Auto-Register Phone Tool

The Cisco Unified CM Auto-Register Phone Tool enables phone users to call the Unified CM Auto-Register Phone Tool directory number and download the preconfigured phone settings for the user's directory number. Unified CM Auto-Register Phone Tool works in conjunction with Cisco Unified CallManager Administration to provide these capabilities:

Configure Unified CM Auto-Register Phone Tool—Allows you to enable Unified CM Auto-Register Phone Tool usage for all phones that use auto-registration or to limit Unified CM Auto-Register Phone Tool to only phones that are added through BAT with dummy MAC addresses. See the "Configuring Auto-Registration Options for Unified CM Auto-Register Phone Tool" section on page 52-8.

Secure Unified CM Auto-Register Phone Tool—Allows you to keep some directory numbers from being updated through Unified CM Auto-Register Phone Tool. See the "Setting Secure Directory Numbers" section on page 52-9

User Locales for Unified CM Auto-Register Phone Tool—Allows you to choose the languages for Unified CM Auto-Register Phone Tool prompts. See the "Setting the User Locales for Unified CM Auto-Register Phone Tool" section on page 53-1.

The following topics provide information about using, installing, and configuring Unified CM Auto-Register Phone Tool:

Introducing Cisco Unified CM Auto-Register Phone Tool

Unified CM Auto-Register Phone Tool components get installed on the Cisco Unified CallManager first node as part of the Cisco Unified CallManager installation. You must enable auto-registration in Cisco Unified CallManager Serviceability for Unified CM Auto-Register Phone Tool to function.

Note When you use Unified CM Auto-Register Phone Tool, it leads to the depletion of auto-registration range on the Cisco Unified CallManager. After update through Unified CM Auto-Register Phone Tool, the auto-registered directory number (DN) of the phone becomes an unassigned DN. You should delete unassigned DNs using BAT periodically to free up the auto-registration range. For more information, refer to *Cisco Unified CallManager Administration Guide*.

You must install Unified CM Auto-Register Phone Tool application on the Cisco Customer Response Solutions (Cisco CRS) server. Unified CM Auto-Register Phone Tool requires the Cisco IP Interactive Voice Response (IP IVR) application that runs on the Cisco CRS server for the user interface and prompts.

Administrators need to provide instructions to tell end users how to use Unified CM Auto-Register Phone Tool to configure their new phones. For end user instructions, see the "Unified CM Auto-Register Phone Tool Information for End Users" section on page 53-2

Note Cisco recommends that you stop the Unified CM Auto-Register Phone Tool service when you are not using Unified CM Auto-Register Phone Tool to add phones to Cisco Unified CallManager database.

Additional Topics

See the "Related Topics" section on page 52-11.

Auto-registration Options for Unified CM Auto-Register Phone Tool

You can set the following options for using Unified CM Auto-Register Phone Tool to update auto-registering phones.

- Update MAC addresses and download a predefined configuration for new phones.
- Reload the configuration for replacement phones.

Use the following topics.

Using Unified CM Auto-Register Phone Tool with New Phones

After BAT has added the new phone configurations with dummy MAC addresses in Cisco Unified CallManager Administration, you can plug the phones into the network. You or the phone user can dial a Unified CM Auto-Register Phone Tool directory number that causes the phone to download its configuration. At the same time, the phone gets updated in Cisco Unified CallManager Administration with the correct MAC address. You must make sure that Auto-registration is enabled in Cisco Unified CallManager Administration for Unified CM Auto-Register Phone Tool to function.

Note When you use Unified CM Auto-Register Phone Tool, it leads to the depletion of auto-registration range on the Cisco Unified CallManager. After update through Unified CM Auto-Register Phone Tool, the auto-registered directory number (DN) of the phone becomes an unassigned DN. You should delete unassigned DNs using BAT periodically to free up the auto-registration range. For more information, refer to *Cisco Unified CallManager Administration Guide*.

Example

You have 100 new-hire employees starting on Monday. You must add these users and their new phones to Cisco Unified CallManager Administration. You can use BAT to create a phone template for these 100 phones and a CSV data file for phones and users. By using the dummy MAC address option in the CSV data file, you do not need to add the individual MAC addresses for the new phones. With auto-registration enabled in Cisco Unified CallManager, you can plug the phones directly into the network. You or the new employee can load the configuration by dialing the Unified CM Auto-Register Phone Tool directory number and following the voice-prompt instructions.

Using Unified CM Auto-Register Phone Tool for Reloading Configurations

When you must replace an existing phone that is not functioning, you can use Unified CM Auto-Register Phone Tool to download the existing phone configuration to the new phone. After the user receives the new phone and plugs the phone into the network, the user dials the Unified CM Auto-Register Phone Tool directory number to download configuration for the previous phone. The user makes no configuration changes during this process.

In Cisco Unified CallManager Administration, you must enable auto-registration. You must ensure that you configure Unified CM Auto-Register Phone Tool usage for all phones to enable a user to download an existing phone configuration. See the "Configuring Auto-Registration Options for Unified CM Auto-Register Phone Tool" section on page 52-8.

Note When you use Unified CM Auto-Register Phone Tool, it leads to the depletion of auto-registration range on the Cisco Unified CallManager. After update through Unified CM Auto-Register Phone Tool, the auto-registered directory number (DN) of the phone becomes an unassigned DN. You should delete unassigned DNs using BAT periodically to free up the auto-registration range. For more information, refer to *Cisco Unified CallManager Administration Guide*.

Example

John's Cisco Unified IP Phone model 7940 gets short-circuited during a lightning storm. He receives a new Cisco Unified IP Phone model 7940 and plugs it into the network. John can dial the Unified CM Auto-Register Phone Tool directory number, and the new phone will download the configuration that was previously used for the damaged phone. Unified CM Auto-Register Phone Tool automatically updates device information in Cisco Unified CallManager Administration.

Additional Topics

See the "Related Topics" section on page 52-11.

Secured Directory Numbers

Because Unified CM Auto-Register Phone Tool can replace a directory number, you can protect certain directory numbers from being overwritten. To protect important directory numbers, you can use the Secure Unified CM Auto-Register Phone Tool option. See the "Setting Secure Directory Numbers" section on page 52-9 for more information.

Example

The directory number 5000 provides voice-messaging access for your system. You do not want a new user to mistakenly configure 5000 on the new phone. The Secure Unified CM Auto-Register Phone Tool option allows you to specify that Unified CM Auto-Register Phone Tool cannot access directory number "5000."

Additional Topics

See the "Related Topics" section on page 52-11.

Language Prompts for Unified CM Auto-Register Phone Tool Users

You can configure user prompts for Unified CM Auto-Register Phone Tool to play in several languages. Administrators can choose the languages to make available to users. See the "Setting the User Locales for Unified CM Auto-Register Phone Tool" section on page 53-1.

If you need to use language prompts other than English prompts, make sure that you installed the Cisco Unified CallManager Locale Installer on every Cisco Unified CallManager and Cisco CRS server in the cluster before you install, upgrade, or configure Unified CM Auto-Register Phone Tool. Using the locale installer ensures that you have the latest translated text, translated voice prompts, country-specific phone tones, and country-specific gateways tones available for the phones. For more information on the Cisco Unified CallManager Locale Installer, refer to the specific locale installer documentation.

Additional Topics

See the "Related Topics" section on page 52-11.

Installing Unified CM Auto-Register Phone Tool

This section provides information about installing, reinstalling, and uninstalling Unified CM Auto-Register Phone Tool. Unified CM Auto-Register Phone Tool interfaces with both Cisco Unified CallManager server and Cisco Customer Response Solution (CRS) 4.5 server. This installation procedure involves installing Unified CM Auto-Register Phone Tool on the CRS server.

You cannot use Windows Terminal Services to install Unified CM Auto-Register Phone Tool. You must install Unified CM Auto-Register Phone Tool directly from the Cisco Unified CallManager first node server and the Cisco CRS server.

Before You Begin

The following prerequisites apply to the Unified CM Auto-Register Phone Tool installation for BAT Release 5.2(1):

- Make sure that the Cisco Unified CallManager first node database is configured and running.
- Have the IP address for the Cisco Unified CallManager first node server.

- Ensure the Cisco CRS server is configured. The Cisco CRS 4.5 application can reside on its own dedicated server.
- Be sure to use the locale installer to create the country-specific Unified CM Auto-Register Phone Tool prompts.

To install Unified CM Auto-Register Phone Tool on CRS application server, use the following procedure:

Procedure

Step 1 Log on with administrator privileges to the system that is running the Cisco Unified CallManager first node database.

Step 2 Choose **Applications > Plugins**. The Find and List Plugins window displays.

Step 3 Find Cisco Unified CallManager Auto-Register Phone Tool for Windows and click **Download** and save the plugin to your Windows server where the CRS application server is installed.

Step 4 The Welcome window for the installation wizard opens. This installation program installs Unified CM Auto-Register Phone Tool on the CRS applications server. Click **Next**.

Note When you are installing Unified CM Auto-Register Phone Tool in a network with a dedicated CRS server, you must run the Unified CM Auto-Register Phone Tool installation program again on the CRS server. Use CRS online help for assistance with installation and configuration.

Step 5 Enter the CRS application server IP address in the IP Address field, and click **Next**.

Step 6 The Installing Unified CM Auto-Register Phone ToolonAppsServer window displays a progress bar that shows the status of the installation. Click **Next** to begin the installation.

Step 7 The Installation Completed window displays when the installation ends. Click **Finish**.

Additional Topics

See the "Related Topics" section on page 52-11.

Configuring the Unified CM Auto-Register Phone Tool Application in CRS Applications Server

You can review the Cisco CRS 4.5 application server documentation by browsing to Cisco Voice Applications and Tools at http://www.cisco.com. Refer to the *Cisco Customer Response Administration Guide* for instructions on how to configure an application.

Additional Topics

See the "Related Topics" section on page 52-11.

Uninstalling Unified CM Auto-Register Phone Tool

The uninstall program removes the Unified CM Auto-Register Phone Tool applications from the Cisco CRS server.

To uninstall Unified CM Auto-Register Phone Tool by using the Add/Remove Programs in the Control Panel, use the following procedure.

Procedure

Step 1 On the Cisco CRS server, choose **Start > Settings > Control Panel > Add/Remove Programs**.

Step 2 Choose Unified CM Auto-Register Phone Tool and click the **Change/Remove** button. A message displays that confirms the uninstall operation.

Step 3 To uninstall Unified CM Auto-Register Phone Tool, click **Yes** or **No** to cancel. If you clicked Yes, Unified CM Auto-Register Phone Tool uninstalls from the Cisco CRS server.

Step 4 To exit the uninstallation, click **OK**.

Additional Topics

See the "Related Topics" section on page 52-11.

Activating Unified CM Auto-Register Phone Tool Service

You can activate and deactivate Unified CM Auto-Register Phone Tool service by using Cisco Unified CallManager Serviceability after you access it by using the appropriate URL. Use the following procedure to activate the service.

Procedure

Step 1 Access Cisco Unified CallManager Serviceability.

Step 2 Choose **Tools > Service Activation**.

The Service Activation window displays.

Step 3 Choose the appropriate server from the drop-down list box. Click **Next**.

Step 4 Choose Cisco Unified CM Auto-Register Phone Tool Service from Database and Admin Services of the Unified CMServices list and click **Save**.

Note If the service is already activated, the Activation Status will display as Activated.

Step 5 The service gets activated, and the Activation Status column displays the status as Activated.

Starting/Stopping/Restarting Unified CM Auto-Register Phone Tool

The Unified CM Auto-Register Phone Tool service starts automatically after it is activated by using Cisco Unified CallManager Serviceability. This section describes the procedures to stop or restart the Unified CM Auto-Register Phone Tool service.

Procedure

Step 1 In Cisco Unified CallManager Serviceability, choose **Tools > Control Center - Feature Services.**

The Control Center–Feature Services window displays.

Step 2 Choose the Cisco Unified CallManager server from the Servers drop-down list box.

Cisco Unified CM Auto-Register Phone Tool Service displays in list under Database and Admin Services column, in the Unified CMServices.

Note If Unified CM Auto-Register Phone Tool was activated by using "Activating Unified CM Auto-Register Phone Tool Service" section on page 52-6, the Status displays as Activated.

Step 3 Check the check box that corresponds to Cisco Unified CM Auto-Register Phone Tool Service.

Step 4 If you want to restart the Unified CM Auto-Register Phone Tool service, click **Restart**.

The service restarts, and the message, Service Successfully Restarted, displays.

Step 5 If you want to stop the Unified CM Auto-Register Phone Tool service, click **Stop**.

The service stops, and the message, Service Successfully Stopped, displays.

Step 6 If you want to start a stopped Unified CM Auto-Register Phone Tool service, click **Start**.

The service starts, and the message, Service Successfully Started, displays.

Setting Unified CM Auto-Register Phone Tool Options

Administrators can choose how to use Unified CM Auto-Register Phone Tool in their Cisco Unified CallManager system. These Unified CM Auto-Register Phone Tool feature options provide more flexibility when allowing users to update phones or download phone profiles. Unified CM Auto-Register Phone Tool options include:

- Configuring Auto-Registration Options for Unified CM Auto-Register Phone Tool, page 52-8
- Setting Secure Directory Numbers, page 52-9
- Setting the User Locales for Unified CM Auto-Register Phone Tool, page 53-1

Configuring Auto-Registration Options for Unified CM Auto-Register Phone Tool

The Configure Unified CM Auto-Register Phone Tool option provides two ways to use Unified CM Auto-Register Phone Tool to update phones that auto-register with the Cisco Unified CallManager database.

- For phones that are added by using BAT and have a dummy MAC address.
- For existing phones in Cisco Unified CallManager Administration

The default setting limits use of Unified CM Auto-Register Phone Tool to phones that have a dummy MAC address with a device name that starts with the prefix "BAT."

You can set the Configure Unified CM Auto-Register Phone Tool option to allow any phone to auto-register in the Cisco Unified CallManager system, including phones that have a standard MAC address.

Note When you use Unified CM Auto-Register Phone Tool, it leads to the depletion of auto-registration range on the Cisco Unified CallManager. After update through Unified CM Auto-Register Phone Tool, the auto-registered directory number (DN) of the phone becomes an unassigned DN. You should delete unassigned DNs using BAT periodically to free up the auto-registration range. For more information, refer to *Cisco Unified CallManager Administration Guide*.

To set the Configure Unified CM Auto-Register Phone Tool option, use this procedure.

Procedure

Step 1 In the Cisco Unified CallManager Administration window, choose **System > Service Parameters.** The Service Parameter Configuration window displays.

Step 2 From the Server drop-down list, choose the appropriate server.

Step 3 From the Service drop-down list, choose **Cisco Unified CM Auto-Register Phone Tool Service**.

Step 4 Choose one of these two options from the Parameter Value drop-down list box.

- **Allow Auto-Registered phones to reset with a profile with a dummy MAC address**.

  Unified CM Auto-Register Phone Tool updates auto-registered phones with a profile that have the dummy MAC address only.

- **Allow Auto-Registered phones to reset with any profile**.

  Unified CM Auto-Register Phone Tool updates auto-registered phones with any profile.

Step 5 Click **Save**. A status message indicates that the update is successful.

Step 6 To return to the Unified CM Auto-Register Phone Tool Options window, click **Back**.

Additional Topics

See the "Related Topics" section on page 52-11.

Setting Secure Directory Numbers

The Secure Unified CM Auto-Register Phone Tool options let you specify directory numbers that Unified CM Auto-Register Phone Tool cannot access. Use this capability when you want to protect directory numbers from being accidentally assigned to another phone.

Note When you use Unified CM Auto-Register Phone Tool, it leads to the depletion of auto-registration range on the Cisco Unified CallManager. After update through Unified CM Auto-Register Phone Tool, the auto-registered directory number (DN) of the phone becomes an unassigned DN. You should delete unassigned DNs using BAT periodically to free up the auto-registration range. For more information, refer to *Cisco Unified CallManager Administration Guide*.

Use the following sections to find restricted directory numbers or to add restrict more directory numbers:

- Finding Secure Directory Numbers, page 52-9
- Restricting Directory Numbers, page 52-9
- Lifting Restriction on a Directory Number, page 52-10

Finding Secure Directory Numbers

Use the following procedure to find and list the directory numbers that have been restricted.

Procedure

Step 1 Choose **Bulk Administration > Unified CM Auto-Register Phone Tool > Secure** Unified Unified CM Auto-Register Phone Tool. The Find and List Secure Directory Numbers window displays.

Step 2 Click **Next**. The Secure Directory Numbers window displays.

Step 3 Enter the appropriate search criteria and click **Search**. A list of restricted directory numbers displays.

Step 4 To restrict more directory numbers, see the "Restricting Directory Numbers" section on page 52-9. To lift restriction on a directory number, see the, "Lifting Restriction on a Directory Number" section on page 52-10.

Additional Topics

See the "Related Topics" section on page 52-11.

Restricting Directory Numbers

To block Unified CM Auto-Register Phone Tool from using directory numbers that you specify, use this procedure. Unified CM Auto-Register Phone Tool cannot use any directory number that you include in the list of secured directory numbers.

Procedure

Step 1 Choose **Bulk Administration > Unified CM Auto-Register Phone Tool > Secure** Unified CM Auto-Register Phone Tool. The Find and List Secure Directory Numbers window displays.

Step 2 Click **Add New**. The Secure Directory Numbers Configuration window displays.

Step 3 In the Directory Number field, enter the number(s) that you want to protect from Unified CM Auto-Register Phone Tool. To enter multiple Directory Numbers, use one line for each Directory Number entry.

Step 4 Click **Save**.

Step 5 To return to Find and List Directory Numbers window, choose Back to Find/List from the Related links drop-down list box on the right, top corner of the window and click **Go**.

Unified CM Auto-Register Phone Tool cannot use the directory numbers that are shown in this list. If a user tries to update a device profile by entering one of the directory numbers in this list, Unified CM Auto-Register Phone Tool will refuse the request.

Additional Topics

See the "Related Topics" section on page 52-11.

Lifting Restriction on a Directory Number

To remove a directory number from the list of directory numbers that Unified CM Auto-Register Phone Tool cannot access, use this procedure.

Procedure

Step 1 Choose **Bulk Administration > Unified CM Auto-Register Phone Tool > Secure** Unified CM Auto-Register Phone Tool. The Find and List Secure Directory Numbers window displays.

Step 2 To find the directory numbers you want to delete, see"Finding Secure Directory Numbers" section on page 52-9.

Step 3 Choose the directory numbers that you want to remove from the secure directory number list and click **Delete**.

Note If two or more phones lines share an unrestricted directory number, and you are trying to update any of these phones, you will be prompted to enter the external phone mask of your phone.

Additional Topics

See the "Related Topics" section on page 52-11.

Viewing Unified CM Auto-Register Phone Tool Log Files

Use the following procedure to view Unified CM Auto-Register Phone Tool log files.

Step 1 Choose **Bulk Administration > Unified CM Auto-Register Phone Tool > View Taps Log File**.

Step 2 The View Unified CM Auto-Register Phone Tool Log File window displays.

Step 3 Each row of the log file represents each Unified CM Auto-Register Phone Tool transaction.

Additional Topics

See the"Related Topics" section on page 52-11.

Related Topics

- Introducing Cisco Unified CM Auto-Register Phone Tool, page 52-2
- Installing Unified CM Auto-Register Phone Tool, page 52-4
- Uninstalling Unified CM Auto-Register Phone Tool, page 52-6
- Activating Unified CM Auto-Register Phone Tool Service, page 52-6
- Starting/Stopping/Restarting Unified CM Auto-Register Phone Tool, page 52-7
- Setting Unified CM Auto-Register Phone Tool Options, page 52-7
- Setting Secure Directory Numbers, page 52-9Auto-registration Options for Unified CM Auto-Register Phone Tool, page 52-2
- Viewing Unified CM Auto-Register Phone Tool Log Files, page 52-11
- Setting the User Locales for Unified CM Auto-Register Phone Tool, page 53-1
- Unified CM Auto-Register Phone Tool Information for End Users, page 53-2

Related Topics

CHAPTER 53

User Locales for Unified CM Auto-Register Phone Tool

Administrators can specify the languages for TAPs voice prompts by using the User Locales for Unified CM Auto-Register Phone Tool option. You can configure user prompts for Unified CM Auto-Register Phone Tool in several languages. Make sure that the Cisco Unified CallManager Locale Installer is installed on every Cisco Unified CallManager and Cisco CRS server in the cluster.

Using the locale installer ensures that you have the latest translated text, translated voice prompts, country-specific phone tones, and country-specific gateways tones that are available for the phones. For more information on the Cisco Unified CallManager Locale Installer, refer to the specific locale installer documentation.

Note You have to select at least one user locale for Unified CM Auto-Register Phone Tool to work.

Setting the User Locales for Unified CM Auto-Register Phone Tool

Use the following procedures to add or remove languages for Unified CM Auto-Register Phone Tool prompts:

- Adding Languages for Unified CM Auto-Register Phone Tool Prompts, page 53-1
- Removing Languages for Unified CM Auto-Register Phone Tool Prompts, page 53-2

Adding Languages for Unified CM Auto-Register Phone Tool Prompts

To set the languages for Unified CM Auto-Register Phone Tool prompts, use the following procedure.

Procedure

Step 1 In the Cisco Unified CallManager Administration window, choose **Bulk Administration > Unified CM Auto-Register Phone Tool > User Locales for** Unified CM Auto-Register Phone Tool. The User Locales Configuration window displays.

Step 2 In the User Locales list box, which is the list of languages that are installed on Cisco Unified CallManager, choose the languages that you want to use for user prompts. Click the arrow to move the chosen language to the Selected User Locales list box.

You can choose as many languages as you need for user prompts and move them to the Selected User Locales list box.

Step 3 After you have chosen the languages for user prompts, to create a job, click **Submit**.

Step 4 Use the Job Scheduler option in the Bulk Administration main menu to schedule and/or activate this job.

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 53-3.

Removing Languages for Unified CM Auto-Register Phone Tool Prompts

To remove the languages for Unified CM Auto-Register Phone Tool prompts, use the following procedure.

Procedure

Step 1 Choose **Bulk Administration > Unified CM Auto-Register Phone Tool > User Locales for** Unified CM Auto-Register Phone Tool. The Select User Locales window displays. The User Locales Configuration window displays.

Step 2 In the Selected User Locales list box, which is the list of languages that is chosen for user prompts, choose the language that you want to remove.

Step 3 Click the arrow to move the chosen language to the User Locales list box.

You can choose one or many languages from user prompts and move them to the User Locales list box.

Step 4 Click **Submit.** A status message indicates that the update is complete.

Step 5 To return to the Unified CM Auto-Register Phone Tool Options window, click **Back**.

Additional Topics

See the "Related Topics" section on page 53-3.

Unified CM Auto-Register Phone Tool Information for End Users

To configure your new phone, use this procedure.

Procedure

Step 1 Plug the phone into a port.

The phone automatically registers and displays a number.

Note It takes around 20-25 seconds for downloading phone profile and making necessary updates in first node and directory.

Step 2 Dial the CTI Route Point number provided by your system administrator and follow the prompts.

Step 3 Dial the Unified CM Auto-Register Phone Tool extension that your system administrator provided.

Step 4 A voice prompts you to choose the language that you want to use. Choose appropriately.

Step 5 Dial your personal extension number, that your system administrator provided, followed by #.

Note You may be instructed to enter the complete telephone number (including area code).

Step 6 To confirm, enter your personal extension number again, followed by #.
You will receive confirmation prompt.

Step 7 Hang up the phone.

The phone resets and displays your extension number.

If you experience any problems, contact your system administrator.

Additional Topics

See the "Related Topics" section on page 53-3.

Related Topics

- Setting the User Locales for Unified CM Auto-Register Phone Tool, page 53-1
- Unified CM Auto-Register Phone Tool Information for End Users, page 53-2
- Installing Unified CM Auto-Register Phone Tool, page 52-4
- Uninstalling Unified CM Auto-Register Phone Tool, page 52-6
- Activating Unified CM Auto-Register Phone Tool Service, page 52-6
- Starting/Stopping/Restarting Unified CM Auto-Register Phone Tool, page 52-7
- Setting Unified CM Auto-Register Phone Tool Options, page 52-7
- Setting Secure Directory Numbers, page 52-9

Cisco Systems

PART 13

Troubleshooting BAT and Unified CM Auto-Register Phone Tool

CHAPTER 54

Troubleshooting BAT and Unified CM Auto-Register Phone Tool

For information about problems and messages that you might encounter when you are using Cisco Unified CallManager Bulk Administration (BAT) or Unified CM Auto-Register Phone Tool, use the following topics.

Viewing Trace Configuration Files

Trace files provide a means of tracking problems in the functioning of a tool. The system writes trace files for BAT and Unified CM Auto-Register Phone Tool to the server on which BAT and Unified CM Auto-Register Phone Tool are installed. You can choose to enable or disable the writing of trace files feature from the Service Control window in Cisco Unified CallManager Serviceability.

This section describes the procedure to enable and disable the writing of trace files.

Use the following procedure to enable the feature.

Procedure

Step 1 In Cisco Unified CallManager Serviceability, choose **Trace > Trace Configuration**.

The Trace Configuration window displays.

Step 2 Choose the Cisco Unified CallManager server, from the Server drop-down list box.

Step 3 Choose one of the following services from the Configured Services drop-down list box.

- For BAT trace file settings, choose Cisco Bulk Provisioning Service
- For Unified CM Auto-Register Phone Tool trace file settings, choose Cisco Unified CM Auto-Register Phone Tool Service

Step 4 To activate the trace feature, click the Trace On check box.

Step 5 In the Trace Filter Settings, choose the trace level that you want to set from the Debug Trace Level drop-down list box. Click the desired debug trace level as described in Table 54-1.

Table 54-1 Debug Trace Levels

Level	Description
Fatal	Traces very severe error events that may cause the application to abort.
Error	Traces alarm conditions and events. Used for all traces that are generated in abnormal path. Uses minimum number of CPU cycles.
Warn	Traces potentially harmful situations.
Info	Traces the majority of servlet problems and has a minimal effect on system performance.
Debug	Traces all State Transition conditions plus media layer events that occur during normal operation. Trace level that turns on all logging.

Step 6 Check the check boxes for Cisco Bulk Provisioning Service Trace Fields and Device Name Based Trace Monitoring, as needed.

Step 7 In the Trace Output Settings, enter values for the maximum number of files, maximum number of lines per file, and maximum number of minutes per file.

Step 8 Click **Update**.

The system enables the feature, and the trace files get written to the following locations on the server:

- BAT trace files: /var/log/active/cm/trace/bps/log4j
- Unified CM Auto-Register Phone Tool trace files: /var/log/active/cm/trace/taps/log4j

The BAT trace file displays in the following format:

bps<index number>.log

The Unified CM Auto-Register Phone Tool trace file displays in the following format

taps<index number>.log

where <*index number*> ranges from 1- 250.

After you have configured information that you want to include in the trace files, you can collect and view trace files by using the trace and log central option in the Real-Time Monitoring Tool (RTMT). For more information, refer to *Cisco Unified CallManager Serviceability System Guide*.

Use the following procedure to disable the writing trace files feature.

Procedure

Step 1 In Cisco Unified CallManager Serviceability, choose **Trace > Trace Configuration**.

The Trace Configuration window displays.

Step 2 Choose the Cisco Unified CallManager server from the Server drop-down list box.

Step 3 Choose Cisco Bulk Provisioning Service from the Configured Services drop-down list box.

Step 4 To deactivate the trace feature, uncheck the Trace On check box.

Step 5 Click **Update**.

This action means that the feature is disabled.

BAT Log Files

BAT generates log files for each bulk transaction. The log file shows the key value of a record, so the administrator may reexamine the record. The MAC address of the phone serves as the key value when you are adding, updating, or modifying phones. When users are added, the User ID serves as the key value. To view the log files for each job that is created in BAT, find the appropriate job, by using "Finding a Job" section on page 51-3, and click on the link in the Log File Name column. A pop-up window displays the log file details of that job.

The log file names designate the operation that was performed and the time that the operation ended.

- Log File Names—File name shows the Job ID, which is a unique identifier that the system creates when a job is submitted.
- TimeStamp—The timestamp format that is included in the log file name specifies *mmddyyyyhhmmss*.
- The log file name is of the format jobid#timestamp.txt

Additional Topics

See the "Related Topics" section on page 54-8.

Troubleshooting BAT

The following list describes some scenarios that could occur and provides possible resolutions.

Symptom Bulk Administration menu does not display in Cisco Unified CallManager Administration.

Explanation Bulk Administration menu is accessible only from first node of Cisco Unified CallManager.

Recommended Action Make sure that you are logged into first node of Cisco Unified CallManager.

Symptom Cannot access complete Bulk Administration functionality.

Explanation After logging into Cisco Unified CallManager Administration, all the Bulk Administration windows are not accessible.

Recommended Action This problem may arise due to restricted access to the application given to the User ID. Contact the System Administrator to be granted required permissions

Symptom Export to BAT Format button does not work in BAT.xlt file.

Explanation Clicking the **Export to BAT Format** button in the BAT.xlt file does not seem to do anything.

Recommended Action Click a blank cell. The button can seem to be disabled if the cursor is on the text in a cell or in the text box.

Symptom BAT Excel spreadsheet gives a compilation error while exporting data to the CSV format.

Explanation Check the version of Microsoft Excel that you are using. Customers have reported problems with BAT.xlt when they were using Excel 97.

Recommended Action Use Microsoft Excel 2000 version or higher.

Symptom BAT Excel spreadsheet does not respond to actions.

Explanation .BAT Excel spreadsheet does not respond to actions like Add More Lines and so on.

Recommended Action .Ensure that Enable Macros option is selected while opening BAT Excel spreadsheet.To enable macros in BAT.xlt use the following steps:

a. Open BAT.xlt.
b. Go to **Menu >Tools >Macro > Security**.
c. Set the Security Level to Medium.
d. Close BAT.xlt and open it again. When prompted, choose Enable Macros.

Symptom Data files (CSV) format do not match Phone Template/Sample File.

Explanation The number of lines in the data file should be less than or equal to the number of lines that are configured in the BAT phone template, but is not. For example, the phone template has three lines, and, of these, Lines 1, 2, and 3 are configured. You should use a phone data file with up to three configured lines. 1111, 2222, 4444 results in Line1-1111, Line2-2222, Line3-none, Line4-4444.

Recommended Action Check the BAT phone template that you intend to use. The number of lines that are specified on the CSV data file should not exceed the number of lines that are configured in the BAT phone template. Also, the number of speed dials that the CSV data file specifies should not exceed the maximum possible number of speed dials for the BAT phone template that you plan to use.

Symptom Uploaded CSV file does not display in the File Name drop-down list box.

Explanation The CSV file that you uploaded to Cisco Unified CallManager Server using File Upload Configuration widow, does not display in the File Name drop-down list box field for various operations. For example, if you uploaded a CSV file for inserting phones using Uploading/Downloading menu option in Bulk Administration menu, but the file does not appear as one of the options in the Insert Phone Configuration window File Name drop-down list box.

Recommended Action Check and make sure that the file is uploaded for the right function. In the preceding example, the you might have uploaded the file for Phones - Insert All details, where as the CSV file actually belongs to Phones -Insert Specific details.
Delete the file through Upload/Download Files menu option and upload it for the right function.

Symptom Jobs remain in Pending state even after the scheduled time expires.

Explanation You schedule jobs with a specific scheduled time for execution. But, the jobs remain in Pending state, even after the scheduled time.

Recommended Action Check for the following details:

a. Check that Cisco Bulk Provisioning Service (BPS) is started.
b. Check that there is no other job in Processing state. BPS can process only one job at a time.
c. Check if Stop Processing is requested for BPS transactions. If so, go to Job Scheduler window and click **Start Processing**.

Symptom Jobs remain in Hold state.

Explanation After you submit jobs with all the required data, the jobs show in Hold state on the job scheduler window. These jobs do not get executed.

Recommended Action You need to activate jobs that are in Hold state, before they can be executed by BPS. Go to Job Scheduler window and follow the process to activate the job.

Symptom Job does not display in the Find and List Jobs window.

Explanation After you submit a job with all the required data, choose **Bulk Administration > Job Scheduler**. Enter the appropriate search criteria for the job you scheduled and click **Find**. The job does not display in the search results. Check if Hide is chosen in the third drop-down list box in the Search Options area of the Find and List Jobs window. This option hides all the completed jobs. If the job you submitted is already complete then it will not be displayed in the Search Results area.

Recommended Action In the Find and List jobs window, choose Show from the third drop-down window and click **Find** again. The search results now display completed jobs also.

Symptom Port number not configured in the template.

Explanation The CSV file specified the port number, but no corresponding ports are configured in the BAT template.

Recommended Action In the BAT template, configure the ports that you have specified in the CSV file.

Symptom MAC address values are not allowed in the file if dummy MAC address values are desired.

Explanation The CSV file contains MAC addresses. You cannot provide dummy MAC addresses when MAC addresses are present in any row in the CSV file.

Recommended Action If you want to use dummy MAC addresses, create a new CSV file that contains only those records for which you have not specified MAC addresses. Alternatively, you can specify MAC addresses in the CSV file and not check the Create Dummy MAC Address check box.

Symptom The BAT.xlt spreadsheet does not work with Microsoft Excel XP (Office XP)

Explanation In Microsoft Excel packaged with Office XP, macro security is set to high by default. Due to this setting, macros in BAT.xlt cannot run which renders BAT.xlt unusable.

Recommended Action To enable macros in BAT.xlt use the following steps:

a. Open BAT.xlt.
b. Go to **Menu >Tools >Macro > Security**.
c. Set the Security Level to Medium.
d. Close BAT.xlt and open it again. When prompted, choose Enable Macros.

Troubleshooting BAT Performance

Keep in mind that it is best to send bulk transactions during low-traffic periods. When you insert BAT files to the first node database during the time when Cisco Unified CallManager is processing a high volume of calls, the BAT transactions can be slow. In fact, you can adversely affect how Cisco Unified CallManager processes calls.

You can improve BAT performance by restricting the file size of the file to less than 12000 records per file.

You can also improve BAT performance by stopping the TFTP service before you insert the BAT files to the first node database. You must restart the TFTP service when the insert transaction complete.

Use the following procedure to stop the TFTP service on the Cisco Unified CallManager first node server.

Procedure

Step 1 In Cisco Unified CallManager Serviceability window, choose **Tools > Control Center - Feature Services**.

Step 2 Choose Cisco TFTP from the Unified CMService list by clicking the corresponding radio button.

Step 3 Click **Stop** and click **OK**.

Note You must restart the TFTP service when the insert transaction is complete. Use the same procedure and click **Start** to restart the service.

Additional Topics

See the "Related Topics" section on page 54-8.

Troubleshooting BAT and Unified CM Auto-Register Phone Tool

When you install Unified CM Auto-Register Phone Tool, you must install the application on the Cisco Unified CallManager CRS server console. If you attempt to use Windows Terminal Services to install Unified CM Auto-Register Phone Tool, you receive a message that indicates that Unified CM Auto-Register Phone Tool installation is not supported over Terminal Services.

As a general rule, Cisco recommends that you stop Cisco Unified CallManager Unified CM Auto-Register Phone Tool service when Unified CM Auto-Register Phone Tool is not in use. You can prevent undesired Unified CM Auto-Register Phone Tool usage by stopping the service, and you can save some CPU time.

Additional Topics

See the "Related Topics" section on page 54-8.

Viewing Unified CM Auto-Register Phone Tool Log Files

Unified CM Auto-Register Phone Tool generates a row of information for each

To view Unified CM Auto-Register Phone Tool log file, choose **Bulk Administration > Unified CM Auto-Register Phone Tool > View Unified CM Auto-Register Phone Tool Log File**.

Unified CM Auto-Register Phone Tool Error Messages

You may receive the following messages while running Unified CM Auto-Register Phone Tool on the Cisco CRS server.

Symptom When dialing the Unified CM Auto-Register Phone Tool route point number, the caller receives a busy tone.

Explanation The busy tone indicates that the maximum number of simultaneous sessions for Unified CM Auto-Register Phone Tool has been reached. The maximum number of sessions for Unified CM Auto-Register Phone Tool equals the number of ports that are assigned to the Unified CM Auto-Register Phone Tool application in CRS configuration.

Recommended Action You must increase the number of ports that are assigned to Unified CM Auto-Register Phone Tool in CRS configuration to prevent this situation.

Symptom When the Cisco CRS server starts, the JTAPI subsystem shows partial service or out of service

Explanation Message occurs because of configuration problems in the Cisco Unified CallManager or the Cisco CRS server.

Recommended Action Perform one or all of the following steps until the problem has been corrected:

- Verify that Cisco Unified CallManager is started.
- Make sure that JTAPI is installed on the Cisco CRS server.
- Make sure that the JTAPI version on the CRS server is the same as the JTAPI version that is installed on Cisco Unified CallManager. If the version is not the same, install the JTAPI client from the Cisco Unified CallManager plug-ins window on the CRS server.
- Verify that the CRS engine configuration has a valid application engine host name. You can use the IP address to eliminate name resolution issues.
- Make sure that the Route Points and CTI ports are properly configured on the Cisco Unified CallManager.
- Verify that the Allow control of device from CTI check box is checked for the JTAPI user; you can verify that this in the user window in Cisco Unified CallManager Administration.
- Verify that the CTI Manager service is started.
- Verify that the ports and the route point are associated to the user in the Cisco Unified CallManager user configuration.

For further troubleshooting, collect and review MIVR log files for Cisco CRS server. You can find these files on the CRS server in the following folder: C:\program files\wfavvid\log\.

Additional Topics

See the "Related Topics" section on page 54-8.

Related Topics

- BAT Log Files, page 54-3
- Viewing Trace Configuration Files, page 54-1
- Troubleshooting BAT, page 54-3
- Troubleshooting BAT Performance, page 54-6
- Troubleshooting BAT and Unified CM Auto-Register Phone Tool, page 54-7

Cisco Systems

PART 14

Appendix

Text-Based CSV Files

Cisco Unified CallManager Bulk Administration (BAT) uses data that is entered in a comma separated values (CSV) file format to provide information for insert transactions to the Cisco Unified CallManager database on the first node server. By using the CSV data format, you can build a textual file that contains data records in a tabular format.

You can create a CSV data file by using a text editor, such as Microsoft Notepad. You must use a separate line to enter data for each record. Separate each data field with a comma and include comma separators for blank fields. Enter data on every line in the data file because an error occurs during the insert transaction if you enter a blank line in a CSV file.

When you insert the data records to the Cisco Unified CallManager database, BAT accesses a set of designated folders that reside on the server that is running the first node database. For BAT to access the appropriate CSV data file for the transaction, you must upload the CSV data file to the first node database server of Cisco Unified CallManager. See the "Uploading a File" section on page 2-3.

The following topics provide information and file formats for the following text-based CSV files:

Creating a Text-Based CSV File for Phones

Instead of using the BAT spreadsheet for data input when you are adding phones, you can create the comma separated values (CSV) file by using lines of ASCII text with values separated by commas.

Use the following procedure to create a CSV text file for phones, IP telephony devices, and user combinations.

Procedure

Step 1 Open a text editor (such as Microsoft Notepad) or any application that allows you to export or create a CSV file.

Step 2 Use a separate line to enter the values for each phone, IP telephony device, or user combination that you want to add to Cisco Unified CallManager. You must create separate CSV files for each type of device. Keep in mind the following rules when you create the CSV data file.

- Always include comma separators, even if a field is blank.
- Specify the user ID if the phone is to be associated to a user.
- Directory Number fields are optional only when you are creating the CSV file for use with a BAT template that has no lines. If lines are configured on the BAT phone template, you must supply directory numbers in the CSV file for each device.
- An error occurs when you insert a CSV file with blank lines.

See the "Phone CSV Data File Formats" section on page A-2 for information about the CSV data file formats that you must use for different phone types.

Step 3 Upload the CSV file to the first node of Cisco Unified CallManager. See the "Uploading a File" section on page 2-3.

For information about CSV file formats for other phone types, see these topics:

- Phone CSV Data File Formats, page A-2
- Export File Fields for All Phone Details Option, page A-4
- Phone CSV File Examples, page A-5

Phone CSV Data File Formats

Different types of phones require specific data formats. Keep in mind that fields that are labeled as optional in the phone file format become mandatory fields when certain conditions are met.

The following topics provide the formats and samples for these phone types:

- Phones With Users Combinations File Format, page A-2
- CTI Ports/H.323 Clients File Format, page A-3
- CTI Ports-Users and H.323 Client-Users Combinations File Format, page A-3

Phones With Users Combinations File Format

The following sample shows the field length and whether the field is optional or mandatory for a text-based CSV file for phones and the fixed user format.

First Name(Mandatory, 1 to 50 characters), **Last Name**(Mandatory, 1 to 50 characters), **User ID**(Mandatory, 1 to 30 characters), **Password**(Optional, up to 20 characters), **Manager USer ID**(Optional, up to 30 characters, must use the ID that exists in global directory), **Department**(Optional, up to 50 characters), **PIN**(Optional up to 20 numerals),**Default Profile**(Optional, up to 50 characters),**User Locale** (Optional, up to 50 characters),**Telephone Number** (Optional, up to 20 numerals),**Primary Extension** (Optional, up to 50 numerals),**Associated PC**(Optional, up to 50 characters),**ICD Extension**(Optional, up to 50 numerals),**Mail ID** (Optional, up to30

characters),**Presence Group** (Optional, up to 50 characters),**Subscribe Calling Search Space** (Optional, up to 50 characters), **MAC Address** (Mandatory, up to 12 characters),**Description** (Optional, up to 50 characters), **Location** (Optional, up to 50 characters), **Directory Number** (Optional, up to 24 numerals and special characters), **Display** (Optional, up to 30 characters), **Line Text Label** (Optional, up to 30 characters), **Forward Busy External** (Optional, up to 50 numerals and special characters), **Forward No Answer External** (Optional, up to 50 numerals and special characters), **Forward No Coverage External** (Optional, up to 50 numerals and special characters), **Forward Busy Internal** (Optional, up to 50 numerals and special characters), **Forward No Answer Internal** (Optional, up to 50 numerals and special characters), **Forward No Coverage Internal** (Optional, up to 50 numerals and special characters), **Call Pickup Group** (Optional, up to 50/50 characters), **Speed Dial** (Optional, up to 50 numerals and special characters), **Speed Dial Label** (Optional, up to 30 characters)

Sample

```
John,Smith,johns,abcde,Daviss,12,12345,johnProfile,English United
States,1,1231123245AB,Dallas,9725557154,9725557154,Mike,9725557172,9725557196,9725557112,9
725557127,9725557158,9725557189,9725557121/TollByPass,1230000000,Helpdesk
```

CTI Ports/H.323 Clients File Format

The following sample shows the field length and whether the field is optional or mandatory for a text-based CSV file for CTI ports and H.323 clients format.

Device Name (Mandatory, up to 15 characters for CTI ports and up to 50 characters for H.323 Clients),**Description** (Optional, up to 50 characters) **Location** (Optional, up to 50 characters),**User ID**(Optional, 1 to 30 characters),**Directory Number**(Optional, up to 24 numerals and special characters),**Display** (Optional, up to 30 characters), **Line Text Label**(Optional, up to 30 characters),**Forward Busy External**(Optional, up to 50 numerals and special characters),**Forward No Answer External**(Optional, up to 50 numerals and special characters),**Forward No Coverage External**(Optional, up to 50 numerals and special characters),**Forward Busy Internal**(Optional, up to 50 numerals and special characters),**Forward No Answer Internal**(Optional, up to 50 numerals and special characters),**Forward No Coverage Internal**(Optional, up to 50 numerals and special characters),**Call Pickup Group** (Optional, up to 50/50 characters)

Sample

```
Unified CM Auto-Register Phone Tool Port 1,CTI Unified CM Auto-Register Phone Tool Port
1,Dallas,johns,9728437154,9728437154,
Mike,9728437172,9728437196,9728437127,9728437154,9728437178,
9728437189,9728437121/TollByPass,1230000000,Helpdesk
```

CTI Ports-Users and H.323 Client-Users Combinations File Format

The following sample shows the field length and whether the field is optional or mandatory for a text-based CSV file for CTI ports with users and H.323 clients with users format.

First Name(Mandatory, 1 to 50 characters),**Last Name**(Mandatory, 1 to 50 characters),**User ID**(Mandatory, up to 30 characters),UserID (Mandatory, 1 to 30 characters),**Password** (Optional, up to 20 characters),**Manager User ID**(Optional, up to 30 characters, must use existing ID in global directory),**Department** (Optional, up to 50 characters),**PIN** (Optional, up to 20 numerals),**Default Profile** (Optional, up to 50 characters),**User Locale** (Optional, up to 50 characters),**Telephone Number** (Optional, up to 20 numerals),**Primary Extension** (Optional, up to 50 numerals),Associated PC (Optional, up to 50 characters),**ICD Extension**(Optional, up to 50 numerals),**Mail ID** (Optional, up to30 characters),**Presence Group** (Optional, up to 50 characters),**Subscribe Calling Search Space** (Optional, up to 50 characters),**Device Name** (Mandatory, up to 15 characters for CTI ports-users combination and up to 50 characters for H.323client-users combinations),**Description** (Optional, up to

50 characters),**Location** (Optional, up to 50 characters),**Directory Number** (Optional, up to 24 numerals and special characters),**Display** (Optional, up to 30 characters),**Line Text Label** (Optional, up to 30 characters),**Forward Busy External** (Optional, up to 50 numerals and special characters),**Forward No Answer External** (Optional, up to 50 numerals and special characters),**Forward No Coverage External**(Optional, up to 50 numerals and special characters),**Forward Busy Internal** (Optional, up to 50 numerals and special characters),**Forward No Answer Internal** (Optional, up to 50 numerals and special characters),**Forward No Coverage Internal** (Optional, up to 50 numerals and special characters),**Call Pickup Group** (Optional, up to 50 characters)

Sample

```
John,Smith,johns,abcde,Daviss,12,12345,johnProfile,English United States,1,Unified CM
Auto-Register Phone Tool Port 1,CTI Unified CM Auto-Register Phone Tool Port
1,9725557154,9725557154,Mike,9725557172,9725557196,9725557112,9725557127,9725557158,972555
7189,9725557121/TollByPass,1230000000,Helpdesk
```

Note If you use a comma or double quotes as part of the value in one of the fields, you must enclose the entire text value with double quotation marks to designate it as a single value.
For example, if you entered John, Bill as a text value, then you must enter the value as “John,Bill”.
If you entered a double quote in a value, then you must replace the double quote with two consecutive double quotes and enclose the value with double quotes. For example you must enter John “Chief as “John”“Chief”.

Additional Topics

See the “Related Topics” section on page A-21.

Export File Fields for All Phone Details Option

When you are using the export utility to generate a file that containing all the details for the phone records, the export file has the following format.

Caution Cisco does not recommend editing the file that is generated with the export utility. The system dynamically generates fields, such as Logout time and Login time, that must not be edited at all. You must ensure that the login user ID and Product Specific XML fields are accurate for them to work properly, and you must not edit them. Use BAT to update the product specific configurations.

Device Name,Description,Device Pool,Phone Template,CSS,AAR CSS,Location,Extension Mobility,Network Locale,Media Resource Group List,User Hold Audio Source,Network Hold Audio Source,Device User Locale,Signal Packet Capture Mode,Packet Capture Duration,Built in Bridge,Privacy,Retry Video Call as Audio,Ignore Presentation Indicators,Softkey Template,Module 1,Module 2,Phone Load Name,Module 1 Load Name,Module 2 Load Name,Information,Directory,Messages,Services,Authentication Server,Proxy Server,Idle,Idle Timer,MLPP Indication,MLPP Preemption,MLPP Domain,Device Type,User ID,Common Profile,Owner User ID,Allow CTI Control Flag,Device Presence Group,Security Profile,Device Subscribe CSS,Unattended Port,Require DTMF Reception,RFC2833 Disabled,Certificate Operation,Authentication String,Certification Operation Completion Time,Device Protocol,Secure Shell User,Secure Shell Password,XML,Dial Rules,CSS Reroute,CSS Refer,DTMF Signalling,Default DTMF Capability,SIP Profile,SIPCodec_MTPPreferredOrigCodec,Logout Profile,MTP Required,Digest User

Directory Number,Partition,Voice Mail Profile,Line CSS,AAR Group,Line User Hold Audio Source,Line Network Hold Audio Source ,Auto Answer,Forward All Voice Mail,Forward All Destination,Forward All CSS,Forward Busy Internal Voice Mail,Forward Busy Internal Destination,Forward Busy Internal CSS,Forward Busy External Voice Mail,Forward Busy External Destination,Forward Busy External CSS,Forward No Answer Internal Voice Mail,Forward No Answer Internal Destination,Forward No Answer Internal CSS,Forward No Answer External Voice Mail,Forward No Answer External Destination,Forward No Answer External CSS,Forward No Coverage Internal Voice Mail,Forward No Coverage Internal Destination,Forward No Coverage Internal CSS,Forward No Coverage External Voice Mail,Forward No Coverage External Destination,Forward No Coverage External CSS,Forward No Answer Ring Duration,Call Pickup Group,MLPP Target,MLPP CSS,MLPP No Answer Ring Duration,Line Text Label,External Phone Number Mask,Maximum Number of Calls,Busy Trigger,Message Waiting Lamp Policy,Ring setting (Phone Idle),Ring Setting (Phone Active),Caller Name,Caller Number,Redirected Number,Dialed Number,Line Description,Alerting Name,Alerting Name ASCII,Line Presence Group,Secondary CSS for Forward All,Forward on CTI Failure Voice Mail,Forward on CTI Failure Destination,Forward on CTI Failure CSS,Display,ASCII Display

Speed Dial Number,Speed Dial Label,Speed Dial Label ASCII,Service Name,Subscribed Service Name,Subscribed Service Name ASCII,Parameter Name,Parameter Value,Busy Lamp Field Destination,Busy Lamp Field Directory Number,Busy Lamp Field Label,Busy Lamp Field Label ASCII

Additional Topics

See the "Related Topics" section on page A-21.

Phone CSV File Examples

The following list provides examples of commonly used phone CSV data files:

Using a Template Attribute-Forward Busy Destination

If Forward Busy Destination is 3001 on a phone template, all records in a CSV file that have no value for Forward Busy Destination use 3001.

```
1231123245AB,SEP1231123245AB,Dallas,johns,9728437154,9728437154,Mike,,9728437196,972843712
7,9728437154,9728437178,9728437189,9728437121/TollByPass,1230000000,Helpdesk
```

No Phone Description Entry

If the description for a phone is blank, use this format:

```
1231123245AB,,Dallas,johns,9728437154,9728437154,Mike,9728437172,9728437196,9728437127,972
8437154,9728437178,9728437189,9728437121/TollByPass,1230000000,Helpdesk
```

No Active Line or Location Entry

If no active line is required and the location is also blank, use this format:

```
1231123245AB,SEP1231123245AB,,,1230000000,HelpDesk
```

Two Active Lines

If two active lines are required, use this format:

```
1231123245AB,SEP1231123245AB,Dallas,johns,9725557154,9725557154,Mike,9725557172,9725557196
,9728437127,9728437154,9728437178,9728437189,9725557121/TollByPass,9725557155,9725557155,K
elvin,9725557133,9725557196,9728437112,9728437145,9728437187,9728437198,9725557112/TollByP
ass,1230000000,Helpdesk
```

Note For the MAC Address, enter MAC address values or check the option for creating dummy MAC addresses.

Mandatory Phone Entries

If one line is required and you want to include only the required values and none of the optional values, use this format:

```
1231123245AB,,,,9725557154,,,,,
```

Using Dummy MAC Address Option

If the option is checked for a dummy MAC address and you want one line, use this format:

```
,Dallas,9725557154,9725557154,Mike,9725557172,9725557196,9728437127,9728437154,9728437178,
9728437189,9725557121/TollByPass,johns,1230000000,Helpdesk
```

Additional Topics

See the "Related Topics" section on page A-21.

Creating a Text-Based CSV File for Users

Instead of using the BAT spreadsheet for data input when you are adding users, you can create the comma separated values (CSV) file by using lines of ASCII text with values separated by commas.

Use this procedure to create a CSV text file for users.

Procedure

Step 1 Open a text editor (such as Microsoft Notepad) or any application that allows you to export or create a CSV file.

Step 2 Using a separate line for each user, enter the values for each user that you want to add to Cisco Unified CallManager. See Users File Format, page A-7, for detailed information about the formatting that you must use in the text-based CSV file.

You can associate any number of existing devices to a new user by entering the device name of all the devices separated by a comma at the end of the record.

You can associate a directory number to a user, even if that user does not control any device.

Note An error occurs if any blank lines exist in the CSV file.

Step 3 Upload the file to first node of the Cisco Unified CallManager. See "Downloading a File" section on page 2-2.

Related Topics

See the "Related Topics" section on page A-21.

Users File Format

Tip You must specify PIN and Password values, either on the CSV file or when using BAT for file insertion. If you want to apply individual PINs or passwords for each user or group of users, specify the PIN and password information in the CSV file. If you want to use a default PIN and password that all users can use, do not specify PIN or password values in the CSV file and instead provide this information when you use BAT to insert the CSV file in Cisco Unified CallManager.

The following sample format and examples show the fields, field length, and whether the field is optional or mandatory for a text-based CSV file for users.

First Name(Optional, 1 to 50 characters)**,Last Name**(Mandatory, 1 to 50 characters)**,User ID**(Mandatory, up to 30 characters)**,Manager User ID**(Optional, up to 30 characters, must use existing ID in global directory)**,Department** (Optional, up to 50 characters)**,PIN** (Optional, up to 20 numerals)**,Default Profile**(Optional, up to 50 characters)**,User Locale** (Optional, up to 50 characters)**,Telephone Number** (Optional, up to 20 numerals)**,Primary Extension** (Optional, up to 50 numerals)**,Associated PC** (Optional, up to 50 characters)**,ICD Extension**(Optional, up to 50 numerals)**,Mail ID** (Optional, up to30 characters)**,Presence Group** (Optional, up to 50 characters)**,Subscribe Calling Search Space** (Optional, up to 50 characters)

Sample

```
John,Smith,johns,abc123de,karend,0012055,9989,johns profile,English
United States,SEP1231123245AB,9725557154,SEP0010EB001234
```

You must specify delimiters even if a field is blank. Refer to the following examples and sample CSV records when you are creating CSV files.

Example 1

If the manager for a user is blank, use this format:

```
John,Smith,johns,abc123de,,0012055,9989,johns profile,English United
States,SEP1231123245AB,9725557154,SEP0010EB001234
```

Example 2

When you want to complete only the mandatory fields, use this format:

```
Smith,johns,,,,,,,
```

Example 3

When you want to complete only the mandatory fields and associate the user to a phone, use this format:

```
Smith,johns,,,,,,SEP1231123245AB,
```

Example 4

A user can control more than one device. You can add device names for additional devices at the end of the record.

- If the user controls only one device, use this format:

  ```
  John,Smith,johns,abc123de,karend,0012055,9989,johns profile,English
  United States,SEP1231123245AB,9725557154
  ```

- If the user controls three devices, use this format:

```
John,Smith,johns,abc123de,karend,0012055,9989,johns profile,English
UnitedStates,SEP1231123245AB,9725557154,SEP0010EB001234,SEP0010EB432101
```

Updating Users File Format

Use a text editor to create the CSV text file for updating users. Upload the file to first node server. See "Uploading a File" section on page 2-3.

When you are updating a record, you need to supply all mandatory fields for a file. If you have stored values in the optional fields, and you update a record with blank optional fields, you will reset the values to blank. See the "Retaining Stored Values" section on page 17-1 for information about keeping previously stored values.

The following sample format shows the field length and string types followed by examples of CSV files for updating users.

UserID (Mandatory, 1 to 30 characters)**,Password** (Optional, up to 20 characters),**Manager** (Optional, up to 30 characters, must use existing ID in global directory)**,Department** (Optional, up to 50 characters)**,PIN** (Optional, up to 20 numerals)**,Default Profile**(Optional, up to 50 characters)**,User Locale** (Optional, up to 50 characters)**,Telephone Number** (Optional, up to 20 numerals)**,Primary Extension** (Optional, up to 50 numerals)**,Associated PC** (Optional, up to 50 characters)**,ICD Extension**(Optional, up to 50 numerals)**,Mail ID** (Optional, up to30 characters)

Sample

```
johns,Daviss,123,johnProfile,English United States,SEP8612113425AC,9725557154
```

Note You must specify delimiters even if a field is blank. Refer to the following examples and sample CSV records when you are creating CSV files.

Example 1

If the manager for a user is blank. use this format:

```
johns,,123,johnProfile,English United States,SEP8612113425AC,9725557154
```

Example 3

Mandatory fields include the following fields:

```
John,Daviss,123,johnProfile,,,
```

Additional Topics

See the "Related Topics" section on page A-21.

Creating a Text-Based CSV File for User Device Profile

Instead of using the BAT spreadsheet for data input when you are adding user device profiles, you can create the comma separated values (CSV) file by using lines of ASCII text with values separated by commas.

Note If you use comma or double quotes as part of string in one of the fields, you must enclose the entire text string with double quotes.

To create a CSV text file for user device profiles, use this procedure.

Procedure

Step 1 Open Microsoft Notepad to create the CSV file.

Step 2 Using a separate line for each user device profile, enter the values for each user device profile that you want to add to Cisco Unified CallManager. See User Device Profiles File Format, page A-9, for detailed information about the formatting that you must use in the text-based CSV file.

Note An error occurs if any blank lines exist in the CSV file.

Step 3 Upload the CSV file to the first node server for Cisco Unified CallManager.

Additional Topics

See the "Related Topics" section on page A-21.

User Device Profiles File Format

The following sample format shows the field length and string types followed by examples of a CSV files for user device profiles.

Device Profile Name(Mandatory, 1 to 50 characters)**,Description**(Optional, 1 to 50 characters)**,Login UserID** (Optional, 4 to 30 characters)**,Directory Number**(Optional, up to 24 numerals and special characters)**,Display**(Optional, for internal Caller ID, up to 30 characters)**,Line Text Label**(Optional, up to 30 characters)**,Forward Busy External Destination**(Optional, up to 50 numerals)**,Forward No Answer External Destination**(Optional, up to 50 numerals)**,Forward No Coverage External**(Optional, up to 50 numerals)**,Forward Busy Internal Destination**(Optional, up to 50 numerals)**,Forward No Answer Internal Destination**(Optional, up to 50 numerals)**,Forward No Coverage Internal**(Optional, up to 50 numerals)**,Call Pickup Group**(Optional, up to 50/50 characters)**,Speed Dial Number**(Optional, up to 50 numerals)**,Speed Dial Label**(optional, up to 30 characters)

Sample

```
John Profile,John's
Profile,Johns,9725557154,9725557154,Mike,9725557172,9725557196,9725557126,9725557154,97255
57178,9725557189,9725557121/TollByPass,1230000000,Helpdesk
```

Example 1

You must specify delimiters even if a field is blank. The following example shows the correct format for not specifying a Display setting:

```
John Profile,John's
Profile,Johns,9725557154,,Mike,9725557172,9725557196,9725557126,9725557154,9725557178,9725
557189,9725557121/TollByPass,1230000000,Helpdesk
```

Example 2

If it is a 0-line profile and only mandatory fields are added, use the following example:

```
John Profile,,,,
```

Example 3

If only the mandatory fields are completed and you want to associate the user device profile to only one directory number, use this format:

```
John Profile,,,9725557154,,,,,
```

User Device Profile with Two Lines and Two Speed Dials

The following example format shows the field length and string types of a CSV file for user device profiles with two lines.

User Device Profile Name(Mandatory, 1 to 50 characters)**,Description**(Optional, 1 to 50 characters)**,Login UserID** (Optional, 4 to 30 characters)**,Directory Number1**(Optional, up to 24 numerals and special characters),**Display1**(Optional, for internal Caller ID, up to 30 characters)**,Line Text Label1**(Optional, up to 30 characters)**,Forward Busy External Destination1**(Optional, up to 50 numerals)**,Forward No Answer External Destination1**(Optional, up to 50 numerals)**,Forward No Coverage External Destination1**(Optional, up to 50 numerals)**,Forward Busy Intermal Destination1**(Optional, up to 50 numerals)**,Forward No Answer Internal Destination1**(Optional, up to 50 numerals)**,Forward No Coverage Internal Destination1**(Optional, up to 50 numerals)**,Call Pickup Group1**(Optional, up to 50/50 characters)**,Directory Number2**(Optional, up to 24 numerals and special characters)**,Display2**(Optional, for internal Caller ID, up to 30 characters)**,Line Text Label2**(Optional, up to 30 characters)**,Forward Busy External Destination2**(Optional, up to 50 numerals)**,Forward No Answer External Destination2**(Optional, up to 50 numerals)**,Forward No Coverage External Destination2**(Optional, up to 50 numerals)**,Forward Busy Intermal Destination2**(Optional, up to 50 numerals)**,Forward No Answer Internal Destination2**(Optional, up to 50 numerals)**,Forward No Coverage Internal Destination2**(Optional, up to 50 numerals)**,Call Pickup Group2**(Optional, up to 50/50 characters)**,Speed Dial Number1**(Optional, up to 50 numerals)**,Speed Dial Label1**(optional, up to 30 characters)**,Speed Dial Number2**(Optional, up to 50 numerals)**,Speed Dial Label2**(optional, up to 30 characters)

Example

```
John Profile,John's
Profile,John's,9725557154,9725557154,Mike,9725557172,9725557196,9725557126,9725557154,9725
557178,9725557189,9725557121/TollByPass,9725557155,9725557155,Kelvin,9725557133,9725557196
,9725557113,9725557145,9725557187,9725557198,9725557112/TollByPass,1230000000,Helpdesk,214
9523460,Keith
```

Export File Fields for User Device Profile with All Details Option

When you are using the export utility to generate a file that contains all the details for the user device profiles, the export file will have the following format. The example shows the length and type of fields in the export all details file.

The export utility does not generate model specific fields for user device profiles.

Caution Cisco does not recommend editing the file that is generated with the export utility. The system dynamically generates some fields, such as Logout time and Login time, that must not be edited at all. You must ensure that the login user ID and Product Specific XML fields are accurate for them to work properly and you must not edit them. Use BAT to update the product-specific configurations.

Device Profile Name,Description,Device Pool,Phone Template,CSS,AAR CSS,Location,Extension Mobility,Network Locale,Media Resource Group List,User Hold Audio Source,Network Hold Audio Source,Device User Locale,Signal Packet Capture Mode,Packet Capture Duration,Built in Bridge,Privacy,Retry Video Call as Audio,Ignore Presentation Indicators,Softkey Template,Module 1,Module 2,Phone Load Name,Module 1 Load Name,Module 2 Load Name,Information,Directory,Messages,Services,Authentication Server,Proxy Server,Idle,Idle Timer,MLPP Indication,MLPP Preemption,MLPP Domain,Device Type,User ID,Common Profile,Owner User ID,Allow CTI Control Flag,Device Presence Group,Security Profile,Device Subscribe CSS,Unattended Port,Require DTMF Reception,RFC2833 Disabled,Certificate Operation,Authentication String,Certification Operation Completion Time,Device Protocol,Secure Shell User,Secure Shell Password,XML,Dial Rules,CSS Reroute,CSS Refer,DTMF Signalling,Default DTMF Capability,SIP Profile,SIPCodec_MTPPreferredOrigCodec,Logout Profile,MTP Required,Digest User

Directory Number,Partition,Voice Mail Profile,Line CSS,AAR Group,Line User Hold Audio Source,Line Network Hold Audio Source ,Auto Answer,Forward All Voice Mail,Forward All Destination,Forward All CSS,Forward Busy Internal Voice Mail,Forward Busy Internal Destination,Forward Busy Internal CSS,Forward Busy External Voice Mail,Forward Busy External Destination,Forward Busy External CSS,Forward No Answer Internal Voice Mail,Forward No Answer Internal Destination,Forward No Answer Internal CSS,Forward No Answer External Voice Mail,Forward No Answer External Destination,Forward No Answer External CSS,Forward No Coverage Internal Voice Mail,Forward No Coverage Internal Destination,Forward No Coverage Internal CSS,Forward No Coverage External Voice Mail,Forward No Coverage External Destination,Forward No Coverage External CSS,Forward No Answer Ring Duration,Call Pickup Group,MLPP Target,MLPP CSS,MLPP No Answer Ring Duration,Line Text Label,External Phone Number Mask,Maximum Number of Calls,Busy Trigger,Message Waiting Lamp Policy,Ring setting (Phone Idle),Ring Setting (Phone Active),Caller Name,Caller Number,Redirected Number,Dialed Number,Line Description,Alerting Name,Alerting Name ASCII,Line Presence Group,Secondary CSS for Forward All,Forward on CTI Failure Voice Mail,Forward on CTI Failure Destination,Forward on CTI Failure CSS,Display,ASCII Display

Speed Dial Number,Speed Dial Label,Speed Dial Label ASCII,Service Name,Subscribed Service Name,Subscribed Service Name ASCII,Parameter Name,Parameter Value,Busy Lamp Field Destination,Busy Lamp Field Directory Number,Busy Lamp Field Label,Busy Lamp Field Label ASCII

Note Use True and False for settings with Boolean values.

Additional Topics

See the "Related Topics" section on page A-21.

Creating a Text-Based CSV File for Cisco Unified CM Assistant Manager-Assistant Associations

Instead of using the BAT spreadsheet for data input when you are adding Unified CM Assistant managers and assistants, you can create the comma separated values (CSV) file by using lines of ASCII text with values separated by commas.

To create a CSV text file for Unified CM Assistant manager and assistants, use this procedure.

Procedure

Step 1 Open a text editor (such as Notepad) or any application that allows you to export or create a CSV file.

Step 2 Using a separate line for each manager-assistants association, enter the values for each manager-assistant that you want to add to Cisco Unified CallManager. See Managers and Assistants File Formats, page A-12, for detailed information about the formatting that you must use in the text-based CSV file.

Note An error occurs if any blank lines exist in the CSV file.

You can assign multiple assistants to a manager by entering the user IDs of the manager and assistants separated by a comma at the end of the record.

Step 3 Upload the file to the server that is running the first node database for Cisco Unified CallManager. See the "Uploading a File" section on page 2-3.

Additional Topics

See the "Related Topics" section on page A-21.

Managers and Assistants File Formats

The following sample formats and examples show the field length and string types for Unified CM Assistant manager and assistant associations. Use the user ID of the manager for the Manager ID and the user ID of the assistant for the Assistant ID. You can also associate many managers to one assistant by putting the Assistant ID first, followed by a list of Manager IDs. When you insert the CSV file, you select the type of association.

Default Manager-Assistant Association

Use the following default format for manager-assistant association.

ManagerID (Mandatory, 1 to 30 characters)**,AssistantID 1** (Mandatory, 1 to 30 characters)**,AssistantID 2** (Optional, 1 to 30 characters)**...AssistantID #** (Optional, 1 to 30 characters)

Sample

```
Johns,Mikeh,Larryh
```

Default Assistant-Manager Association

Use the following default format for assistant-manager association.

AssistantID (Mandatory, 1 to 30 characters)**,ManagerID 1**(Mandatory, 1 to 30 characters)**,ManagerID 2** (Optional, 1 to 30 characters)**...ManagerID #** (Optional, 1 to 30 characters)

Sample

```
Larryh,Johns,Mikeb,Karend
```

Custom Manager-Assistant Association

For proxy line configurations, you can build a CSV data file that specifies the proxy lines on assistant phones by using this format.

ManagerID (Mandatory, 1 to 30 characters)**,Device Name** (Optional, 15 characters)**,Intercom DN** (Optional, 1 to 24 characters)**,Assistant User ID** (Mandatory, 1 to 30 characters)**,Device Name** (Optional, 15 characters)**,Intercom DN** (Optional, 1 to 24 characters)**,Proxy Line DN** (Mandatory, 1to 24 characters)**,Manager Line DN** (Mandatory, 1 to 24 characters)

Example

```
Johns,SEP1231123245AB,90001,Mikeh,SEP2342342342AB,20001,20002,90002
```

Additional Topics

See the "Related Topics" section on page A-21.

Creating a Text-Based CSV File for Cisco VG200 Gateways

Instead of using the BAT spreadsheet for data input when you are adding Cisco VG200 gateways, you can create the comma separated values (CSV) file by using lines of ASCII text with values separated by commas.

To create a CSV text file for VG200 gateways, use this procedure.

Procedure

Step 1 Open a text editor (such as Notepad) or any application that allows you to export or create a CSV file.

Step 2 Using a separate line for each gateway, enter the values for each gateway and port that you want to add to Cisco Unified CallManager.

The sections, FXO or FXS Trunks CSV File Format, page A-14, and T1 CAS, T1 PRI, or E1 PRI Trunks File Format, page A-14, provide descriptions and examples.

Note An error occurs if any blank lines exist in the CSV file.

Step 3 Upload the file to the server that is running the first node database for Cisco Unified CallManager. See the "Uploading a File" section on page 2-3.

Additional Topics

See the "Related Topics" section on page A-21.

FXO or FXS Trunks CSV File Format

The following sample format shows the required field length and string types followed by sample of CSV files for a Cisco VG200 gateway.

MGCP Domain Name(Mandatory, 1 to 64 characters)**,Description**(Optional, up to 100 characters)**,Slot**(Mandatory, up to 3 numerals), **Subunit** (Mandatory, up to 3 numerals), **Port Number**(Mandatory, up to 3 numerals), **Port Description** Optional, up to 50 characters),**Port Directory Number**(Optional, up to 24 numerals and special characters)

Sample

```
MGCPTest,VG200 Lab Gateway,0,1,0,Port 0,97255576601
MGCPTest,VG200 Lab Gateway,0,1,1,Port 1,97255572001
```

Note You must include comma separators even if a field is blank. Specify the directory number and route partition only if the port type in the Cisco VG200 gateway template is POTS.

Example 1

If the Description for a Cisco VG200 gateway is blank, use this format:

```
MGCPTest, ,0,1,0,Port 0,97255576601
```

Additional Topics

See the "Related Topics" section on page A-21.

T1 CAS, T1 PRI, or E1 PRI Trunks File Format

The following sample format shows the required field length and string types followed by examples of CSV files for the Cisco VG200 gateway.

T1 CAS Trunks

MGCP Domain Name(Mandatory, 1 to 64 characters),**Description**(Optional, up to 100 characters),**Slot**(Mandatory, up to 3 numerals),**Subunit**(Mandatory, up to 3 numerals),**Port Number**(Mandatory, up to 3 numerals),**Port Description** (Optional, up to 50 characters),**CAS Port Number**(Optional, up to 3 numerals)

Sample 1

```
MGCPTest,VG200 Lab Gateway,001,001,001,,,
```

T1 PRI or E1 PRI

MGCP Domain Name(Mandatory, 1 to 64 characters),**Description**(Optional, up to 100 characters),**Slot**(Mandatory, up to 3 numerals), **Subunit**(Mandatory, up to 3 numerals), **Port Number**(Mandatory, up to 3 numerals), **Port Description** (Optional, up to 50 characters)

Sample 2

```
MGCPTest,VG200 Lab Gateway,001,001,001,,
```

Note You must include comma separators even if a field is blank.

Example for Both Trunk Options

If you provide only the mandatory value, use this format:

```
MGCPTest,,001,001,001,,
```

T1 CAS Examples

If the Description for a Cisco VG200 gateway is blank, use this option:

```
MGCPTest,,001001,001,001,MGCP Port,
```

For port identifiers, the first digit is either 0 or 1 (signifying either Sub-Unit 0 or Sub-Unit 1), followed by the port number, 01 to 24. Acceptable values include 001 through 024 or 101 through 124. If the Cisco VG200 gateway template has three port identifiers, use this option:

```
MGCPTest,VG200 Lab Gateway,001,002,003
```

Additional Topics

See the "Related Topics" section on page A-21.

Creating a Text-Based CSV File for Cisco Catalyst 6000 FXS Ports

Instead of using the BAT spreadsheet for data input when you are adding Cisco Catalyst 6000 FXS ports, you can create the comma separated values (CSV) file by using lines of ASCII text with values separated by commas.

Use this procedure to create a CSV text file for Cisco Catalyst 6000 FXS ports.

Procedure

Step 1 Open a text editor (such as Notepad) or any application that allows you to export or create a CSV file.

Step 2 Using a separate line for each port, enter the values for each port that you want to add to Cisco Unified CallManager. See Cisco Catalyst 6000 (FXS) Ports File Format, page A-16, for detailed information about the formatting that you must use in the text-based CSV file.

Note An error occurs if any blank lines exist in the CSV file.

Step 3 Upload the CSV file to the first node of Cisco Unified CallManager. See the "Uploading a File" section on page 2-3.

Additional Topics

See the "Related Topics" section on page A-21.

Cisco Catalyst 6000 (FXS) Ports File Format

The CSV file contains information about each port as a record. Each record specifies the gateway MAC address and port number on that gateway to which you want to add or update the port details.

Note BAT does not add Cisco Catalyst 6000 (FXS) gateways. It only adds or updates ports to an existing gateway.

For the MAC address, enter no MAC address values for an existing Cisco Catalyst 6000 (FXS) gateway. This MAC address uses the last 12 characters in the Gateway Name.

If you provide no values for Partition for any record on the CSV file, the system uses values from the BAT template for these fields.

The following sample format shows the required field length and string types followed by examples of CSV files for Catalyst 6000 (FXS) ports.

MAC Address (Mandatory, 12 characters)**,Port Number** (Mandatory, 2 numerals)**,Directory Number**(Optional, up to 24 numerals and special characters)

Sample

```
1231123245AB,23,9725557250
```

Note You must include comma separators even if a field is blank.
Do not specify a partition unless you have also specified a directory number.

Examples

If the directory number for a port is blank, use this format:

```
1231123245AB,23,
```

If you want to add only the mandatory values, use this format:

```
1231123245AB,23,
```

Additional Topics

See the "Related Topics" section on page A-21.

Creating a Custom Text-Based CSV Files for Client Matter Codes and Forced Authorized Codes

To create a custom text-based CSV file, perform the following procedure:

Procedure

Step 1 Open a text editor (such as Notepad) or any application that allows you to export or create a CSV file.

Step 2 Using a separate line for each code, create a custom Client Matter Codes (CMC) CSV file or a Forced Authorized Codes (FAC) CSV file, as described in the following steps:

- For CMC—Step 3 and Step 5
- For FAC— Step 4 and Step 5

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

Step 3 To create a CMC CSV file, enter the corresponding information, where x, y represent the following fields:

- x—The client matter code (mandatory entry for all additions, updates, and deletions)
- y—The description (optional if you update the entry)

For example, you may enter 5555,Acme Toys, where 5555 equals the mandatory client matter code, and Acme Toys equals the description.

Step 4 To create a FAC CSV file, enter the corresponding information, where x,y,z represent the following fields:

- x—The forced authorization code (mandatory entry for all additions, updates, and deletions)
- y—The authorization code name (optional if you update the entry)
- z—The authorization level (optional if you update the entry)

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.

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 5 Upload the CSV file to the first node of Cisco Unified CallManager. See the "Uploading a File" section on page 2-3.

Step 6 Perform one of the following tasks:

- If you made additions or updates, insert the file in BAT, as described in "Using BAT to Update the Cisco Unified CallManager Database" section on page 47-6.
- If you plan to delete code settings, see the "Deleting Code Settings" section on page 48-1.

Note You cannot perform insert and update operations simultaneously with the same CSV file. You have to create separate CSV files for insert and update.

Additional Topics

See the "Related Topics" section on page A-21.

CMC File Format

The following sample format and examples show the fields, field length, and whether the field is optional or mandatory for a text-based CSV file for client matter codes.

Client Matter Code(Mandatory, 1 to 16 numerals),**Description**(Optional, 1 to 50 Characters)

Sample

```
1234567890123456,Marketing
```

Example

If the value of the field includes a comma, that field must be enclosed in double quotes. Use this format for fields with commas:

```
1234567890123456,"Marketing, team"
```

Additional Topics

See the "Related Topics" section on page A-21.

Updating CMC File Format

Use a text editor to create the CSV text file for updating client matter codes.

The following sample format shows the field length and string types followed by examples of CSV files for updating client matter codes.

Client Matter Code(Mandatory, 1 to 16 numerals),**Description**(Optional, 1 to 50 Characters)

Sample

```
1234567890123456,Marketing
```

Example

If the description is empty, use this format:

```
1234567890123456,
```

Additional Topics

See the "Related Topics" section on page A-21.

FAC File Format

The following sample format and examples show the fields, field length, and whether the field is optional or mandatory for a text-based CSV file for forced authorization codes.

Forced Authorization Code(Mandatory, 1 to 16 numerals),**Authorization Code Name** (Mandatory, 1 to 50 Characters),**Authorization Level**(Mandatory,values range from 0 to 255)

Sample

```
1234567890123456,John FAC,251
```

Additional Topics

See the "Related Topics" section on page A-21.

Updating FAC File Format

Use a text editor to create the CSV text file for updating client matter codes.

The following sample format shows the field length and string types followed by examples of CSV files for updating forced authorization codes.

Forced Authorization Code(Mandatory, 1 to 16 numerals),**Authorization Code Name** (Mandatory, 1 to 50 Characters),**Authorization Level**(Mandatory,values range from 0 to 255)

Sample

```
1234567890123456,John FAC,251
```

Example

Values you do not want to update must still include the delimiter. If only the Authorization Code Name has to be updated use the following format:

```
1234567890123456,John FAC,
```

If only the Authorization level has to be updated, use the following format:

```
1234567890123456,John FAC,220
```

Additional Topics

See the "Related Topics" section on page A-21.

Creating a Text-Based CSV File for Call Pickup Groups

To create a custom text-based CSV file, perform the following procedure:

Procedure

Step 1 Open a text editor (such as Notepad) or any application that allows you to export or create a CSV file.

Step 2 Using a separate line for each call pickup group name, create a custom call pickup group CSV file as described in the following steps:

Step 3 Enter the Pickup Group Name, Pickup Group Number, Partition, Other Pickup Group Name-Member1... Other Pickup Group Name-Member10.

For example, you may enter Marketing,7815,Part1,Marketing,Managers,Training, where Marketing is the mandatory pickup group name, 7815 is the mandatory pickup group number. Part1 is the partition, Marketing, Managers, and Training are the other pickup group names that are associated to the pickup group Marketing.

Caution 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 Sales from Marketing, from the preceding examples, overwrites the existing value in the database.

Step 4 Upload the CSV file to the first node of Cisco Unified CallManager. See the "Uploading a File" section on page 2-3.

Step 5 Perform one of the following tasks:

- If you made additions or updates, insert the file in BAT, as described in "Using BAT to Update the Cisco Unified CallManager Database" section on page 47-6.
- If you plan to delete call pickup groups settings, see the "Deleting Code Settings" section on page 48-1.

Additional Topics

See the "Related Topics" section on page A-21.

CPG File Format

The following sample format and examples show the fields, field length, and whether the field is optional or mandatory for a text-based CSV file for call pickup groups.

Pickup Group Name(Mandatory, 1 to 50 characters),**Pickup Group Number**(Mandatory, 1 to 24 numerals),**Partition**(Optional, 1 to 50 Characters),**Other Pickup Group Name-Member1... Other Pickup Group Name-Member10**(Optional, 1 to 50 Characters)

Sample

```
Marketing,7815,Part1,Marketing,Managers,Training
```

Example

Optional values that you do not want to specify at this time must still include the delimiter (a comma) except for Other Pickup Group members.

If the Partition for a Pickup Group is blank, use the following format:

```
Marketing,7815,
```

Additional Topics

See the "Related Topics" section on page A-21.

Updating CPG File Format

Use a text editor to create the CSV text file for updating the call pickup group.

The following sample format shows the field length and string types followed by examples of CSV files for updating call pickup groups.

Pickup Group Name(Mandatory, 1 to 50 characters),**Pickup Group Number**(Mandatory, 1 to 24 numerals),**Partition**(Optional, 1 to 50 Characters),**Other Pickup Group Name-Member1... Other Pickup Group Name-Member10**(Optional, 1 to 50 Characters)

Sample

```
Marketing,,,Marketing,Managers,Training
```

Example

If you do not want to update Other Pickup Group member, do not include the delimiter (a comma). Use the following format:

```
Marketing,,,Managers,Marketing,Training
```

Additional Topics

See the "Related Topics" section on page A-21.

Related Topics

- Creating a Text-Based CSV File for Phones, page A-1
- Creating a Text-Based CSV File for Users, page A-6
- Creating a Text-Based CSV File for User Device Profile, page A-9
- Creating a Text-Based CSV File for Cisco Unified CM Assistant Manager-Assistant Associations, page A-12
- Creating a Text-Based CSV File for Cisco VG200 Gateways, page A-13
- Creating a Text-Based CSV File for Cisco Catalyst 6000 FXS Ports, page A-15
- Creating a Custom Text-Based CSV Files for Client Matter Codes and Forced Authorized Codes, page A-16
- Creating a Text-Based CSV File for Call Pickup Groups, page A-19

BAT Performance

Table Table B-1 lists the performance values for various BAT transactions.

Note The following performance data occurs at laboratory conditions, and this data can change depending on Cisco Unified CallManager activity. Off-peak hour numbers only provide an approximate guidance to judge the overall time for transaction.

Table B-1 BAT Performance Measures for Various Transactions

Transaction	Records Processed/Minute
Forced Authorization Codes	
Insert FAC	200
Delete FAC	500
Client Matter Codes	
Insert CMC	250
Delete CMC	500
Call Pickup Groups	
Insert CPG	200
Delete CPG	500
Phones/Users	
Validate Phones/Users	100
Insert Phones/Users	30
Users	
Insert Users	150
Update Users	65
Reset Password/PIN Query	500
Reset Password/PIN Custom	350
Generate User reports	500
Export Users - Specific	250
Export Users - All	200
Delete Users - Query	300
Delete Users - Custom	300

Table B-1 BAT Performance Measures for Various Transactions

Transaction	Records Processed/Minute
Manager Assistants	
Manager/Assistant Insert	75
Manager/Assistant CSV-Based Delete	300
Manager/Assistant Query-Based Delete	300
Manager/Assistant Custom File-Based Delete	300
UDP Transactions	
Validate UDP	300
Insert UDP Specific Details	65
Export All Details	50
Add lines UDP	75
Report UDP	125
Delete UDP	70
Phone Transactions	
Validate Phones	250
Insert Specific Phones	45
Export All Details	75
Update Phones	150
Add lines for Phones	75
Reset/Restart Phones	500
Generate Phone Reports	300
Delete Phones (Query)	75

A

B

C

D

E

F

G

H

I

J

L

M

N

O

P

Q

R

S

T

U

V