



# Bulk Administration Tool User Guide

Release 4.4(4)

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## **Preface** xi

Purpose xi

Audience xi

Organization xii

Related Documentation xiii

Conventions xiv

Obtaining Documentation xv

    Cisco.com xv

    Ordering Documentation xv

Documentation Feedback xvi

Obtaining Technical Assistance xvi

    Cisco Technical Support Website xvi

    Opening a TAC Case xvii

    TAC Case Priority Definitions xvii

Obtaining Additional Publications and Information xviii

---

## CHAPTER 1

### **Overview** 1-1

BAT Specifications 1-2

Using BAT 1-3

    Starting BAT 1-3

    Logging On to BAT 1-4

- Obtaining Online Help 1-4
  - Finding the BAT Version 1-4
  - Finding the TAPS Version 1-5
- Stopping BAT 1-5

---

CHAPTER 2

**Installation 2-1**

- Upgrading BAT 2-2
- Installing BAT/TAPS 2-3
- Installing TAPS 2-5
- Uploading TAPS to the Cisco CRA Server 2-7
- Uninstalling BAT and TAPS 2-8
- Completing TAPS Uninstallation 2-9

---

CHAPTER 3

**Working with Phones, IP Telephony Devices, and User Combinations 3-1**

- Adding Phones and Other IP Telephony Devices 3-2
  - Creating a BAT Phone Template 3-3
  - Adding or Updating Lines to a BAT Phone Template 3-5
  - Adding or Updating IP Services to a BAT Phone Template 3-6
  - Adding or Updating Speed Dials to a BAT Phone Template 3-6
  - Creating CSV Files for Phones, IP Telephony Devices, and the User Combinations 3-7
    - Understanding the BAT.xlt File 3-9
    - Creating a CSV File for Phones, IP Telephony Devices, and User Combinations Using BAT.xlt 3-9
    - Creating a Text-Based CSV Text File 3-16
- Validating Phone Records 3-22
- Adding Phones or Other IP Telephony Device to Cisco CallManager 3-24
- Adding Phones and Users or Other IP Telephony Devices to Cisco CallManager 3-26

Copying a BAT Phone Template	3-29
Adding Lines to Existing Phones	3-31
Updating Phones	3-32
Updating Lines	3-35
Viewing a List of Phones with Dummy MAC Addresses	3-37
Viewing a List of Devices	3-38
Deleting Phones	3-39
Deleting Templates	3-41
Field Descriptions	3-42
Field Descriptions for Adding a BAT Phone Template	3-42
Field Descriptions for Adding a Line to a BAT Phone Template	3-51
Field Descriptions for Updating Lines	3-55
Field Descriptions for Update Phones	3-57

---

**CHAPTER 4****Working with Users 4-1**

Adding Users	4-1
Creating the CSV File for Users	4-2
Creating a CSV File for Users Using BAT.xlt	4-3
Creating a Text-Based CSV File for Users	4-5
Adding Users to Cisco CallManager	4-8
Updating Users	4-12
Creating the CSV File for Updating Users	4-12
Creating a CSV File for Updating Users Using BAT.xlt	4-13
Creating a Text-Based CSV File for Updating Users	4-15
Updating Users to Cisco CallManager	4-18
Deleting Users	4-20
Deleting Users from Cisco CallManager	4-21

CHAPTER 5

**Working with User Device Profiles 5-1**

- Configuring User Device Profiles 5-1
  - Creating a Template for Inserting User Device Profiles 5-2
    - Creating the CSV File for User Device Profiles 5-4
    - Creating a Text-Based CSV File for User Device Profile 5-7
- Validating User Device Profiles 5-12
- Inserting User Device Profiles 5-13
- Adding Lines 5-15
- Updating Lines 5-16
- Deleting User Device Profiles 5-17
- Field Descriptions for Adding a Line to a UDP Template 5-18

CHAPTER 6

**Working with Cisco IP Manager Assistant 6-1**

- Setting up the Phones and Lines for Use with Cisco IPMA 6-1
  - Setting Up Lines on New Phones 6-2
  - Setting Up Lines on Existing Phones 6-3
- Creating the CSV File for Manager-Assistant Associations 6-4
  - Creating a CSV File for Manager-Assistant Association by Using BAT.xlt 6-5
  - Creating a Text-Based CSV File for Manager-Assistant Association 6-8
- Adding or Modifying Manager-Assistant Associations 6-10
  - Adding/Updating Manager-Assistant to the Cisco CallManager 6-11
  - Manager and Assistant Line Configurations 6-12
  - Deleting Manager-Assistant from Cisco CallManager 6-15
- Deleting Managers or Assistants 6-16
  - Deleting Managers from Cisco CallManager 6-17
  - Deleting Assistants from Cisco CallManager 6-18

## CHAPTER 7

**Working with Client Matter Codes and Forced Authorization Codes** 7-1

- CMC and FAC Configuration Checklist 7-2
- Important BAT Considerations 7-3
- Creating a CSV File by Using BAT.xlt 7-4
- Creating a Custom Text-Based CSV File 7-5
- Editing an Existing CMC or FAC CSV File 7-7
- Deleting Code Settings 7-8
- CMC and FAC CSV File Settings 7-12
- Using BAT to Update the Cisco CallManager Database 7-14
- BAT Settings for Updating the Cisco CallManager Database 7-16

## CHAPTER 8

**Working with Gateways and Ports** 7-1

- Cisco VG200 Gateways and Ports 7-2
  - Adding Cisco VG200 Gateways and Ports 7-2
    - Creating a Cisco VG200 Gateway Template 7-3
    - Updating the Endpoint Identifiers for Cisco VG200 Gateway 7-7
  - Creating CSV Files for Cisco VG200 FXS or FXO Gateways 7-7
  - Creating CSV Files for Cisco VG200 T1-CAS, T1-PRI, or E1-PRI Gateways 7-9
  - Creating a Text-Based CSV Text File 7-12
    - FXO or FXS Trunks 7-13
    - T1-CAS, T1-PRI, or E1-PRI Trunks 7-14
  - Adding Cisco VG200 Gateways to Cisco CallManager 7-15
  - Copying a Cisco VG200 BAT Template 7-16
  - Deleting Cisco VG200 Gateways 7-17
- Cisco Catalyst 6000 24 Port FXS Analog Interface Module Ports 7-19
  - Adding or Updating Ports to Cisco Catalyst 6000 24 Port FXS Analog Interface Module Gateways 7-19
  - Creating a Cisco Catalyst 6000 (FXS) Ports Template 7-20
  - Creating CSV Files for Cisco Catalyst 6000 (FXS) Ports 7-21

- Using the Cisco Catalyst 6000 (FXS) Ports Tab in BAT.xlt 7-23
- Creating a Text-Based CSV Text File 7-25
- Adding Cisco Catalyst 6000 (FXS) Ports to Cisco CallManager 7-26
- Copying a Cisco Catalyst 6000 FXS Ports BAT Template 7-28
- Updating Cisco Catalyst 6000 24 Port FXS Analog Interface Module Ports in Cisco CallManager 7-29
- Deleting All Ports for Cisco Catalyst 6000 24 Port FXS Analog Interface Module Gateway 7-30
- Gateway Directory Number 7-31
  - Creating a Gateway Directory Number Template 7-32
  - Copying a Gateway Directory Number BAT Template 7-33
- Deleting Templates 7-34
- Field Descriptions 7-35
  - Field Descriptions for FXS Trunks on a Cisco VG200 Gateway 7-35
  - Field Descriptions for FXO Trunks on a Cisco VG200 Gateway 7-37
  - Field Descriptions for T1-CAS Trunks on a Cisco VG200 Gateway 7-39
  - Fields Descriptions for T1-CAS Ports 7-42
  - Field Descriptions for T1-PRI or E1-PRI Trunks on a Cisco VG200 Gateway 7-44
  - Field Descriptions for FXS Ports on a Cisco Catalyst 6000 24 Port Analog Interface Module 7-57
  - Field Descriptions for Gateway Directory Number Template 7-59

CHAPTER 9

**Working with the Export Utility 8-1**

- Moving Records from one Cisco CallManager Server to Another 8-1
- Updating Records on one Cisco CallManager Server 8-3
- Exporting Phone Records 8-4
- Exporting User Records 8-8
- Exporting User Device Profile Records 8-11
- Viewing Export Log Files 8-14

---

**CHAPTER 10****Working with TAPS 9-1**

## Configuring TAPS 9-3

Allowing TAPS to Update Any Cisco IP Phone That is Added Using Auto-Registration 9-4

Restricting TAPS to Update Only Cisco IP Phones That Were Added Using the Dummy MAC Address Option in BAT 9-5

## Starting TAPS 9-6

## Stopping TAPS 9-7

## Securing TAPS 9-7

Restricting Directory Numbers 9-8

Lifting the Restriction on a Directory Number 9-9

Resetting Directory Numbers 9-10

Viewing a List of Restricted Directory Numbers 9-11

## TAPS for End Users 9-11

---

**CHAPTER 11****Troubleshooting BAT and TAPS 10-1**

## BAT Log Files 10-1

## Viewing BAT Log Files 10-2

## Troubleshooting BAT 10-2

## Troubleshooting TAPS on the Cisco CRA Server 10-6

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**INDEX**





## Preface

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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, page xi](#)
- [Audience, page xi](#)
- [Organization, page xii](#)
- [Related Documentation, page xiii](#)
- [Conventions, page xiv](#)
- [Obtaining Documentation, page xv](#)

## Purpose

The *Bulk Administration Tool User Guide* provides instructions for using the Bulk Administrative Tool (BAT).

## Audience

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

# Organization

Table 1 provides the chapter layout of the guide.

**Table 1**     *Layout of BAT Tool User Guide*

Chapter	Description
Chapter 1, “Overview”	Provides an overview of BAT.
Chapter 2, “Installation”	Describes the installation, upgrade, and uninstallation procedures for BAT and the Tool for Auto-Registered Phone Support (TAPS).
Chapter 3, “Working with Phones, IP Telephony Devices, and User Combinations”	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.
Chapter 4, “Working with Users”	Describes how to add, update, and delete batches of users.
Chapter 5, “Working with User Device Profiles”	Describes how to add, update, or delete User Device Profiles.
Chapter 6, “Working with Cisco IP Manager Assistant”	Describes how to add, update, or delete Manager Assistant Associations.
Chapter 7, “Working with Client Matter Codes and Forced Authorization Codes”	Describes how to add, update, or delete Client Matter Codes and Forced Authorization Codes
Chapter 8, “Working with Gateways and Ports”	Describes how to add, update, or delete Cisco VG200 gateways and ports, 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.
Chapter 9, “Working with the Export Utility”	Describes how to use the export utility.

**Table 1**    *Layout of BAT Tool User Guide*

<a href="#">Chapter 10, “Working with TAPS”</a>	Describes how to use and configure TAPS.
<a href="#">Chapter 11, “Troubleshooting BAT and TAPS”</a>	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 TAPS.

## Related Documentation

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

- *Cisco CallManager Administration Guide*
- *Cisco CallManager System Guide*
- *Release Notes for Cisco CallManager Release 3.3(4) or later*
- *Installing Cisco CallManager Release 3.3*
- *Cisco CallManager Serviceability Administration Guide*
- *Cisco CallManager Serviceability System Guide*
- *Hardware Configuration Guide for the Cisco VG200*
- *Software Configuration Guide for the Cisco VG200*
- *Cisco VG248 Analog Phone Gateway Software Configuration Guide*
- *Cisco IP Phone Administration Guide for Cisco CallManager*
- *Cisco CallManager Features and Services Guide*
- *Troubleshooting Guide for Cisco CallManager*
- *Cisco IP Manager Assistant User Guide*

# Conventions

This document uses the following conventions:

Convention	Description
<b>boldface font</b>	Commands and keywords are in <b>boldface</b> .
<i>italic font</i>	Arguments for which you supply values are in <i>italics</i> .
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.
<b>boldface screen font</b>	Information you must enter is in <b>boldface screen font</b> .

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.

# 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 on the World Wide Web at this URL:

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

You can access the Cisco website at this URL:

<http://www.cisco.com>

International Cisco websites can be accessed from this URL:

[http://www.cisco.com/public/countries\\_languages.shtml](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\\_inpk/pdi.htm](http://www.cisco.com/univercd/cc/td/doc/es_inpk/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 submit e-mail comments about technical documentation to [bug-doc@cisco.com](mailto: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, Inc.  
Attn: Customer Document Ordering  
170 West Tasman Drive  
San Jose, CA 95134-9883

We appreciate your comments.

## Obtaining Technical Assistance

For all customers, partners, resellers, and distributors who hold valid Cisco service contracts, the Cisco Technical Assistance Center (TAC) provides 24-hour-a-day, award-winning technical support services, online and over the phone. Cisco.com features the Cisco Technical Support Website as an online starting point for technical assistance. If you do not hold a valid Cisco service contract, please 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 Cisco Technical Support Website is available 24 hours a day, 365 days a year. The Cisco Technical Support Website is located at this URL:

<http://www.cisco.com/tac>

Accessing all the 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 login ID or password, register at this URL:

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

## Opening a TAC Case

Using the online TAC Case Open Tool is the fastest way to open P3 and P4 cases. (P3 and P4 cases are those in which your network is minimally impaired or for which you require product information.) After you describe your situation, the TAC Case Open Tool automatically recommends resources for an immediate solution. If your issue is not resolved using the recommended resources, your case will be assigned to a Cisco TAC engineer. The online TAC Case Open Tool is located at this URL:

<http://www.cisco.com/tac/caseopen>

For P1 or P2 cases (P1 and P2 cases are those in which your production network is down or severely degraded) or if you do not have Internet access, contact Cisco TAC by telephone. Cisco TAC engineers are assigned immediately to P1 and P2 cases to help keep your business operations running smoothly.

To open a case 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 listing of Cisco TAC contacts, go to this URL:

<http://www.cisco.com/warp/public/687/Directory/DirTAC.shtml>

## TAC Case Priority Definitions

To ensure that all cases are reported in a standard format, Cisco has established case priority definitions.

**Priority 1 (P1)**—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.

**Priority 2 (P2)**—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.

Priority 3 (P3)—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.

Priority 4 (P4)—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. Go to this URL to visit the company store:

<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 online at this URL:

<http://www.ciscopress.com>

- *Packet* magazine is the Cisco quarterly publication that provides the latest networking trends, technology breakthroughs, and Cisco products and solutions to help industry professionals get the most from their networking investment. Included are networking deployment and troubleshooting tips, configuration examples, customer case studies, tutorials and training, certification information, and links to numerous in-depth online resources. You can access Packet magazine at this URL:

<http://www.cisco.com/packet>

- *iQ Magazine* is the Cisco bimonthly publication that delivers the latest information about Internet business strategies for executives. 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>
- Training—Cisco offers world-class networking training. Current offerings in network training are listed at this URL:  
<http://www.cisco.com/en/US/learning/index.html>





# Overview

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The Bulk Administration Tool (BAT), a web-based application, lets you perform bulk transactions, such as adding, updating, or deleting, on a large number of phones, users, and ports on a Cisco Catalyst 6000 FXS analog interface module to the Cisco CallManager database. BAT also supports inserting and deleting Cisco VG200 gateways and ports. Where this was previously a manual operation, BAT helps you automate the process and achieve much faster add, update, and delete operations. BAT also provides the Tool for Auto-Registered Phones Support (TAPS), an optional component of BAT.

When used with TAPS, BAT further reduces the manual labor involved in administering a large system by allowing you to add phones with dummy media access control (MAC) addresses instead of entering each MAC address in the comma separated value (CSV) file. Using TAPS, you can correct the dummy MAC addresses in the Cisco CallManager database later simply by dialing into the TAPS directory number and following a few voice prompts. You must individually update each phone that was added using a dummy MAC address, but you can pass this task on to the user of the phone by providing simple instructions on how to use TAPS. See the [“TAPS for End Users” section on page 10-11](#) for more information.

## Related Topics

- [BAT Specifications, page 1-2](#)
- [Using BAT, page 1-3](#)
- [Starting BAT, page 1-3](#)
- [Stopping BAT, page 1-5](#)

# BAT Specifications

The following specifications apply to BAT Release 4.4(4):

- BAT Release 4.4(4) is compatible with Cisco CallManager Release 3.3(4).
- BAT supports Lightweight Directory Access Protocol (LDAP) including Cisco CallManager DC Directory (DCD), Microsoft Active Directory (AD), and Netscape Directory Server.
- You must install BAT on the same server as the publisher database server for Cisco CallManager.
- The BAT application, along with the Tool for Auto-Registered Phones Support (TAPS) application, uses approximately 35 MB of disk space for the applications and the online documentation.
- TAPS use approximately 90 KB of disk space on the Cisco Customer Response Application (CRA) server.

Only Cisco CallManager system administrators require access to BAT; however, end users can use TAPS when instructed to do so by the system administrator.

## Related Topics

- [Using BAT, page 1-3](#)
- [Starting BAT, page 1-3](#)
- [Finding the BAT Version, page 1-4](#)

# Using BAT

BAT, a web-based application, requires Internet Explorer 4.01 Service Pack 2 or later or Netscape 4.5 or later. BAT does not support the use of Netscape 6.0. Cisco CallManager Administration provides the model for the look and feel of BAT.

You can access BAT from Cisco CallManager Administration and vice versa using the **Application** menu. Access BAT directly from the server on which BAT is installed, or from a remote PC.



## Caution

---

Use BAT only during off-peak hours. Otherwise, bulk transactions could affect the Cisco CallManager performance, and call processing may be adversely affected.

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### Related Topics

- [Starting BAT, page 1-3](#)
- [Finding the BAT Version, page 1-4](#)

## Starting BAT

Start BAT from Cisco CallManager Administration (**Application > BAT**), the Start menu (**Start > Program > Cisco CallManager 3.3 > Bulk Admin Tool > BAT 4.4**), or double-click the BAT desktop icon. You can also access BAT by browsing into Cisco CallManager Administration from a remote PC. To begin using BAT, open Cisco CallManager Administration and choose **Application > BAT**.

## Logging On to BAT

When you start BAT, a prompt asks for user ID and password. For BAT, use the same user ID and password that you use to access Cisco CallManager Administration. The user ID should have administrative rights on the machine.

### Related Topics

- [Using BAT, page 1-3](#)
- [Stopping BAT, page 1-5](#)

## Obtaining Online Help

To access BAT online help, choose the **Help** menu. The **Help** menu provides two help features: **Contents and Index** and **For This Page**.

**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 page 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.

### Related Topic

- [Finding the BAT Version, page 1-4](#)

## Finding the BAT Version

You can find the current version of BAT by clicking **Help > About Bulk Administration Tool** and clicking the **Details** button or clicking the **Help > Component Versions** from Cisco CallManager Administration.

If Bat is not currently installed, you can find the current version of BAT by right-clicking the file **BulkAdministrationTool.exe** and clicking **Properties** and then clicking **Product Version**.

**Related Topic**

- [Obtaining Online Help, page 1-4](#)

## Finding the TAPS Version

You can find the current version of TAPS by right-clicking the file **ToolForAutoRegisteredPhonesSupport.exe** and choosing **Properties** and then clicking **Product Version**.

**Related Topic**

- [Obtaining Online Help, page 1-4](#)

## Stopping BAT

BAT provides a tool to stop BAT transactions if they are in progress. This capability can prove useful when you start a BAT transaction but then notice a degradation in Cisco CallManager performance and want to stop the transaction. You can always run the BAT transaction later when impact to Cisco CallManager performance may be reduced. You may also want to stop BAT if you realize that the wrong transaction has been started or if you need to make additional changes before running the transaction.

You can access the Stop BAT feature only from the publisher database server. Stop BAT does not halt the BAT process immediately because it can take some time to stop the transaction.

To stop BAT, choose **Start > Programs > Cisco CallManager 3.3 > Bulk Admin Tool > Stop BAT**.

View the log file for details about how many records that were processed passed or failed. See [Chapter 11, “Troubleshooting BAT and TAPS,”](#) for information on log files.

**Note**

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StopBAT does not stop export transactions in progress.

---

**Related Topic**

- [Starting BAT, page 1-3](#)





# Installation

---

This chapter provides information about installing, reinstalling, and uninstalling BAT and TAPS. You must install BAT on the same server as the publisher database for Cisco CallManager. TAPS requires a two-part installation; you must install the first part on the same server as the publisher database for Cisco CallManager; you can do this only during a BAT installation or reinstallation. The second part requires installation on the Cisco Customer Response Application (CRA) server.



## Note

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Effective with Release 3.0, Cisco Customer Response Applications (CRA) has been renamed Cisco Customer Response Solutions (CRS). The Cisco website and packaging materials have been updated to reflect the new name, but the user interface, and therefore the documentation, has not.

---

During BAT/TAPS installation or reinstallation on the publisher database server, the setup program halts the following services:

- IIS Admin
- World Wide Web publishing
- FTP publishing

These services automatically restart when the installation is complete.

See [Installing TAPS, page 2-5](#), for instructions on installing the Tool for Auto-Registered Phones Support (TAPS).



## Note

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If BAT is uninstalled and then the newer version is installed, no template migration will occur.

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**Note**

---

BAT does not support backward template migration: If you have installed BAT Release 4.2(1), 4.3(1), or 4.4(1), and you reinstall BAT Release 4.0(1) or 4.1(1), no template migration occurs. Templates migration occurs only when you upgrade from BAT Release 4.0(1) or higher.

---

**Related Topics**

- [Installing BAT/TAPS, page 2-3](#)
- [Uninstalling BAT and TAPS, page 2-8](#)

## Upgrading BAT

You can upgrade to BAT Release 4.4(4) from any previous BAT release, but only upgrades from BAT Release 4.0 to Release 4.3 (or later) provide template migration. BAT automatically migrates existing BAT templates. Although default values are automatically provided, product-specific configuration for phones and gateways remains blank during migration. For example, an existing BAT template that was created to add 15 Cisco VG200 gateways would migrate, so it contains the new fields provided in BAT Release 4.3(1), such as Network Locale, but new Product Specific Configuration fields, such as Switchback Timing on Cisco VG200 gateways, remain blank. Fields in which you already provided data, such as device pool and calling search space, contain the original data after migration.

CSV files do not migrate.

Follow the instructions in the “Installing BAT/TAPS” section on page 2-3 to upgrade to BAT Release 4.4(4).

**Note**

---

If you are currently using BAT Release 3.0(3), you can upgrade to Release 4.4(4), but the upgrade provides no template migration.

---

# Installing BAT/TAPS

**Note**

---

TAPS represents an optional component of BAT. Use the following steps regardless of whether you plan to install TAPS.

---

The BAT installation process includes BAT Excel template file that is located in the following default location on the publisher database server:

C:\CiscoWebs\BAT\ExcelTemplate. Because you are unlikely to have Microsoft Excel installed on the publisher database server, copy and paste the excel template file called BAT.xlt to where you have Microsoft Excel installed, and use this spreadsheet to create the CSV files from that location.

## Before You Begin

The following prerequisites apply to the BAT/TAPS installation for BAT Release 4.4(4):

- Make sure that BAT is installed on the server that is running the publisher database for Cisco CallManager.
- If you plan to install TAPS, you must install it on a Cisco Customer Response Application (CRA) server. Cisco CRA and Cisco CallManager may reside on the same server.

Use this procedure to install BAT (and TAPS, if desired).

## Procedure

- 
- Step 1** Log on with administrator privileges to the system that is running the publisher database for Cisco CallManager.
  - Step 2** Choose **Applications > Install Plugins**.  
The Install Plugins window displays.
  - Step 3** Find Cisco Bulk Administration Tool and double-click the setup icon.
  - Step 4** A standard Windows dialog box appears. You must decide whether you want to copy the BAT install executable to your system or to run it from the current location; click accordingly.

If an existing version of BAT is detected on the server, a prompt asks you to confirm the reinstallation or upgrade. Click **OK** to reinstall BAT or to upgrade from a previous version.




---

**Note** You can upgrade to BAT Release 4.4 from Release 4.0 through 4.3, and template migration will occur. However, if you are upgrading from BAT Release 3.0(3), no template migration occurs.

---

- Step 5** The Welcome screen displays. Click **Next**.  
The Current Settings: window displays.
- Step 6** Click **Next** to install to the default location C:\CiscoWebs\BAT. BAT installs to C:\ciscowebs\BAT. You cannot change this path.  
The Start Copying Files window displays.  
Setup begins copying files.
- Step 7** Setup allows you to install the Tool for Auto-Registered Phone Support (TAPS). TAPS allows you to update the MAC addresses for phones that were bulk-added in BAT using dummy MAC addresses. By simply dialing into a TAPS directory number, you can later update the phones in the Cisco CallManager database. The phone configuration downloads to the phone, and the MAC address gets updated in Cisco CallManager. See [Chapter 10, “Working with TAPS,”](#) for more information.  
Click **Yes** to install TAPS or **No** to skip TAPS installation. If you clicked **No**, skip to [Step 11](#).
- Step 8** The Tool for Auto-Registered Phones Support Setup window displays. Click **Next**.
- Step 9** Enter the private phrase for the publisher server and click **Next**.  
Setup begins copying files.
- Step 10** Setup prompts you to run **ToolForAutoRegisteredPhonesSupport.exe** on the Cisco CRA server. See Step 2 in the [“Installing TAPS” section on page 2-5](#) for instructions on completing TAPS installation on the Cisco CRA server.  
Click **OK**.

- Step 11** The Setup Complete window displays. You have successfully installed BAT. If you chose to install TAPS, you must complete that installation by installing and uploading TAPS to the Cisco CRA server.
- Step 12** Click **Finish** to close Setup.
- 

#### Related Topics

- [Upgrading BAT, page 2-2](#)
- [Uninstalling BAT and TAPS, page 2-8](#)
- [Completing TAPS Uninstallation, page 2-9](#)

## Installing TAPS

TAPS requires a two-part installation. The first part stems from the BAT installation, where you have the choice to install TAPS along with BAT on the server that is running the publisher database for Cisco CallManager. The second part installs on the Cisco Customer Response Application (CRA) server. See [Installing BAT/TAPS, page 2-3](#), for more information about the BAT installation process.

#### Before You Begin

Before you install/upgrade/configure TAPS, make sure that you installed the Cisco IP Telephony Locale Installer on every Cisco CallManager and Cisco Customer Response Application 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 available for the phones. For more information on the Cisco IP Telephony Locale Installer, refer to the specific locale installer documentation.

The following prerequisites apply to the TAPS installation for BAT Release 4.4(2):

- Make sure that the publisher database for Cisco CallManager is configured and running. The publisher database can reside on its own server or on the same server as Cisco CallManager.
- Ensure the Cisco CRA server is configured.

- Ensure the Windows 2000 Services window is closed.
- Ensure BAT is installed on the publisher database server for Cisco CallManager.
- Be sure to use the locale installer to create the country-specific TAPS prompts.

Use this procedure to complete the TAPS installation.

### Procedure


- 
- Step 1** Follow the steps in [Installing BAT/TAPS, page 2-3](#), and choose **Yes** to install TAPS.
- The system copies all TAPS files onto the server that is running the publisher database.
- Step 2** Log on with administrator privileges to the system that is running the publisher database for Cisco CallManager.
- Step 3** Choose **Applications > Install Plugins**.
- The Install Plugins window displays.
- Step 4** Find Tool for Auto-Registered Phone Support (TAPS) and double-click the setup icon.
- Step 5** A standard Windows dialog box appears. You must decide whether you want to copy the TAPS install executable to your system or to run it from the current location; click accordingly.
- Step 6** Enter the primary Cisco CallManager server IP address on the machine where BAT is installed and click **Next**.
- TAPS installation completes.
- Step 7** Click **OK**.
- Step 8** Upload TAPS to the Cisco CRA server. See [“Uploading TAPS to the Cisco CRA Server” section on page 2-7](#) for instructions.
-

# Uploading TAPS to the Cisco CRA Server

Use this procedure to upload a file to the Cisco CRA server for TAPS.

## Procedure

---

- Step 1** On the Cisco CRA server, choose **Start > Programs > Cisco CRA Administrator > Repository Manager**.
- The Repository Manager window displays.
- Step 2** Click **Upload**.
- The Repository Manager dialog box displays.
- Step 3** Choose **TAPS.aef** and click **Open**.
- The file TAPS.aef uploads to the Cisco CRA server.
- Step 4** Click **OK** on the message box that indicates that the upload was successful. You must refresh the Application Engine for the change to take effect.
- Step 5** Choose **Start > Programs > Cisco CRA Administrator > Application Administrator**.
- The Application Administration page displays, and you are prompted to enter the password for access to the Cisco CRA machine.
- Step 6** In the Password dialog, log on using the user name and password that you use to access the Cisco CRA server.
- Step 7** Click **Engine**.
-  **Note** If you have not already configured the initial setup for Directory, a prompt asks you to do so. See the Application Administration documentation for details; then, return to these steps after you complete the initial setup.
- 
- Step 8** Add TAPS as an application. See the Cisco CRA documentation for instructions on how to add an application.
- Step 9** Click **Refresh Scripts**.
- Step 10** Click **Refresh**.
-

# Uninstalling BAT and TAPS

Use the following steps to uninstall BAT and the first part of TAPS or use Add/Remove Programs in the Control Panel.

The uninstall program removes the BAT and TAPS applications and BAT Excel spreadsheet that are stored in the ...\\BAT\\ExcelTemplate folder but does not remove any CSV files or BAT templates that you created and saved to the C:\\BATFiles or C:\\CiscoWebs\\BAT\\Templates folders.

After completing the following steps on the server that is running the publisher database for Cisco CallManager, you must complete the uninstallation of TAPS on the Cisco CRA server.

Use this procedure to uninstall BAT.

## Procedure

---

- Step 1** On the server that is running the publisher database for Cisco CallManager, choose **Start > Programs > Cisco CallManager 3.3 > Bulk Admin Tool > Uninstall BAT**.
- A dialog box requests confirmation of the uninstall request.
- Step 2** Click **OK** to uninstall BAT or **Cancel** to exit the uninstaller.
- The IIS Admin service stops, files are deleted, and the IIS Admin service restarts.
- Step 3** Click **OK** to exit the uninstaller.
- Step 4** Although BAT and the first part of TAPS have been uninstalled, to completely remove TAPS, you must also complete the steps in the [“Completing TAPS Uninstallation”](#) section on page 2-9.
- 

## Related Topics

- [Installing BAT/TAPS, page 2-3](#)
- [Chapter 10, “Working with TAPS,”](#)

# Completing TAPS Uninstallation

TAPS requires a two-part uninstallation and cannot be uninstalled separately from BAT. Uninstalling BAT also uninstalls TAPS from the server that is running the publisher database. Perform the following steps to uninstall TAPS from the Cisco CRA server. This procedure completes the TAPS uninstallation.

## Procedure

---

- Step 1** On the Cisco CRA server, choose **Start > Settings > Control Panel > Add/Remove Programs**.
- Step 2** Choose **Taps** and click the **Change/Remove** button.  
A message displays confirming the uninstall operation.
- Step 3** Click **Yes** to uninstall or **No** to cancel.  
If you clicked Yes, TAPS uninstalls from the Cisco CRA server.
- Step 4** To exit the uninstallation, click **OK**.
- 

## Related Topic

- [Uninstalling BAT and TAPS, page 2-8](#)





# Working with Phones, IP Telephony Devices, and User Combinations

---

BAT allows you to bulk-add or bulk-update large numbers of phones, CTI ports, H.323 clients, Cisco VGC virtual phones, Cisco VGC phones, and user combinations such as phones and users, CTI ports and users, H.323 clients and users, Cisco VGC virtual phones and users, and Cisco VGC phones and users. BAT also allows you to bulk-delete large numbers of phones, CTI ports, H.323 clients, Cisco VGC virtual phones, and Cisco VGC phones.

## Related Topics

- [Adding Phones and Other IP Telephony Devices, page 3-2](#)
- [Creating a BAT Phone Template, page 3-3](#)
- [Creating CSV Files for Phones, IP Telephony Devices, and the User Combinations, page 3-7](#)
- [Validating Phone Records, page 3-22](#)
- [Adding Phones or Other IP Telephony Device to Cisco CallManager, page 3-24](#)
- [Adding Phones and Users or Other IP Telephony Devices to Cisco CallManager, page 3-26](#)
- [Viewing a List of Phones with Dummy MAC Addresses, page 3-37](#)
- [Updating Phones, page 3-32](#)
- [Deleting Phones, page 3-39](#)

- [Deleting Templates, page 3-41](#)
- [Field Descriptions, page 3-42](#)

## Adding Phones and Other IP Telephony Devices

You can use BAT to add Cisco IP Phones, CTI ports, H.323 clients, Cisco VGC virtual phone, and Cisco VGC phone to the Cisco CallManager database in batches, rather than individually.

BAT can also associate the phones to existing users. BAT also allows you to “Enable CTI Application Use” while you are associating CTI ports to existing users. This ability proves useful if you are adding users who will have applications that require a CTI port, such as Cisco IP SoftPhone.

Use this procedure to add phones, Cisco VGC virtual phones, and Cisco VGC phones to the Cisco CallManager database in bulk:

1. Create a BAT phone template to define common values for a set of phones or IP telephony devices.



---

**Note** You can specify services, speed dials, and lines for phones and Cisco VGC phones.

---

2. Create a comma separated values (CSV) file to define individual values for each phone or device that you want to add. We recommend that you create the CSV file using the Excel file, **BAT.xlt**.
3. (Optional) If you are inserting a large number of records, you can validate your CSV file against the publisher database and correct any errors before you insert the phones or devices in the Cisco CallManager database.
4. Insert the BAT template and CSV file to add the phones, devices, or phone/user combination to the Cisco CallManager database.
5. Plug in the phones and apply power.
6. (Optional) If you created dummy MAC addresses in the CSV file, use TAPS to update the phones. You must make sure auto-registration is enabled in Cisco CallManager to use this feature.

### Related Topics

- [Chapter 10, “Working with TAPS”](#)
- [Creating a BAT Phone Template, page 3-3](#)
- [Creating CSV Files for Phones, IP Telephony Devices, and the User Combinations, page 3-7](#)
- [Validating Phone Records, page 3-22](#)
- [Adding Phones or Other IP Telephony Device to Cisco CallManager, page 3-24](#)
- [Adding Phones and Users or Other IP Telephony Devices to Cisco CallManager, page 3-26](#)
- Refer to *Cisco CallManager Administration Guide* for Auto-Registration procedures.

## Creating a BAT Phone Template

The BAT phone template and CSV file work together in bulk transactions. Based on the type of phone or device that you want to add in a batch, you can create a template that has features that are common to all the phones or devices in that batch, such as model, device pool, and so on. The system stores these templates, so they are reusable for future bulk transactions. For example, you can configure a template for the Cisco IP Phone 7960 with two lines and another Cisco IP Phone 7960 template with four lines configured. Then, when you need to add a large number of phones with the same configuration, you can reuse the existing template.

The CSV file stores the details for each individual phone, such as its MAC address, description, and so on. See “Creating CSV Files for Phones, IP Telephony Devices, and the User Combinations” section on page 3-7 for more details about CSV files. Because you customize CSV files for each bulk transaction, less likelihood exists that you will reuse them than BAT templates.

You create a phone template by specifying values in the phone template fields. You can also specify lines attributes, Cisco IP Phone services, and speed dials, if applicable. The phone settings for the BAT phone template require similar values to those that you enter when you are adding a phone in Cisco CallManager Administration. However, you must use the BAT phone template when you are performing bulk operations in BAT.

### Prerequisite

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 CallManager Administration. You cannot create new settings in BAT.

Use this procedure to create the phone template. You can then add lines, services, and speed dials. If you have already created the template but did not add lines, skip to [“Adding or Updating Lines to a BAT Phone Template” section on page 3-5](#).

### Procedure

---

- Step 1** Start BAT. (See [Starting BAT, page 1-3](#).)
- Step 2** Choose **Configure > Template > Phone**.
- Step 3** In the Device Information area, enter the settings for the phone model for which you are creating the template. See [“Field Descriptions for Adding a Phone Template” section on page 3-43](#) for more information.
- Step 4** To create the BAT phone template, click **Insert**.
- Step 5** When the status indicates that insert has completed, scroll down to the Line Details area to add line attributes, if applicable. Because you probably do not have any lines created at this point, you have successfully created the template.

If the template does have lines, skip to Step 4 in the [“Adding or Updating Lines to a BAT Phone Template” section on page 3-5](#).

---

### Related Topics

- [Adding or Updating Lines to a BAT Phone Template, page 3-5](#)
- [Adding or Updating IP Services to a BAT Phone Template, page 3-6](#)
- [Adding or Updating Speed Dials to a BAT Phone Template, page 3-6](#)
- [Copying a BAT Phone Template, page 3-29](#)

## Adding or Updating Lines to a BAT Phone Template

To add one or more lines to the phones in 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.

### Procedure

---

- Step 1** Start BAT. (See [Starting BAT, page 1-3](#).)
- Step 2** Choose **Configure > Template > Phone**.
- Step 3** From the list of templates, choose the template for which you want to add line(s).
- Step 4** Scroll down to the bottom of the template and click **Add Line**.

A popup window displays.



**Note** The maximum number of lines that appear for a BAT template depends on model and button template that you chose when you created the BAT phone template.

---

- Step 5** Enter or choose the appropriate values for the line settings that are described in [“Field Descriptions for Adding a Line to a BAT template” section on page 3-52](#). Remember that all phones in this batch will use the settings that you choose for this line. Treat all fields as optional.
  - Step 6** Click **Insert and Close**.  
BAT adds lines to the phone template configuration, and the popup window closes.
  - Step 7** Repeat [Step 4](#) through [Step 6](#) to add settings for any additional lines.
  - Step 8** If you want to add Cisco IP Phone services to the template (Cisco IP Phone models 7960 and 7940 only), skip to [Step 4](#) in the [“Adding or Updating IP Services to a BAT Phone Template” section on page 3-6](#).
-

## Adding or Updating IP Services to a BAT Phone Template

You can subscribe Cisco IP Phone services to the phones. Only Cisco IP Phone models 7960 and 7940 include this feature.

### Procedure

---

- Step 1** Start BAT. (See [Starting BAT, page 1-3.](#))
  - Step 2** Choose **Configure > Template > Phone**.
  - Step 3** From the list of templates, choose the template for which you want to add service(s).
  - Step 4** Click **Subscribe/Unsubscribe Services** in upper, right corner of the window.  
A popup window displays. In this window, you can subscribe to Cisco IP Phone services that are available (only Cisco IP Phone models 7960 and 7940).
  - Step 5** In the Select a Service 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 6** Click **Continue**.
  - Step 7** Repeat [Step 5](#) and [Step 6](#) to set services for any expansion modules, if applicable.
  - Step 8** In the Service Name field, you can modify the name of the service, if desired.
  - Step 9** Click **Subscribe** to associate these phone services to the phone template.
  - Step 10** Repeat [Step 5](#) through [Step 9](#) to add more services.
  - Step 11** Close the popup window.
  - Step 12** If you want to add speed dials to the template, skip to Step 4 in the [“Adding or Updating Speed Dials to a BAT Phone Template”](#) section on page 3-6.
- 

## Adding or Updating Speed Dials to a BAT Phone Template

You can add and update speed dial to the BAT phone template.

### Procedure

---

- Step 1** You can designate speed dials for phones and Cisco VGC phones if the Phone Button Template has provided speed-dial buttons. Start BAT. (See [Starting BAT, page 1-3.](#))
- Step 2** Choose **Configure > Template > Phone.**
- Step 3** From the list of templates, choose the template for which you want to add speed dial(s).
- Step 4** Click **Add/Update Speed Dials** in the upper, right corner of the window.
- A popup window displays. In this window, you can designate speed-dial buttons for base Cisco IP Phones and expansion modules. The number of speed-dial buttons that are available for this template depends on the Phone Button Template in use for this BAT template. Expansion module sections only display for Cisco IP Phone 7960.
- Step 5** In the Speed Dial Settings for Base Phone area, enter the number in the **Speed Dial Number** fields, including any access or long-distance codes.
- Step 6** In the **Speed Dial Label** fields, enter a corresponding label for each speed-dial number that you entered.
- Step 7** Repeat [Step 5](#) and [Step 6](#) to set speed dials for any expansion modules, if applicable (Cisco IP Phone 7960 templates only).
- Step 8** Click **Update and Close.**
- BAT inserts the speed-dial buttons to the database, and the popup window closes.
- 

## Creating CSV Files for Phones, IP Telephony Devices, and the User Combinations

The CSV file contains information for each device. Make sure that all phones and devices in a CSV file are the same model and have the same number of configured lines. For CTI ports and H.323 client, enter device names instead of MAC addresses. You can also enable CTI application usage while you are associating a new CTI port to an existing user.

You can associate the phones to an existing user. To associate more than one phone to an existing user, you need to write the required information in separate records. For example, to associate two new Cisco IP Phone model 7960s to an existing user, you need to write two records in the CSV file, one for each Cisco IP Phone model 7960 but each with the same user ID.

The CSV file contains duplicates of some values from the BAT template. Values in the CSV file override any values that were set in the BAT phone template. For example, you can set speed-dial buttons and labels in the BAT phone template, as well as in the CSV file. This override feature allows for special configuration in some cases. For example, if you want most of the phones in the bulk-add transaction to be redirected to voice mail, you can set the Call Forward Busy and Call Forward No Answer fields to the voice-mail number. If you want the calls for a few phones in the bulk-add transaction to be redirected to a secretary instead of voice mail for only those phones, you can specify the directory number of the secretary in the Call Forward Busy (CFB) and Call Forward No Answer (CFNA) fields in the CSV file. This allows most of the phones to use the CFB and CFNA values from the BAT phone template, but certain phones use the directory number of the secretary as specified in the CSV file instead.

The CSV file for phones can contain multiple directory numbers depending on whether the BAT phone template in question supports multiple lines.

**Note**

---

The number of directory numbers that are entered in the CSV file must equal the number of lines that are configured in the phone template, or an error will result.

---

Three ways exist to create a CSV file. You can use the export utility to extract existing records from the directory into a CSV file. You can also create a CSV file by using the Microsoft Excel template called **BAT.xlt** or by following the sample text file that is provided on the phone insert screen. Cisco recommends that, if you are creating new records, you use **BAT.xlt** template because the data is validated automatically when you export to CSV format.

When you use Export Phones with the All Phone detail option, you generate an export file that contains records with information on the phone device, line attributes, and services that are associated with that phone. You can also export phone records with specific details when you have phones that have similar line configurations.

The **BAT.xlt** file provides data file templates with macros, support for multiple phone lines, error checking, and exports the values into a CSV file for the different devices.

For instructions on creating the CSV file, see

- [Creating CSV Files for Phones, IP Telephony Devices, and the User Combinations, page 3-7](#) (recommended method)
- [Creating a Text-Based CSV Text File, page 3-16](#)

## Understanding the BAT.xlt File

The BAT.xlt file simplifies the creation of CSV files. It provides validation and error checking automatically to help reduce configuration errors. The BAT.xlt file provides several tabs (along the bottom edge of the file) that allow you to create CSV files for the various devices and user combinations in BAT.

To use the BAT.xlt file to create a CSV file, first click the tab for the type of device with which you want to work. For example, to add phones and users all at once, click the tab that is marked **Phones-Users**. Each tab specifies the field name, whether it is a required or optional field, and the maximum number of characters that are allowed.

The CSV file works in combination with the BAT template. For example, on the Phone tab in the BAT.xlt file, you can leave Location, Forward Busy Destination, or Call Pickup Group for any record on the CSV file blank, and the values from the BAT phone template will be used for these fields. However, if you specify values in the CSV file for those fields, those values override the values for these fields that were set in the BAT phone template.

## Creating a CSV File for Phones, IP Telephony Devices, and User Combinations Using BAT.xlt

Follow this procedure to create the CSV file for adding phones, IP telephony devices, phones and users, and IP telephony devices and users together. The information that you provide here, in combination with the information that is provided in the BAT template for phones, gets used to add the IP telephony device to the Cisco CallManager database.

## Procedure

---

**Step 1** The BAT.xlt file resides on the publisher database server; however, you normally would not have Microsoft Excel running on the publisher database server. You must copy the file from the publisher database server to the local machine on which you plan to work.

Using a floppy disk or a mapped network drive, open the path C:\CiscoWebs\BAT\ExcelTemplate on the publisher database server and copy the file **BAT.xlt** to a local machine where Microsoft Excel is installed.

**Step 2** Double-click **BAT.xlt**.

**Step 3** When prompted, click **Enable Macros**.

**Step 4** Click the tab for the type of CSV file that you want to add:

- Click the **Phones** tab at the bottom of the spreadsheet to add phones.
- Click the **Phones-Users** tab at the bottom of the spreadsheet to add phones and users all at once.
- Click the **CTI Port** tab at the bottom of the spreadsheet to add CTI ports.
- Click the **CTI Port-Users** tab at the bottom of the spreadsheet to add CTI ports and users all at once.
- Click the **H.323 Client** tab at the bottom of the spreadsheet to add H.323 clients.
- Click the **H.323 Client -Users** tab at the bottom of the spreadsheet to add H.323 clients and users all at once.
- Click the **VGC Virtual Phone** tab at the bottom of the spreadsheet to add Cisco VGC virtual phones.
- Click the **VGC Virtual Phone-Users** tab at the bottom of the spreadsheet to add Cisco VGC virtual phones and users all at once.
- Click the **VGC Phones** tab at the bottom of the spreadsheet to add Cisco VGC phones.
- Click the **VGC Phones-Users** tab at the bottom of the spreadsheet to add Cisco VGC phones and users all at once.
- Click the **Add Lines** tab at the bottom of the spreadsheet to add additional lines to existing phones.

- Step 5** Scroll to the right side of the template until you see the Number of Phone Lines box. In that box, enter the number of lines that equals the number of directory numbers.
- You must enter 1 for the Number of Phone Lines for a Cisco VGC virtual phone because Cisco CallManager only supports one line for Cisco VGC virtual phones.



---

**Note** The number of lines that you specify here must match the number of lines that are configured in the BAT template, or an error will result when you attempt to insert a BAT phone template and CSV with mismatched number of lines.

---

If you are creating a phones, Cisco VGC phones, phones-users, or a Cisco VGC phones-users file, in the Number of Speed Dials box, enter the number of speed-dial buttons that are configured on the BAT phone template.



---

**Note** The Number of Speed Dials box only displays in the Phone, VGC phone, Phones-Users, or VGC phone-user tabs.

---



---

**Note** The number of speed dials that you specify here cannot exceed the number of speed dials that are configured in the BAT template, or an error will result when you attempt to insert the BAT phone template and CSV file.

---

- Step 6** 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. If you have multiple devices, several fields will appear multiple times, once for each device.



---

**Note** The system treats blank rows in the spreadsheet as “End of File” and discards subsequent records.

---

Provide the following information for the fields that are described in each row of Table 3-1. Because these instructions apply to different tabs, complete only the fields for the tab that you are adding.

**Table 3-1** *Field Descriptions in the CSV File*

Field	Description
The following fields appear in the user combination tabs:	
First Name	Enter the first name of up to 50 characters for the user to whom this phone will be issued.
Last Name	Enter the last name of up to 50 characters for the user to whom this phone will be issued.
User ID	Enter the user ID for the user to whom this phone will be issued.
Password	<p>Enter the password that the user needs to access the Cisco IP Phone User Options window.</p> <p>Although the password is considered optional in the CSV file, you must provide a password. You can specify the password either on the CSV file or during user insertion in BAT. If you want to apply individual passwords for each user, specify the password in the CSV file. If you want to use a default password that can be used by all users, do not specify the password in the CSV file and instead provide this information when you insert the users in BAT.</p>
Manager	Enter the manager user ID for the user to whom this phone will be issued.
Department	Enter the department number for the user to whom this phone will be issued.
PIN	<p>Enter the personal identification number (PIN) to be used for extension mobility.</p> <p>Although the PIN is considered optional in the CSV file, you must provide a PIN. You can specify the PIN either on the CSV file or during user insertion in BAT. If you want to apply individual PINs for each user, specify the PIN in the CSV file. If you want to use a default PIN that can be used by all users, do not specify the PIN in the CSV and instead provide this information when you insert the users in BAT.</p>

**Table 3-1** Field Descriptions in the CSV File (continued)

Field	Description
User Device Profile	Enter the user device profile for this user. A user device profile specifies basic device information, such as the phone button template, and gets used in connection with the extension mobility feature.
User Locale	<p>Enter the language and country 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 CallManager user windows and phones.</p> <p><b>Note</b> Enter your preferred language first, followed by the country.</p> <p><b>Note</b> If you misspell the language name or country or if you place them in reverse order, the Excel template will still get created successfully, but an error message displays when you attempt to insert the users</p>
The following field appears in the CTI port and H.323 client tabs:	
Device Name	Enter a unique identifier for the CTI port. You can check the <b>Create Dummy MAC Addresses</b> check box to automatically generate unique device identifiers.
The following field appears in the phone, VGC virtual phone, and VGC phone tabs:	
The following field appears in the phones-users tab:	
Controlled MAC Address	Enter the MAC address.
The following fields appear in all the telephony device tabs:	
Description	Enter a description of the phone, such as the MAC address preceded with “SEP,” or something more descriptive such as “Conference Room A” or “John Smith” if the phone is going to be placed in a conference room or given to a specific user.

**Table 3-1** *Field Descriptions in the CSV File (continued)*

Field	Description
Location	Enter the location. If you provided a location in BAT phone template, you can leave this field blank to use the value in the BAT phone template. A location indicates the remote location that is accessed by using restricted bandwidth connections.
Speed Dial	Enter the complete number, including access or long-distance codes, that you want users to be able to dial when they press the speed-dial button.
Speed Dial Label	(All Phone Types) Enter a description of the speed-dial number; for example, “555-1234,” “Security,” or “Cafeteria.”
For all tabs:	
Directory Number	Enter the directory number for the phone.
Display	Enter the text that you want to appear on the called party phone display, such as the user name (John Smith) or phone location (Conference Room 1). <b>Note</b> The default text is English
Line Text Label	Enter text that identifies this directory number for a line/phone combination. <b>Note</b> The default text is English
Forward Busy Destination	Enter the directory number to which calls should be forwarded when the phone is busy. To use the value that is provided in the BAT phone template, leave this field blank.
Forward No Answer	Enter the directory number to which calls should be forwarded when the phone is not answered. To use the value that is provided in the BAT phone template, leave this field blank.
Call Pickup Group	Enter the number that can be dialed to answer calls to this directory number. To use the value that is provided in the BAT phone template, leave this field blank.

**Table 3-1** Field Descriptions in the CSV File (continued)

Field	Description
User ID	Enter the user ID for the user to whom this phone will be issued.
The following field appears in the Add Lines tab:	
Line Index	Enter a number between 1 and 34 for the line index of a phone.

**Step 7** (Optional) To use the dummy MAC address option, check the **Create Dummy MAC Address** check box.

You must enter the MAC address or use the dummy MAC address option. If 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 CallManager Administration for each phone or by using the TAPS tool. See [Chapter 10, “Working with TAPS,”](#) for more information about TAPS.

If you are adding CTI ports, the dummy MAC address option provides a unique device name for each CTI port in the form of fake MAC addresses.

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

The system saves the file to **C:\XLSDataFiles\** (or to your choice of another existing folder) as

**tablename#timestamp.txt** (or to your choice of filename)

where “tablename” represents the type of CSV file that you created (such as phones, phones-users), 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.

**Step 8** To be accessed by BAT, the CSV file must reside on the publisher database server; however, you normally would not have Microsoft Excel running on the publisher database server. So this step assumes that you have saved the CSV file to the local machine (not the publisher database server). In that case, you must copy the file to the publisher database server.

Using a floppy disk or a mapped network drive, copy the CSV file from C:\XLSDataFiles\ (or the folder that you chose to store the CSV file) to the appropriate C:\BATFiles\ folder on the server that is running the publisher database for Cisco CallManager. For phones or IP telephony devices, you would copy the CSV file to C:\BATFiles\Phones\Insert; for phones and users combination, or other IP Telephony devices and users combination such as CTI port and users or H.323 client and users combination, you would copy the CSV file to C:\BATFiles\PhonesUsers; for users, you would copy the CSV file to C:\BATFiles\Users\Insert Users; for add lines, you would copy the CSV file to C:\BATFiles\Addlines.

- Step 9** For information on how to read the exported CSV file, click the link to **View Sample File** in the Insert Phones window in BAT (**Configure > Phones**).
- 

## Creating a Text-Based CSV Text File

If you do not use the BAT.xlt file for data input when you are adding phones, IP telephony devices, and users, you must create the CSV file by using lines of ASCII text with values separated by commas. You do not need to follow the instructions in this section if you created the CSV file by using the BAT.xlt file.



### 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.

---



### Tip

Use the **BAT.xlt** file to input data because data validation is performed on that file.

---

The comma separated values (CSV) file provides a common textual way of providing tabular information. You can create a data file by using any file format, such as Microsoft Notepad or Microsoft Word. Save the CSV file to its respective folder; for example, for phones, this folder would be C:\BATFiles\Phones\ on the server that is running the publisher database for Cisco CallManager.

Use the following procedure to create a CSV text file for phones, IP telephony devices, and user combination.

## Procedure

---

- Step 1** Open a text editor (such as Microsoft Notepad) or any application that allows you to export or create a CSV file.

Using a separate line for each phone, enter the values for each phone, IP telephony device, or user combination that you want to add to Cisco CallManager. See *Tips for Creating a Text-Based CSV File*, page 3-17, for detailed information about the formatting that you must use in the text-based CSV file.



---

**Note** An error occurs upon insertion if any blank lines exist in the CSV file.

---

- Step 2** Save or copy the file to C:\BATFiles\ (in the folder named for the type of CSV file that you are creating: phones, CTI port-users, and so on) on the server that is running the publisher database for Cisco CallManager.



---

**Note** You cannot use CSV files that are saved anywhere except in the proper folder under C:\BATFiles\ on the server that is running the publisher database for Cisco CallManager for BAT inserts.

---

## Tips for Creating a Text-Based CSV File

The following example format and samples show the fields, field length, and whether the field is optional or mandatory.

Some fields that are labeled optional in the CSV file actually become mandatory when certain conditions are met. For example, you must specify password and PIN fields, but they appear as optional in the CSV file because you can specify them in BAT when you insert the CSV file. Directory number, also shown as optional, becomes mandatory if your corresponding phones or phones-users BAT template has one or more lines configured. In that case, directory number becomes mandatory, and the number of directory number fields that you supply in the CSV file must match the number of lines that are configured in the BAT template.

Phones, Cisco VGC virtual phones and Cisco VGC phones

**MAC Address** (Mandatory, 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 Destination** (Optional, up to 50 numerals and special characters), **Forward No Answer Destination** (Optional, up to 50 numerals and special characters), **Call Pickup Group** (Optional, up to 50/50 characters), **User ID** (Optional, up to 30 characters), **Speed Dial** (Optional, up to 50 numerals and special characters), **Speed Dial Label** (Optional, up to 30 characters)

#### For example

```
1231123245AB,SEP1231123245AB,Dallas,9725557154,9725557154,Mike,9725557172,9725557196,9725557121/TollByPass,johns,1230000000,Helpdesk
```



#### Note

The MAC address for Cisco VGC phones comprises a combination of the MAC address for the gateway and the port number. Enter the first 10 digits of the MAC address of the Cisco VGC phone and the last two digits of the port to be configured.



#### Note

The MAC address for Cisco VGC virtual phone comprises the first 10 digit of the VGC gateway with the last two digits being 00.

Phones and Users combination, Cisco VGC virtual phones and Users or Cisco VGC phones and Users.

**First Name** (Mandatory, 1 to 50 characters), **Last Name** (Mandatory, 1 to 50 characters), **User ID** (Optional, 1 to 30 characters), **Password** (Optional, up to 20 characters), **Manager** (Optional, up to 30 characters), **Department** (Optional, up to 50 characters), **PIN** (Optional up to 20 numerals), **User Device Profile** (Optional, up to 50 characters), **User Locale** (Optional, up to 50 characters), **MAC Address** (Mandatory, 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 Destination** (Optional, up to 50 numerals and special characters), **Forward No Answer Destination** (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)

**For example**

John,Smith, johns,abcd,Daviss,12,12345, johnProfile,English United States,1231123245AB,,SEP1231123245AB,Dallas,9725557154,9725557154, Mike,9725557172,9725557196,9725557121/TollByPass,1230000000,Helpdesk

## CTI ports/H.323 Clients

**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),**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 Destination** (Optional, up to 50 numerals and special characters),**Forward No Answer**(Optional, up to 50 numerals and special characters),**Call Pickup Group** (Optional, up to 50/50 characters),**User ID**(Optional, 1 to 30 characters)

**For example**

TAPS port 1,CTI TAPS port 1,Dallas,9725557154,9725557154,John Smith,9725557100,9725557100,9725557121/TollByPass, johns

## CTI ports-users and H.323 client-users combinations

**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**(Optional, up to 30 characters),**Department**(Optional, up to 50 characters),**PIN**(Optional up to 20 numerals),**User Device Profile**(Optional, up to 50 characters),**User Locale**(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 Destination** (Optional, up to 50 numerals and special characters),**Forward No Answer**(Optional, up to 50 numerals and special characters),**Call Pickup Group** (Optional, up to 50/50 characters)

**For example**

John,Smith, johns,abcd123de,karend,0012055,9989, johns,TAPS port 1, CTI TAPS port 1,Dallas,9725557154,9725557154,John Smith,9725557100,9725557100,9725557121/TollByPass

## Fields in the Export File that are Generated by Using All Phone Details Option in the Export Utility

The following sample format shows the length and type of fields in the file that is generated by using All Phone Details option in the export utility.



### 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. The login user ID and Product Specific XML fields have to be accurate to work properly and must not be edited. Use BAT to update the product specific configurations.

```
<<DEVICE>>Device Name(Mandatory, 15 characters),Description(Optional, up to 50 characters),Device Pool (Mandatory, up to 50 characters),Calling Search Space(Optional, up to 24 characters),AAR Calling Search Space(Optional, up to 24 characters),Media Resource Group List(Mandatory, up to 50 characters),User Hold Audio Service(Optional, up to 50 characters),Network Hold Audio Source(Optional, up to 50 characters),Location (Optional, up to 50 characters),User Locale(Optional, up to 50 characters),Network Locale(Optional, up to 100 characters),Phone Button Template(Mandatory, up to 50 characters),Expansion Module 1(Optional, up to 50 characters),Expansion Module 2(Optional, up to 50 characters), Softkey Template(Optional, up to 50 characters),Phone Load name(Optional, up to 32 characters),Module I load name(Optional, up to 32 characters),Module II load name(Optional, up to 32 characters),Login user ID(Optional, 1 to 30 characters)

<<MODEL SPECIFIC>> Information(Optional, up to 255 characters),Directory(Optional, up to 255 characters),Messages(Optional, up to 255 characters),Services(Optional, up to 255 characters),Authentication Server(Optional, up to 255 characters),Proxy Server(Optional, up to 255 characters),Idle(Optional, up to 255 characters),Idle timer(Optional, up to 5 numerals),Enable extension mobility(Optional, boolean),Logout Profile(Optional, 1 to 50 characters),Login User ID(Optional, 1 to 30 characters),Logout time(Written by login service),Login time(Written by login service),Product Specific XML(Optional)

<<LINE>>Directory number(Optional, up to 24 numerals and special characters),Partition(Optional, up to 50 characters),Voice mail Profile(Optional, up to 50 characters),Calling Search Space(Optional, up to 24 characters),AAR Group(Optional, up to 20 characters),User Hold Audio Source(Optional, up to 50 characters), Network hold audio source(Optional, up to 50 characters),Call
```

**waiting**(Optional, boolean),**Auto Answer**(Mandatory, up to 50 characters),**Forward all to Voice Mail**(Optional, up to 50 numerals),**Forward all destination**(Optional, up to 50 numerals), **Forward all CSS**(Optional, up to 24 numerals),**Forward Busy to Voice Mail**(Optional, up to 50 numerals),**Forward Busy destination**(Optional, up to 50 numerals),**Forward Busy CSS**(Optional, up to 24 numerals), **Forward No Answer to Voice Mail**(Optional, up to 50 numerals),**Forward No Answer destination**(Optional, up to 50 numerals),**Forward No Answer CSS**(Optional, up to 24 numerals),**Forward on Failure to Voice Mail**(Optional, up to 50 numerals),**Forward on Failure destination**(Optional, up to 50 numerals),**Forward on Failure CSS**(Optional, up to 24 numerals),**Call Pickup Group**(Optional, up to 50/50 characters),**Display**(Optional, for internal Caller ID, up to 30 characters),**External phone mask**(Optional, up to 30 numerals or Xs, where the Xs represents the mask),**Message Waiting Lamp Policy**(Optional, up to 50 characters),**Ring Setting when idle**(Optional, up to 50 characters),**Ring Setting when Active**(Optional, up to 50 characters),**Line Text label**(Optional, up to 30 characters)

<<USER>>**User ID**(Optional, 1 to 30 characters)

<<SPEEDDIALS>>**Speed Dial Number 1**(Optional, up to 50 numerals and special characters),**Speed Dial Label 1**(Optional, up to 30 characters)

<<SERVICES>>**Service Name 1**(Optional, up to 100 characters),**Subscribed Service Name 1**(Optional, up to 50 characters),**Parameter Name 1**(Optional, up to 50 characters),**Parameter Value 1**(Optional, up to 100 characters)

True and False are used for settings with Boolean values.

Always include comma separators, even if a field is blank. Specify Call Pickup Group as either a Directory Number or as Directory Number/Route Partition Name, if the access to the call pickup group is restricted by a route partition. Specify the user ID if the phone is to be associated to a user.



#### Tip

Optional Directory Number fields only apply if 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 an equal number of directory numbers in the CSV file for each device.

### Phone CSV File Examples

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,9725557154,9725557154,John Smith,,
9725557100,9725557121/TollByPass,johns,557200,Cafeteria
```

If the description for a phone is blank

```
1231123245AB,,Dallas,9725557154,9725557154,John Smith,9725557100,
9725557100,9725557121/TollByPass,johns,557200,Cafeteria
```

If no active line is required and the location is also blank

```
1231123245AB,SEP1231123245AB,,johns,557200,Cafeteria
```

If two active lines are required

```
1231123245AB,SEP1231123245AB,Dallas,9725557154,9725557154,John
Smith,9725557100,9725557100,9725557121/TollByPass,9725557155,972555715
5,John Smith,9725557100,9725557100,9725557121/TollByPass,johns,557200,
Cafeteria
```



#### Note

---

For the MAC Address, enter MAC address values or check the option for creating dummy MAC addresses.

---

If one line is required and you want to include only the required values and none of the optional values

```
1231123245AB,,,9725557154,,,,,,,,,
```

If the option is checked for a dummy MAC address and you want one line

```
,SEP1231123245AB,Dallas,9725557154,9725557154,John Smith,9725557100,
9725557100,9725557121/TollByPass,johns,557200,Cafeteria
```

## Validating Phone Records

Use validate to check that all required fields, such as device pool and locations, are populated in the records in the CSV file. Validate verifies those entries exist on the database. Validate does not verify fields that are stored in the directory, such as User ID. Follow this procedure to validate your CSV phone records.

### Before You Begin

- You must create a CSV file that contains the phones and other IP telephony devices
- You must create a BAT phone template before you attempt to add phones or IP telephony devices to Cisco CallManager.

### Procedure

---

- Step 1** Start BAT. (See [Starting BAT, page 1-3.](#))
- Step 2** Choose **Configure > Phones**.  
The Insert Phones window displays.
- Step 3** In the File Name field, choose the CSV file that you created for this type of bulk transaction.
- Step 4** Choose the Insert option. Choose the **Specific Details** radio button if you are validating phone records that follow the Default phone CSV template format. Choose the **All Details** radio button if you are validating phone records from a file that was generated with the export utility by using the All Details option.  
Complete Step 5 if you chose the **Specific Details** radio button. Skip to Step 7 if you chose the **All Details** radio button.
- Step 5** In the Phone Template Name field, choose the BAT template that you created for this type of bulk transaction. Skip to step 7.
- Step 6** (Optional) Choose the Model. BAT displays only the models that are currently in the Cisco CallManager database.
- Step 7** Click **Validate** to check the selected CSV file for errors against the publisher database.

When the transaction completes, Click **View Latest Log File** to see a log file that displays the devices that would not be added and the error code that would be encountered. For more information on log files, see [Chapter 11, “Troubleshooting BAT and TAPS.”](#)

---

# Adding Phones or Other IP Telephony Device to Cisco CallManager

Follow this procedure to bulk-add phones, Cisco VGC phones, CTI ports, or H.323 clients to Cisco CallManager.

## Before You Begin

- You must create a CSV file before you attempt to add phones and other IP telephony devices to Cisco CallManager.
- If you are adding phones or other IP telephony devices, you must create a BAT phone template before you attempt to add phones or IP telephony devices to Cisco CallManager.

## Procedure

- 
- Step 1** Start BAT. (See [Starting BAT, page 1-3.](#))
- Step 2** Choose **Configure > Phones**.  
The Insert Phones window displays.
- Step 3** In the File Name field, choose the CSV file that you created for this type of bulk transaction.



---

**Note** If you are inserting a file that was generated with the export utility, use the appended suffixes to guide you in choosing a correct 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, a file `test_1_3.txt` means that all phone records in this file have lines 1 and 3 configured.

---

- Step 4** Check the **Enable CTI Application Use** check box to enable use of applications such as Cisco IP SoftPhone.
- Step 5** Choose the Insert option. Choose the **Specific Details** radio button if you are inserting phone records that follow the Default phone CSV template format. Choose the **All Details** radio button if you are inserting phone records from a file that was generated with the export utility by using the All Details option.

Phone records that follow the default phone CSV template have uniform line and configuration settings. Phone records that follow the All Phone Details CSV template format can have different line and configuration settings.

See [Table 3-1](#) for information on phone fields that are in the Default phone CSV file.

See [Table 3-1](#), and [Table 3-2](#) for information on phone fields, and [Table 3-3](#) for information on the line fields that are in the generated file when you export with the All Details option.

Complete Step 6 and Step 7 if you chose the **Specific Details** radio button. Skip to Step 8 if you chose the **All Details** radio button.

- Step 6** In the Phone Template Name field, choose the BAT template that you created for this type of bulk transaction.



---

**Note** If you want to insert phones that require different phone templates, you must create separate CSV files. The Line Details link shows how many lines are configured for the chosen template.

---

- Step 7** If you did not enter individual MAC addresses in the CSV file, you must check the **Create Dummy MAC Address** check box. You can update the phones or devices later with the correct MAC address by using TAPS or by manually entering this information into Cisco CallManager Administration for each phone. See [Chapter 10, “Working with TAPS,”](#) for more information about TAPS.

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

This field automatically generates fake MAC addresses in the following format: **XXXXXXXXXXXX**

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

- Choose this option only when auto-registration is enabled.
- Choose this option if you do not know the MAC address of the phone that will be assigned to the user. When the phone is plugged in, a MAC address registers for that device.
- Do not choose this option if you supplied MAC addresses or device names in the CSV file.

When phones are given to users, remember to update the phone records with the valid MAC address either by using TAPS or by manually updating in Cisco CallManager Administration. Skip to Step 9.

**Step 8** Choose the Model. BAT displays only the models that are currently in the Cisco CallManager database.

**Step 9** Click **Insert** to insert phone records.

A message displays that advises you of approximately how long it will take to insert the records into the Cisco CallManager database. You can cancel the transaction if you feel that it may cause performance degradation.

**Step 10** Click **OK** to insert the phones or click **Cancel** to cancel the transaction.

If you clicked **OK**, a Transaction Status window displays. Click the **Show Latest Status** button to see the transaction in progress.



---

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

---

When the transaction completes, Click **View Latest Log File** to see a log file that indicates 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 11, “Troubleshooting BAT and TAPS.”](#)

---

## Adding Phones and Users or Other IP Telephony Devices to Cisco CallManager

Follow this procedure to bulk-add phones and users or other IP telephony devices and users.

### Before You Begin

- You must create a Phones-Users, CTI Port-Users, H.323 Client-Users, Cisco VGC virtual phone-users, or Cisco VGC phone-users CSV file before you attempt to add phones and users or CTI ports and users to Cisco CallManager.

- If you are adding phones and users or other IP telephony devices and users, you must create a BAT phone template before you attempt to add phones and users or IP telephony devices and users to Cisco CallManager.

### Procedure

- 
- Step 1** Start BAT. (See [Starting BAT, page 1-3.](#))
- Step 2** Choose **Configure > Phones/Users**.
- The Insert Phones/Users window displays.
- Step 3** In the File Name field, choose the CSV file that you created for this type of bulk transaction.
- Step 4** In the Phone Template Name field, choose the BAT template that you created for this type of bulk transaction.



---

**Note** If you want to insert phones that require different phone templates, you must create separate CSV files. The Line Details link shows how many lines are configured for the chosen template.

---

- Step 5** If you did not enter individual MAC addresses in the CSV file, you must check the Create **Dummy MAC Address** check box. You can update the phones or devices later with the correct MAC address by using TAPS or by manually entering this information into Cisco CallManager Administration for each phone. See [Chapter 10, “Working with TAPS,”](#) for more information about TAPS.

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

This field automatically generates fake MAC addresses in the following format:  
**XXXXXXXXXXXX**

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

- Choose this option only when auto-registration is enabled.
- Choose this option if you do not know the MAC address of the phone that will be assigned to the user. Once the phone is plugged in, a MAC address registers for that device.

- Do not choose this option if you supplied MAC addresses or device names in the CSV file.

When phones are assigned to users, remember to update the phone records with the valid MAC address either by using TAPS or by manually updating in Cisco CallManager Administration.

Check the **Enable Authentication Proxy Rights** check box if you want all users that are added in this transaction to be able to log on to a phone on behalf of someone else. Users who have authentication proxy rights enabled are considered “super users” or “admin users” who act as the single point of authentication through which all users connect for extension mobility. You will need to do further configuration in Application Administration on the Cisco CRA server.

**Step 6** Check the **Enable CTI Application Use** check box to enable use of applications such as Cisco IP SoftPhone.

**Step 7** (Optional) In the User Default Values area, provide the following information if you have not already done so in the CSV file:

- **Password**—Enter the password that users should provide when they are logging on to the Cisco IP Phone User Options window. You should only specify a value here when you want to specify the default password for access to the Cisco IP Phone User Options window and when you have not already specified individual passwords for each user in the CSV file. Password values specified in the CSV file take precedence over any values that you enter here.
- **Confirm Password**—Reenter the password.
- **PIN**—Enter the PIN that users should provide when they log in to a Cisco IP Phone model 7960 or 7940 for extension mobility. You should only specify a value here when you want to specify the default PIN for extension mobility and when you have not already specified individual PINs for each user in the CSV file. PIN values that are specified in the CSV file take precedence over any values that you enter here.
- **Confirm PIN**—Reenter the PIN.
- **User Locale**—Choose 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 what language displays in the Cisco CallManager user windows and phones.
- **User Device Profile**—Enter the user device profile for this user and device. The User Device Profile must exist in Cisco CallManager Administration for the Cisco CallManager database to accept this record.

**Step 8** Click **Insert**.

A message displays that advises you of approximately how long it will take to insert the records to the Cisco CallManager database. You can cancel the transaction if you feel that it may cause performance degradation.

**Step 9** Click **OK** to insert the phones and users or click **Cancel** to cancel the transaction.

If you clicked **OK**, a Transaction Status window displays. You can click the **Show Latest Status** button to see the transaction in progress.



---

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

---

When the transaction completes, click **View Latest Log File** to see a log file that indicates 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 11, “Troubleshooting BAT and TAPS.”](#)

---

**Related Topics**

- [Creating CSV Files for Phones, IP Telephony Devices, and the User Combinations, page 3-7](#)
- [Adding Lines to Existing Phones, page 3-31](#)
- [Updating Phones, page 3-32](#)

## Copying a BAT Phone Template

You can copy the properties of a phone template into a new phone template. This action proves useful when you have similar bulk-add transactions and only a few details need to be changed.

**Note**

---

The template that you want to create from the original must be the same device type, such as Cisco IP Phone model 7960. You cannot change device type in the copy of the template.

---

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

### Procedure

---

- Step 1** Start BAT. (See [Starting BAT, page 1-3.](#))
- Step 2** Choose **Configure > Template > Phone**.  
The Phone Template Configuration window displays.
- Step 3** In the Phone Templates column on the left, click on the template that you want to copy.  
The chosen template details display in the Phone Template Configuration window.
- Step 4** 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 5** In the Phone Template Name field, enter a new template name.
- Step 6** Update the fields as needed for the new template.
- Step 7** Click **Insert**.  
The template that is added to BAT displays in the Phone Templates column on the left.
- Step 8** Click Add Line to provide line attributes, if applicable. See the [“Adding or Updating Lines to a BAT Phone Template” section on page 3-5](#) for more information. You can also define services and speed-dial buttons.
- 

### Related Topics

- [Adding Phones and Other IP Telephony Devices, page 3-2](#)
- [Adding or Updating IP Services to a BAT Phone Template, page 3-6](#)
- [Adding or Updating Speed Dials to a BAT Phone Template, page 3-6](#)

# Adding Lines to Existing Phones

You can add lines to existing phones in the Cisco CallManager database when you configure phones for assistants and managers in Cisco IPMA. You can also use this feature to override phone settings.



## Note

---

You change phone services or speed dials by using this feature. BAT ignores those fields on the template when you add lines to existing phones.

---

Use the following procedure to add lines or to existing phones or to modify existing phone settings.

## Before You Begin

You must create a CSV file before you attempt to add lines. Cisco recommends that you create the CSV file by using the Excel file, **BAT.xlt**.

## Procedure

---

- Step 1** Start BAT. (See [Starting BAT, page 1-3.](#))
- Step 2** Choose **Configure > Phones**.  
Click the **Add Lines** link in upper, right corner of the window.  
The Add Lines page displays.
- Step 3** In the File Name field, choose the CSV file that you created for this type of bulk transaction.
- Step 4** Check the **Override the existing configuration** check box if you are changing the phone settings for an existing phone.
- Step 5** If you want to add lines, click the radio button for **Phone Template**. If you want to add lines to a User Device Profile, click the radio button for **User Device Profile Template**.
- Step 6** In the Template Name field, choose the CSV file that you created for this type of bulk transaction.
- Step 7** Click **Add**.

A message displays that advises you of approximately how long it will take to add the records to the Cisco CallManager database. You can cancel the transaction if you feel that it may cause performance degradation.

- Step 8** When the transaction completes, check the Status message. BAT displays a status completed or failed message.

You can click the **View Latest Log File** link to display the log file that BAT generated. The log file displays the number of lines that were successfully added. For more information on log files, see [Chapter 11, “Troubleshooting BAT and TAPS.”](#)

---

## Updating Phones

You can bulk-update phone records and Cisco VGC phone records in the Cisco CallManager database. This action proves useful when you want to change one of the settings for many similar phones, such as device pool or calling search space.

You can create a query to update a set of phone records, or you can update the phones in the Cisco CallManager database by first creating a custom file with a list of phones that will be updated. Creating a query requires defining a filter. You can also create complex queries by clicking either the **AND** or the **OR** button. To update phones by using a custom file, you first create a custom file with a list of phones to be updated. The custom file comprises a simple text file that contains a list of MAC addresses, device names, or directory numbers with each record on a separate line. BAT ignores additional fields after the MAC address or directory number. Save the file in the C:\BATFiles\phones\query\update\ folder. You can choose the in Custom file option as part of your search criteria when you select a query based on the device name or directory number.



### Note

You can have MAC addresses and device names in the same file. If you want to update phones by using both MAC addresses and directory numbers, you need to create separate files - one file that contains all MAC addresses and one file that contains all directory numbers.

---

**Note**

---

You can reset or restart devices without updating any attributes. This action may prove useful if a problem should arise, and you must reset or restart the phones in bulk.

---

**Note**


---

While updating services, you can subscribe to only one service at a time.

---

Use the following procedure to create a query.

**Procedure**

- 
- Step 1** Start BAT. (See [Starting BAT, page 1-3.](#))
- Step 2** Choose **Configure > Phones** .
- Step 3** Click the **Update Phones** link in upper, right corner of the window.
- The Update Phones window displays. To locate the records that you want to update, define the filter.
-  **Caution** If no filter is defined, BAT applies the changes to all phone records.
- 
- Step 4** In the first drop-down list box, choose the field to query such as Model or Device Name, and so on.
- Step 5** In the second drop-down list box, choose the search criteria such as begins with, contains, is empty, and so on.
- Step 6** In the search field/list box, either choose or enter the value that you want to locate, such as a specific phone model.
- BAT displays only the models that are currently in the Cisco CallManager database.
- Step 7** Click **Add To Query** to add the defined filter to the query. Click **AND** or **OR** to add multiple filters and repeat [Step 4](#) through [Step 6](#) to further define your query.



---

**Note** You cannot perform multiple queries when Directory Number is used in the first drop-down list box; that is, **AND** or **OR** do not act as valid operators with Directory Number.

---

If you make a mistake, click the **Clear Query** button to remove the query; then, return to Step 3 and start over.

- Step 8** Click **View Query Result** to display the records that are going to be affected. Specify the setting that you want to update for all the records that you have defined in your query.
- Step 9** In the Parameter list box, choose a setting from the list box. Refer to [Table 3-5](#) for field descriptions of parameters that you might encounter. If you only want to reset or restart devices, leave this field blank and proceed to [Step 12](#).
- Step 10** In the Value field, enter the new value or choose a value from the list box. If you only want to reset or restart devices, leave this field blank and skip to [Step 12](#).
- Step 11** Click the arrow that is pointing toward the Set Values box to add the specified parameter and value to the Set Value box. Values in the Set Value box will be applied to the records that you have defined in your query. You can remove values by choosing the value that you want to remove from the Set Values box and clicking the arrow facing the Value field. You can choose multiple parameters to update. Repeat Step 9 and Step 10 to add more parameters.
- Step 12** Check the **Reset devices** check box to reset (power-cycle) the phones or check the **Restart devices** check box if you want to reset phones without power-cycling. You can also reset and restart the devices without adding any attributes.



---

**Note** If you want to reset or restart the devices at a later time, do not check either check box. When you click update, the records update with the specified parameters; however, no changes take effect until you reset or restart the devices.

---

**Step 13** Click **Update** to apply the updates to the records.

---

#### Related Topics

- [Adding Phones and Other IP Telephony Devices, page 3-2](#)
- [Updating Lines, page 3-35](#)
- [Deleting Phones, page 3-39](#)
- [Viewing a List of Phones with Dummy MAC Addresses, page 3-37](#)
- [Field Descriptions for Update Phones, page 3-57](#)

## Updating Lines

You can use BAT to bulk-update line attributes for a select group of devices.



#### Note

You can use the Update Lines window to query lines for user device profiles. Lines for a phone and user device profile get updated at the same time when both are part of the query result.

---

Use the following procedure to update lines.

#### Procedure

---

**Step 1** Start BAT. (See [Starting BAT, page 1-3.](#))

**Step 2** Choose **Configure > Phones**.

**Step 3** Click the **Update Lines** link in the upper, right corner of the window.

The Update Lines window displays. To locate the records that you want to update, define the filter.



**Caution** If no filter is defined, BAT applies the changes to all lines.

---

- Step 4** In the first drop-down list box, choose the field to query such as Device Pool, Phone Calling Search Space, Directory Number, Line Number, or Line Partition. Line Number designates the actual line number on the phone, such as line 1 or line 2. It does not specify the directory number that is associated with the line.
- Step 5** In the second drop-down list box, choose the search criteria such as begins with, contains, or is empty.
- Step 6** In the search field/list box, either choose or enter the value that you want to locate, such as a specific calling search space.
- Step 7** Click **Add To Query** to add the defined filter to the query. You can click **AND** or **OR** to add multiple filters and repeat [Step 4](#) through [Step 7](#) to further define your query.
- If you make a mistake, click **Clear Query** to remove the query; then, return to [Step 4](#) and restart.
- Step 8** Click **View Query Result** to display the records that are going to be affected. Specify the setting that you want to update for all the records that you have defined in your query.
- Step 9** In the Parameter list box, choose a setting from the list box.
- See [Table 3-4](#) for descriptions of the parameters.
- Step 10** In the Value field, enter the new value or choose a value from the list box.
- Step 11** Click the arrow that is pointing toward the Set Values box to add the specified parameter and value to the Set Value box. Values in the Set Value box will be applied to the records that you have defined in your query. You can remove values by choosing the value that you want to remove from the Set Values box and clicking the arrow facing the Value field.
- You can choose multiple parameters to update. Repeat Steps 9 and 10 to add more parameters.
- Step 12** Click **Update** to update the lines and restart the affected phones.
- A message displays that advises you of approximately how long it will take to update the records in the Cisco CallManager database and that the phones with the affected lines restart automatically. Restarting the phone causes any active calls to be dropped. You can cancel the transaction or click **OK** to continue.
- Step 13** When the transaction completes, check the Status message. BAT displays a status completed or failed message.

You can click the **View Latest Log File** link to display the log file that BAT generated. The log file displays the number of successful phone updates and the number of failed phone updates, including an error code. For more information on log files, see [Chapter 11, “Troubleshooting BAT and TAPS.”](#)

---

#### Related Topics

- [Adding Phones and Other IP Telephony Devices, page 3-2](#)
- [Updating Phones, page 3-32](#)
- [Deleting Phones, page 3-39](#)
- [Field Descriptions for Updating Lines, page 3-55](#)

## Viewing a List of Phones with Dummy MAC Addresses

You can use BAT to view a list of all phones that use a dummy MAC address. The following steps tell you how to search for phones with dummy MAC addresses, but you can modify these procedures and use them to help you find phones by using any of the following search criteria.

Use the following procedure to generate a list of phones that are using dummy MAC addresses.

#### Procedure

---

- Step 1** Start BAT. (See [Starting BAT, page 1-3.](#))
- Step 2** Choose **Configure > Phones**.
- Step 3** Click the **Update Phones** link in the upper, right corner of the window.  
The Update Phones window displays.
- Step 4** In the first drop-down list box, choose **Device Name**.
- Step 5** In the second drop-down list box, choose **begins with**.
- Step 6** All phones that are added with a dummy MAC address have device names that begin with BAT. In the field, enter **BAT**.

**Step 7** Click **Add To Query**.

**Step 8** Click **View Query Results**.

The window displays all phone records that were added to the Cisco CallManager database by using a dummy MAC address. You can print the list by right-clicking inside the window and choosing **Print** or by using the keyboard shortcut **Ctrl + P**.

---

## Viewing a List of Devices

You can use BAT to view a list of all devices by using any search criteria. The following steps tell you how to search for devices.

Use the following procedure to generate a list of devices.

### Procedure

---

**Step 1** Start BAT. (See [Starting BAT, page 1-3](#).)

**Step 2** Choose **Configure > Phones**.

**Step 3** Click the **Update Phones** link in the upper, right corner of the window.

The Update Phones window displays.

In the first drop-down list box, choose **Device Name** or your preferred search criterion.

**Step 4** In the second drop-down list box, choose **begins with** or your preferred search criterion.

**Step 5** In the field, enter any necessary information or leave it blank.

**Step 6** Click **Add To Query**.

**Step 7** Click **View Query Results**.

The window displays all phone records that were added to the Cisco CallManager database by using the search criteria that you specified. You can print the list by right-clicking inside the window and choosing **Print** or by using the keyboard shortcut **Ctrl + P**.

---

# Deleting Phones

Use these procedures to bulk-delete phones and other IP telephony devices from the Cisco CallManager database. You can delete phones by using a query to generate a list of phones with common parameters by following the procedure for deleting phones, or you can delete phones from the Cisco CallManager database by first creating a custom file with a list of phones that are to be deleted.

To delete phones by using a custom file, you first create a custom file with a list of phones to be deleted. The custom file comprises a simple text file that contains a list of MAC addresses, device names, or directory numbers with each record on a separate line. BAT ignores additional fields after the MAC address or directory number. Save the file in the C:\BATFiles\phones\query\delete folder. You can then choose the in Custom file option as part of your search criteria.



---

**Note**

You can have MAC addresses and device names in the same file. If you want to delete phones by using both MAC addresses and directory numbers, you need to create separate files - one file containing all MAC addresses and one file containing all directory numbers.

---



---

**Note**

You cannot delete phones with shared lines by using a custom file.

---

## Procedure for Deleting Phones

---

- Step 1** Start BAT. (See [Starting BAT, page 1-3.](#))
- Step 2** Choose **Configure > Phones**.
- Step 3** Click the **Delete Phones** link in the upper, right corner of the window.  
The Delete Phones window displays.
- Step 4** In the first drop-down list box, choose the field to query such as Model or Device Name.
- Step 5** In the second drop-down list box, choose the search criteria such as begins with, contains, or is empty.
- Step 6** In the search field/list box, either choose or enter the value that you want to locate, such as a specific phone model.

BAT displays only the models that are currently in the Cisco CallManager database.

- Step 7** Click **Add To Query** to add the defined filter to the query. You can click **AND** or **OR** to add multiple filters and repeat [Step 4](#) through [Step 7](#) to further define your query.



---

**Note** You cannot perform multiple queries when Directory Number is used in the first drop-down list box; that is, **AND** or **OR** do not act as valid operators with Directory Number.

---

If you make a mistake, click the **Clear Query** button to remove the query; then, return to [Step 4](#) and restart.

- Step 8** Click **View Query Result** to verify the records that are going to be deleted.



---

**Caution** If no information is entered into the query text box, the system deletes all phone records.

---

- Step 9** Click **Delete** to delete the records.

A message displays that advises you of approximately how long it will take to delete the records from the Cisco CallManager database. You can cancel the transaction or click **OK** to continue.

After the phones are deleted, BAT generates a log file that indicates the number of records that were deleted and the number of records that failed, including an error code. For more information on log files, see [Chapter 11, “Troubleshooting BAT and TAPS.”](#)

---

#### Related Topics

- [Adding Phones and Other IP Telephony Devices, page 3-2](#)
- [Updating Phones, page 3-32](#)
- [Updating Lines, page 3-35](#)

# Deleting Templates

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

## Procedure

---

- Step 1** Start BAT. (See [Starting BAT, page 1-3.](#))
- Step 2** Choose **Configure > Template > *the type of template you want to delete***, such as Phone or VG200 Gateway.  
The Template Configuration window displays.
- Step 3** In the Templates column on the left, click the template that you want to delete.  
The chosen template details display in the Template Configuration window.
- Step 4** 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 5** Click **OK** to delete the template or click **Cancel** to cancel the delete operation without deleting the template.

The template gets deleted from BAT and can no longer be used in bulk transactions.

---

## Field Descriptions

The following sections provide descriptions for fields that you may encounter while adding or updating values.

### Field Descriptions for Adding a BAT Phone Template

[Table 3-2](#) describes the fields that you may encounter when you are adding a BAT phone template.



#### Note

Values appear in the Device Type, Device Pool, Calling Search Space, Media Resource Group List, User Hold Audio Source, Network Hold Audio Source, Location, Phone Button Template, and Phone Load Name fields. Use Cisco CallManager Administration to configure these values in the system.

---

**Table 3-2** Field Descriptions for Adding a Phone Template

Field	Description
Phone Template Name	Enter a name for this BAT template, up to 50 alphanumeric characters. This name identifies the unique phone template that is used only in BAT; for example, BAT 7960.
Device Type	Choose CTI port or the type of Cisco IP Phone.  <b>Note</b> BAT does not support Cisco IP Phone models 12S or 12SP.  After you choose the device type, BAT refreshes the window and displays the fields that apply to the chosen device type.
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 CallManager group, and calling search space for auto-registration.
Calling Search Space	For this optional field, 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	For this optional field, choose the automated alternate routing (AAR) Calling Search Space to which this group of phones should belong.
Media Resource Group List	For this optional field, 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 from among the available ones according to the priority order that is defined in the MRGL.

**Table 3-2** *Field Descriptions for Adding a Phone Template (continued)*

Field	Description
User Hold Audio Source	<p>For this optional field, choose the user hold audio source that this group of IP phones or CTI ports should utilize.</p> <p>The user hold audio source specifies the audio source from which music is played when a user places a call on hold.</p>
Network Hold Audio Source	<p>For this optional field, choose the network hold audio source that this group of IP phones or CTI ports should utilize.</p> <p>The network hold audio source specifies 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.</p>
Location	<p>For this optional field, choose the location to which this group of phones/ports should belong.</p> <p>A location indicates the remote location that is accessed by using restricted bandwidth connections.</p>
User Locale	<p>For this optional field, choose the country and language set that you want to associate with this user.</p> <p>This choice determines which cultural-dependent attributes exist for this user and which language displays for the user in the Cisco CallManager user windows and phones.</p> <p><b>Note</b> User Locale only applies when Cisco IP Phones models 7940 and 7960 are used.</p>
Network Locale	<p>For this optional field, choose the network locale that you want to associate with this user.</p> <p>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.</p> <p><b>Note</b> Network Locale only applies when Cisco IP Phones models 7940 and 7960 are used.</p>

**Table 3-2** *Field Descriptions for Adding a Phone Template (continued)*

Field	Description
	<p>In the Phone Button Template and Expansion Module Template Information area, enter the settings for the phone model for which you are creating the template.</p>
	<p><b>Note</b> Values appear in the Phone Button Template and Expansion Module fields. Use Cisco CallManager Administration to configure these templates in the system.</p>
Phone Button Template	<p>Choose the button template to be used for all phones in this group. This field does not apply if you chose CTI Ports in the Model field.</p> <p>Button templates determine the configuration of buttons on a phone and identify which feature (line, speed dial) that each button designates.</p>
Expansion Module 1	<p>For this optional field (Cisco IP Phone model 7960 only), choose the button template to be used for the first expansion module.</p>
Expansion Module 2	<p>For this optional field (Cisco IP Phone model 7960 only), choose the button template to be used for the second expansion module.</p>
	<p>In the Softkey Template Information area, enter the softkey template name that defines the type of softkeys.</p>
	<p>Softkey Template field only applies when Cisco IP Phones model 7940 and 7960 are used.</p>
Softkey Template	<p>Choose the softkey template to be used for all phones in this group.</p>
	<p>In the Firmware Load Information area, enter the settings for the phone model for which you are creating the template, or leave the fields blank to use the default values.</p>
Phone Load Name	<p>This optional field does not apply for CTI ports. Be aware that any value that is entered in this field overrides the default value for the chosen model and specifies the custom software for a Cisco IP Phone. Enter the custom phone load, if applicable.</p>

**Table 3-2 Field Descriptions for Adding a Phone Template (continued)**

Field	Description
Expansion Module 1 Load Name	(Cisco IP Phone model 7960 only) Enter the firmware load for the first Cisco IP Phone Expansion Module 7914, if applicable. Leave this field blank to use the default load.
Expansion Module 2 Load Name	For this optional field. (Cisco IP Phone model 7960 only), enter the firmware load for the second Cisco IP Phone Expansion Module 7914, if applicable. Leave this field blank to use the default load.
<p>In the Cisco IP Phone - External Data Locations area, enter the settings for the phone model for which you are creating the template or leave the fields blank to use the default values. This area displays only if you are configuring Cisco IP Phone models 7935, 7940 or 7960. Skip these fields if you are configuring this template for any other phone model.</p>	
Information	For this optional field, enter the help text URL for the information button for only Cisco IP Phone models 7935, 7940 and 7960.
Directory	For this optional field that applies only to Cisco IP Phone models 7935, 7940 and 7960, enter the URL of the directory server.
Messages	For this optional field that applies only to Cisco IP Phone models 7935, 7940 and 7960 only, enter the voice-mail access pilot number.
Services	For this optional field that applies only to Cisco IP Phone models 7935, 7940 and 7960, enter the URL for the services menu.
Authentication Server	<p>For this optional field, 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 IP Phone models 7935, 7940 and 7960 that require authentication will not function. Leave this field blank to accept the default setting.</p> <p>By default, this URL accesses a Cisco IP Phone User Options window that was configured during installation.</p>

**Table 3-2** *Field Descriptions for Adding a Phone Template (continued)*

Field	Description
Proxy Server	<p>For this optional field, 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.</p> <p>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.</p> <p>If you do not configure this URL, the phone attempts to connect directly to the URL. Leave this field blank to accept the default setting.</p>
Idle	<p>For this optional field, enter the URL to display on the Cisco 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.</p> <p>Only Cisco IP Phone models 7935, 7940 and 7960 use this field.</p>
Idle Timer	<p>For this optional field, 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.</p> <p>Only Cisco IP Phone models 7935, 7940 and 7960 use this field.</p>

In the Extension Mobility (Device Profile) Information area, enter the settings for the phone model for which you are creating the template or leave the fields blank to use the default values. This area displays only if you are configuring Cisco IP Phone models 7960 or 7940. Skip these fields if you are configuring this template for any other phone model.

**Table 3-2** Field Descriptions for Adding a Phone Template (continued)

Field	Description
Enable Extension Mobility Feature	For this optional box, check this check box if you want to enable the extension mobility feature. Extension mobility allows a user to log in and out of a Cisco IP Phone model 7960 or 7940. Refer to the <i>Cisco CallManager Features and Services Guide</i> for more information about extension mobility.
Log Out Profile	<p>For this optional field, choose the profile that a phone should load when a user logs out. You must configure log out profiles in Cisco CallManager Administration.</p> <p>Choosing &lt;Use Current Device Settings&gt; creates an autogenerated device profile as the default device profile.</p> <p>If you choose &lt;Select a User Device Profile&gt;, you can then assign a user device profile that has already been defined; this user device profile becomes the default device profile for this device.</p> <p>If a user device profile is chosen as the default device profile, that user device profile is loaded onto the device when the device is logged out (when no user is logged in).</p>
<p>In the Product Specific Configuration area, enter the settings for the phone model for which you are creating the template or leave the fields blank to use the default values. This area displays only if you are configuring Cisco IP Phone models 7960, 7940, 7935, or 7910. Skip these fields if you are configuring this template for any other phone model.</p>	
Forwarding Delay	For this mandatory field (Cisco IP Phone models 7960 or 7940 only), check the Enabled check box if you want the port to wait a few seconds prior to forwarding a call.
PC Port	Use this mandatory field to disable or enable the PC port on phones that have internal switches. Use the port labeled “10/100 PC” on the back of the phone to connect a PC or workstation to the phone, so they can share a single network connection.

**Table 3-2** *Field Descriptions for Adding a Phone Template (continued)*

Field	Description
Setting Access	Use this field to choose whether the user has access to phone settings. The options include Enabled and Disabled. .
Disable Speakerphone	For this optional box (Cisco IP Phone models 7960 or 7940 only), check this check box to disable the speakerphone functionality for all phones that are added using this BAT template.
Disable Speakerphone and Headset	For this optional box (Cisco IP Phone models 7960 or 7940 only), check this check box to disable the speakerphone and headset functionality for all phones that are added using this BAT template.
<p>In the H.323Information area, enter the settings for the H.323 client for which you are creating the template or leave the fields blank to use the default values. This area displays only if you are configuring an H.323 client.</p>	
Outgoing Caller ID Pattern	For this optional field, enter the pattern that you want to use for the outgoing caller ID, from 0 to 24 digits.
Calling Party Selection	<p>Choose one of the following options to specify which directory number is sent:</p> <ul style="list-style-type: none"> <li>• Originator—Send the directory number of the calling device.</li> <li>• First Redirect Number—Send the directory number of the redirecting device.</li> <li>• Last Redirect Number—Send the directory number of the last device to redirect the call.</li> <li>• First Redirect Number(external)—Send the directory number of the redirecting device.</li> <li>• Last Redirect Number(external)—Send the directory number of the last device to redirect the call.</li> </ul>

**Table 3-2** *Field Descriptions for Adding a Phone Template (continued)*

Field	Description
Caller ID Presentation	<p>Choose whether the central office transmits or blocks caller ID:</p> <ul style="list-style-type: none"> <li>• Choose Allowed if you want the central office to send caller ID.</li> <li>• Choose Restricted if you do not want the central office to send caller ID.</li> <li>• Default displays the Caller ID unless the caller ID was restricted in a previous level in the call stream.</li> </ul>
Display IE Delivery	<p>Check the check box to enable delivery of the display IE in SETUP and CONNECT messages for the calling and called party name delivery service.</p>
Redirecting Number IE delivery—Outbound	<p>Check this check box to include the Redirecting Number IE in the outgoing SETUP message from the Cisco CallManager to indicate the first redirecting number and the redirecting reason of the call when the call is forwarded.</p> <p>Uncheck the check box to exclude the first redirecting number and the redirecting reason from the outgoing SETUP message.</p> <p>Use Redirecting Number IE for voice-mail integration only. If your configured voice-mail system supports Redirecting Number IE, check the check box.</p> <p>By default, the check box gets checked for H.323 intercluster trunks, and the check box remains unchecked for the H.323 gateway.</p>

**Table 3-2** *Field Descriptions for Adding a Phone Template (continued)*

Field	Description
Redirecting Number IE delivery—Inbound	<p>Check this check box to accept the Redirecting Number IE in the incoming SETUP message to the Cisco CallManager.</p> <p>Uncheck the check box to exclude the Redirecting Number IE in the incoming SETUP message to the Cisco CallManager.</p> <p>Use Redirecting Number IE for voice-mail integration only. If your configured voice-mail system supports Redirecting Number IE, check the check box.</p> <p>By default, the check box gets checked for H.323 intercluster trunks, and the check box remains unchecked for the H.323 gateway.</p>
Media Termination Point Required	<p>If you want a media termination point to implement features that H.323 does not support (such as hold and transfer), check the check box.</p> <p>Use this check box only for H.323 clients and H.323 devices that do not support the H.245 Empty Capabilities Set message.</p>

## Field Descriptions for Adding a Line to a BAT Phone Template

[Table 3-3](#) describes the optional fields for adding line details on a BAT phone template.

**Table 3-3** *Field Descriptions for Adding a Line to a BAT template*

Field	Description
<b>Directory Number</b>	
Partition	<p>Choose a partition. A partition indicates the route partition to which the directory number belongs.</p> <p><b>Note</b> The directory number can appear in more than one partition; however, make sure the directory number and Partition combination is unique.</p>
<b>Directory Number Settings</b>	
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-mail server configured for this phone.
Calling Search Space	<p>This field contains a collection of partitions that are searched for numbers that are called from this directory number.</p> <p><b>Note</b> Changes cause an update of the numbers that are listed in the Call Pickup Group field. The setting applies to all devices that are using this directory number.</p>
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.
User Hold Audio Source	This field specifies the music on hold audio source to be played when the user places a call on hold (presses the Hold button or soft key).
Network Hold Audio Source	This field specifies the music on hold audio source to be played when the system places a call on hold (such as when user transfers a call or initiates a conference or call park).

**Table 3-3** Field Descriptions for Adding a Line to a BAT template (continued)

Field	Description
Call Waiting	The choice that you make in this field applies to all devices that are using this directory number and specifies whether this directory number uses call waiting when a line is busy (On), responds with a busy signal (Off), or uses the system-wide default setting (Default).
Auto Answer	(Cisco IP Phone models 7960 or 7940 only) The choice that you make in this field applies to all phones using this directory number and specifies whether this directory number uses Auto Answer with handset or Auto Answer with speakerphone.
<b>Call Forward and Pickup Settings</b>	
Forward All Destination	This field indicates the directory number to which all calls are forwarded.  <b>Note</b> Setting applies to any dialable phone number, including an outside destination unless restricted, and to all devices using this directory number.
Forward All Calling Search Space	This optional field setting applies to all devices using this directory number and indicates the calling search space to use when you are forwarding to the specified destination.
Voice Mail	Check this check box if you want calls to forward to the number that you chose in the voice-mail profile.  If you check this box, the forward all destination field and forward all calling search space box have no relevance.
Forward Busy Destination	This field indicates the directory number to which a call is forwarded when the line is in use.  <b>Note</b> This setting applies to any dialable phone number, including an outside destination unless restricted, and to all devices using this directory number.

**Table 3-3** *Field Descriptions for Adding a Line to a BAT template (continued)*

Field	Description
Forward Busy Calling Search Space	This setting applies to all devices that are using this directory number and indicates the calling search space to use when you are forwarding to the specified destination.
Forward No Answer Destination	This field indicates the directory number to which a call is forwarded when the phone is not answered.  <b>Note</b> Setting applies to any dialable phone number, including an outside destination unless restricted, and to all devices using this directory number.
Forward No Answer Calling Search Space	This setting applies to all devices that are using this directory number and indicates the calling search space to use when you are forwarding to the specified destination. The setting appears only if it is configured in the system.
Call Pickup Group	This field indicates a number that can be dialed to answer calls to this directory number (in the specified partition); for example, 3003/Partition1.
<b>Line Settings for This Phone</b>	
External Phone Number Mask	This setting indicates the phone number (or mask) that is used to send Caller ID information when a call is placed from this line. This setting uses a maximum of 30 numbers and “X” characters; the X characters must appear at the end of the pattern.
Message Waiting Indicator Policy	This field indicates how the Message Waiting Indicator behaves for the device. You can have the MWI always come on, never come on, or use the system policy, as defined in Cisco CallManager Administration.
Ring Setting When Idle	This setting designates the type of ring for an incoming call on a phone.

**Table 3-3** *Field Descriptions for Adding a Line to a BAT template (continued)*

Field	Description
Ring Setting When Active	This setting designates the type of ring for an incoming call on a phone that is busy.
Line Text Label	Use this field only if you do not want the directory number to be shown on the line appearance. Enter text that identifies this directory number for a line/phone combination.

## Field Descriptions for Updating Lines

Table 3-4 provides the optional field descriptions for updating line details.

**Table 3-4** *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.  <b>Note</b> The directory number can appear in more than one partition; however, make sure the directory number and partition combination is unique.
Calling Search Space Forward All	This optional field applies to all devices that are using this directory number and indicates the calling search space to use when you are forwarding to the specified destination.
Calling Search Space Forward Busy	This setting applies to all devices that are using this directory number and indicates the calling search space to use when you are forwarding to the specified destination.
Calling Search Space Forward No Answer	This setting applies to all devices that are using this directory number and indicates the calling search space to use when you are forwarding to the specified destination. The setting appears only if it is configured in the system.

**Table 3-4** *Field Descriptions for Updating Line Details (continued)*

Field	Description
Calling Search Space Forward on Failure	(CTI ports only) This setting applies to all devices that are using this directory number and indicates the calling search space to use when you are forwarding to the specified destination. The setting appears only if it is configured in the system.
Forward All Destination	This field indicates the directory number to which all calls are forwarded.  <b>Note</b> Setting applies to any dialable phone number, including an outside destination unless restricted, and to all devices using this directory number.
Forward Busy Destination	This field indicates the directory number to which a call is forwarded when the line is in use.  <b>Note</b> This setting applies to any dialable phone number, including an outside destination unless restricted, and to all devices using this directory number.
Forward No Answer Destination	This field indicates the directory number to which a call is forwarded when the phone is not answered.  <b>Note</b> Setting applies to any dialable phone number, including an outside destination unless restricted, and to all devices using this directory number.
Forward on Failure Destination	(CTI ports only) Enter the directory number to which a call should be forwarded when a phone or CTI application fails.
User Hold Audio Source	This field specifies the music on hold audio source to be played when the user places a call on hold (presses the Hold button or soft key).
Network Hold Audio Source	This field specifies the music on hold audio source to be played when the system places a call on hold (such as when user transfers a call or initiates a conference or call park).

**Table 3-4** *Field Descriptions for Updating Line Details (continued)*

Field	Description
Auto Answer	(Cisco IP Phone models 7960 or 7940 only) Choose this parameter if you want all lines that are updated here to use the auto answer feature. With auto answer, Cisco 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-mail server that is configured for this phone.
Calling Search Space (Line)	This field contains a collection of partitions that are searched for numbers that are called from this directory number.  <b>Note</b> Changes cause an update of the numbers that are listed in the Call Pickup Group field. The setting applies to all devices that are using this directory number.
Ring Setting	This setting designates the type of ring for an incoming call on a phone.

## Field Descriptions for Update Phones

[Table 3-5](#) describes the fields that you may encounter when updating phones.



### Note

Values appear in the Device Type, Device Pool, Calling Search Space, Media Resource Group List, User Hold Audio Source, Network Hold Audio Source, Location, Phone Button Template, and Phone Load Name fields. Use Cisco CallManager Administration to configure these values in the system.

**Table 3-5** *Field Descriptions for Update Phones*

Field	Description
Description	This optional field allows you to enter a description, so you can recognize the device.
Phone Load Name	This optional field does not apply for CTI ports. Be aware that any value that is entered in this field overrides the default value for the chosen model and specifies the custom software for a Cisco IP Phone. Enter the custom phone load, if applicable.
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 CallManager group, and calling search space for auto-registration.
Calling Search Space	For this optional field, 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.
Location	For this optional field, 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.
Information	This optional field applies only to Cisco IP Phone models 7960 and 7940. Enter the help text URL for the information button.
Directory	This optional field applies only to Cisco IP Phone models 7960 and 7940. Enter the URL of the directory server.
Messages	This optional field applies only to Cisco IP Phone models 7960 and 7940. Enter the voice-mail access pilot number.

**Table 3-5** *Field Descriptions for Update Phones (continued)*

Field	Description
Services	This optional field applies only to Cisco IP Phone models 7960 and 7940. Enter the URL for the services menu.
Authentication Server	<p>For this optional field, 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 7960 and 7940 that require authentication will not function. Leave this field blank to accept the default setting.</p> <p>By default, this URL accesses a Cisco IP Phone User Options window that was configured during installation.</p>
Proxy Server	<p>For this optional field, 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.</p> <p>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.</p> <p>If you do not configure this URL, the phone attempts to connect directly to the URL. Leave this field blank to accept the default setting.</p>
Idle	<p>For this optional field, enter the URL to display on the Cisco 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.</p> <p>Only Cisco IP Phone models 7960 and 7940 use this field.</p>

**Table 3-5** *Field Descriptions for Update Phones (continued)*

Field	Description
Idle Timer	<p>For this optional field, 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.</p> <p>Only Cisco IP Phone models 7960 and 7940 use this field.</p>
User Hold Audio Source	<p>For this optional field, choose the user hold audio source that this group of IP phones or CTI ports should utilize.</p> <p>The user hold audio source specifies the audio source from which music is played when a user places a call on hold.</p>
Network Hold Audio Source	<p>For this optional field, choose the network hold audio source that this group of IP phones or CTI ports should utilize.</p> <p>The network hold audio source specifies 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.</p>
Media Resource Group List	<p>For this optional field, choose the media resource group list (MRGL) to which this group of phones/ports should belong.</p> <p>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.</p>
Extension Mobility	<p>For this optional field, choose 0 if you want to disable this feature or choose 1 to enable this feature.</p> <p>Extension mobility allows a user to log in and out of a Cisco IP Phone model 7960 or 7940. Refer to the <i>Cisco CallManager Features and Services Guide</i> for more information about extension mobility.</p>

**Table 3-5** *Field Descriptions for Update Phones (continued)*

Field	Description
User Locale	<p>For this optional field, choose the country and language set that you want to associate with this user.</p> <p>This choice determines which cultural-dependent attributes exist for this user and which language displays for the user in the Cisco CallManager user windows and phones.</p> <p><b>Note</b> User Locale only applies when Cisco IP Phones 7940 and 7960 are used.</p>
Network Locale	<p>For this optional field, choose the network locale that you want to associate with this user.</p> <p>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.</p> <p><b>Note</b> Network Locale only applies when Cisco IP Phone models 7940 and 7960 are used.</p>
IP Services	<p>This optional field only applies for Cisco IP Phone models 7960 and 7940; use Cisco CallManager Administration to choose any services that have been configured.</p>
Forwarding Delay	<p>Use this field to enable or disable forwarding delay. Choose enable when you want the port to wait a few seconds prior to forwarding a call.</p>
PC Port	<p>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 using the port labeled “10/100 PC” on the back of the phone.</p>
Setting Access	<p>Use this field to choose whether the user has access to phone settings. The options include Enabled and Disable.</p>

**Table 3-5** *Field Descriptions for Update Phones (continued)*

<b>Field</b>	<b>Description</b>
Disable Speakerphone	Use this field to enable or disable the speakerphone functionality for all phones that are added using this BAT template.
Disable Speakerphone and Headset	Use this field to enable or disable the speakerphone and headset functionality for all phones that are added using this BAT template.



## Working with Users

---

BAT allows you to add users to Cisco CallManager and to associate users to phones and other IP Telephony devices, and BAT allows you to bulk-update and bulk-delete users.

This chapter describes working with users only. For information about working with user combinations, such as phones and users or CTI ports and users, see [Chapter 3, “Working with Phones, IP Telephony Devices, and User Combinations.”](#)

Use the following sections to add users, update users, and delete users:

- [Creating the CSV File for Users, page 4-2](#)
- [Adding Users to Cisco CallManager, page 4-8](#)
- [Creating the CSV File for Updating Users, page 4-12](#)
- [Updating Users to Cisco CallManager, page 4-18](#)
- [Deleting Users from Cisco CallManager, page 4-21](#)

## Adding Users

You can use BAT to add users to the Lightweight Directory Access Protocol (LDAP) Directory on a Cisco CallManager server in batches, rather than individually.

BAT can also associate CTI ports to existing users. This ability proves useful if you are adding users who will have applications that require a CTI port, such as Cisco IP SoftPhone. See [Adding Phones and Other IP Telephony Devices, page 3-2](#), for more information.

To add users to the Cisco CallManager database/LDAP Directory in bulk, you must perform these steps:

1. Create a comma separated values (CSV) file to define individual values for each user or CTI port/user combination that you want to add. Cisco recommends that you create the CSV file by using the Excel file, **BAT.xlt**.
2. Use BAT to insert the CSV file to add the users to the Cisco CallManager database.

#### Related Topics

- [Creating a CSV File for Users Using BAT.xlt, page 4-3](#)
- [Updating Users to Cisco CallManager, page 4-18](#)
- [Deleting Users from Cisco CallManager, page 4-21](#)

## Creating the CSV File for Users

To add users to Cisco CallManager, you must create a comma separated values (CSV) file. Three ways exist to create a CSV file. You can use the export utility to extract existing records from the directory into a CSV file. You can use the Microsoft Excel template called **BAT.xlt** or create the CSV by using the sample text file. Each CSV file type, such as phones, phones and users combined, and so on, provides a sample text file. However, if you are creating new records, Cisco recommends that you use the **BAT.xlt** template because the data is validated automatically when you export to CSV format.

The **BAT.xlt** file provides data file templates with macros to support multiple phone lines and error checking. It exports the values into a CSV files for phones, users, CTI ports, phone/user combinations, CTI port/user combinations, Cisco VG200 gateways, and FXS ports on Cisco Catalyst 6000 analog interface modules.

For instructions on creating the CSV file, see

- [Creating a CSV File for Users Using BAT.xlt, page 4-3](#) (recommended method)
- [Creating a Text-Based CSV File for Users, page 4-5](#)

## Creating a CSV File for Users Using BAT.xlt

Follow this procedure to create the CSV file for bulk-adding users. BAT uses the information that you provide here to add the users to the Cisco CallManager database.

### Procedure

---

**Step 1** The BAT.xlt file resides on the publisher database server. However, you normally would not have Microsoft Excel installed on the publisher database server. In that case, you must copy the file from the publisher database server and move it to the local machine, which must have Microsoft Excel installed.

Using a floppy disk or a mapped network drive, open the path C:\CiscoWebs\BAT\ExcelTemplate on the publisher database server and copy the file **BAT.xlt** to a local machine where Microsoft Excel is installed.

**Step 2** Double-click **BAT.xlt**.

**Step 3** When prompted, click the **Enable Macros** button.

**Step 4** Click the **Users** tab at the bottom of the spreadsheet to add users.

**Step 5** 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.



---

**Caution** The system treats blank rows in the spreadsheet as “End of File” and discards subsequent records.

---

In each row, provide the following information. If you have multiple devices, several fields will appear multiple times, once for each device.

- In the First Name field, enter the first name of the user to whom this phone will be issued, up to 50 characters.

- In the Last Name field, enter the last name of the user to whom this phone will be issued, up to 50 characters.
- In the User ID field, enter the user ID for the user to whom this phone will be issued, from 1 to 30 characters.
- In the Password field, enter the password that the user needs to access the Cisco IP Phone Configuration window, up to 20 characters.

Although it is considered optional in the CSV file, you must enter a password. You can specify the Password either on the CSV file or during file insertion in BAT. If you want to apply individual passwords for each user or groups of users, specify the password information in the CSV file. If you want to use a default password that all users can use, do not specify the password in the CSV and instead provide this information when you insert the CSV file in BAT.

- In the Manager field, enter manager user ID for the user to whom this phone will be issued, up to 30 characters.
- In the Department field, enter the department number for the user to whom this phone will be issued, up to 50 characters.
- In the PIN field, enter the personal identification number (PIN) to be used for extension mobility, up to 20 numerals.
- Although considered optional in the CSV file, you must enter a PIN. You can specify the PIN either on the CSV file or during file insertion in BAT. If you want to apply individual PINs for each user or groups of users, specify the PIN in the CSV file. If you want to use a default PIN that all users can use, do not specify the PIN in the CSV and instead provide this information when you insert the CSV file in BAT.
- In the User Device Profile field, enter the user device profile for this user and device, up to 50 characters. This profile must exist in Cisco CallManager Administration for this record to be successfully inserted to the Cisco CallManager database. You can choose the user device profile from the BAT user interface.
- In the User Locale field, 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 CallManager user windows and phones.
- In the Controlled Device MAC Address field, enter the MAC address for the phone that you want to associate with this user, 12 characters.



---

**Note** Do not specify new phones, CTI ports, or phones that were added using BAT with the “BAT” prefix (meaning, they have not been updated in the Cisco CallManager database with the MAC address yet) in this field.

---

- In the Directory Number field, enter the directory number for the primary extension (usually Line 1) for the phone, up to 50 numerals.
- In the Controlled Device MAC Address2 field, enter the MAC address for any additional phone that you want to associate with this user, 12 characters.

**Step 6** Click the **Add More Devices** button to enter additional MAC addresses that will be associated to a new user.

**Step 7** Click **Export to BAT Format** button to transfer the data from the BAT Excel spreadsheet into a CSV file.

The system saves the file to **C:\XLSDataFiles\** (or to your choice of another existing folder) as

**users#timestamp.txt** (or to your choice of filename)

where “timestamp” represents the precise date and time that the file was created.

**Step 8** To be accessed by BAT, the CSV file must reside on the publisher database server. However, you normally would not have Microsoft Excel running on the publisher database server. This step assumes that you have saved the CSV file to the local machine (not the publisher database server). In that case, you must copy the file to publisher database server.

Using a floppy disk or a mapped network drive, copy the CSV file from **C:\XLSDataFiles\** to the **C:\BATFiles\Users** folder on the server that is running the publisher database for Cisco CallManager.

For information on how to read the exported CSV file, click the link to **View Sample File** in the Insert Users window in BAT (**Configure > Users**).

---

## Creating a Text-Based CSV File for Users

If you do not use the BAT.xlt file for data input when adding users, you must create the comma separated values (CSV) file by using lines of ASCII text with values separated by commas.

If you created the CSV file by using the BAT.xlt file, you can skip the following procedures in this section.

**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.

**Tips**

Use **BAT.xlt** to input data because data validation is performed on that file.

The CSV file provides a common textual way of providing tabular information. You can create a data file by using any file format, such as Microsoft Notepad, Microsoft Word, and so on. Save the CSV file to C:\BATFiles\Users\Insert Users\ on the server that is running the publisher database for Cisco CallManager.

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 CallManager. See [Tips for Creating a Text-Based CSV File, page 4-7](#), for detailed information about the formatting that you must use in the text-based CSV file.

**Caution**

Do not leave blank rows in the spreadsheet. BAT interprets a blank line as the end of the file and discards any subsequent information.

You can associate any number of existing devices to a new user by entering the MAC address 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.

- Step 3** Save the file C:\BATFiles\Users\Insert Users on the publisher server.




---

**Note** For BAT inserts, you cannot use CSV files for users that are saved anywhere but C:\BATFiles\Users\Insert Users\ on the server that is running the publisher database for Cisco CallManager.

---

## Tips for Creating a Text-Based CSV File

The following example format shows the field length and string types followed by an example of a CSV file for users.

**First Name**(Mandatory, 1 to 50 characters),**Last Name**(Mandatory, 1 to 50 characters),**User ID**(Mandatory, up to 30 characters),**Password**(Optional, up to 20 characters),**Manager**(Optional, up to 30 characters),**Department**(Optional, up to 50 characters),**PIN**(Optional, up to 20 numerals),**User Device Profile**(Optional, up to 50 characters),**User Locale**(Optional, up to 50 characters),**Controlled Device MAC Address1**(optional, 12 characters),**Directory Number** (Optional, (Optional, up to 24 numerals and special characters)),**Controlled Device MAC Address2**(Optional, 12 characters)



**Tip**

---

You must specify PIN and Password values, either on the CSV file or during file insertion in BAT. If you want to apply individual PINs or passwords for each user or groups 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 and instead provide this information when you insert the CSV file in BAT.

---



**Note**

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You cannot enter values for **MAC Address2** without entering values for **MAC Address1**.

---

### Example

```
John,Smith, johns, abc123de, karend, 0012055, 9989, johns profile, English
United States, 1231123245AB, 1231123245AB, 9725557154, 0010EB001234
```

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**

If the manager for a user is blank

```
John,Smith,johns,abc123de,,0012055,9989,johns profile,English United
States,1231123245AB,1231123245AB,9725557154,0010EB001234
```

**Example**

You do not have to supply information for the optional fields. If only the mandatory fields are completed

```
John,Smith,johns,,,,,,,,,
```

**Example**

If only the mandatory fields are completed and you want to associate the user to a phone

```
John,Smith,johns,,,,,,,,,1231123245AB,,
```

**Example**

A user can control more than one device. You can add MAC addresses of additional devices at the end of the record.

If the user controls only one device, a sample record can be

```
John,Smith,johns,abc123de,karend,0012055,9989,johns profile,English
United States,1231123245AB,1231123245AB,9725557154
```

If the user controls three devices, a sample record can be

```
John,Smith,johns,abc123de,karend,0012055,9989,johns profile,English
Untied
States,1231123245AB,1231123245AB,9725557154,0010EB001234,0010EB432101
```

## Adding Users to Cisco CallManager

Use this procedure to bulk-add users to Cisco CallManager.

**Before You Begin**

You must create a CSV file before you attempt to add users to Cisco CallManager.

**Caution**

---

Do not insert CSV files that are generated by the export utility from a Cisco CallManager server that is using one directory type on a Cisco CallManager server that is using another type of directory.

---

**Note**

---

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** Start BAT. (See [Starting BAT, page 1-3.](#))
- Step 2** Choose **Configure > Users**.  
The Insert Users page displays.
- Step 3** In the File Name field, choose the CSV file that you created for this type of bulk transaction.
- Step 4** Check the **File created with Export Users** check box if the CSV file was created by using the export utility. Be aware that the password and pin fields in the CSV records that were created with the export utility are encrypted.
- Step 5** (Optional) If you want all users that are added in this transaction to be able to log on to a phone on behalf of someone else, check the Enable Authentication Proxy Rights check box. Users with authentication proxy rights enabled represent “super users” or “admin users” who act as the single point of authentication through which all users connect for extension mobility. You must perform further configuration in Application Administration on the Cisco CRA server.
- Step 6** To enable use of applications such as Cisco IP SoftPhone, check the **Enable CTI Application Use** check box.
- Step 7** Check the **Call Park Retrieval Allowed** check box if you want to enable Call Park Retrieval for all users.

**Note**

---

The export utility saves users with the same CTI application use, call park retrieval, and enable authentication proxy rights settings in the same file. The export utility appends the suffix `_t` (enabled) or `_f` (disabled) for each different setting to the file name that you entered. The following order for the suffix flags in the file name applies: enable authentication proxy rights, CTI application use, and call park retrieval. Use the file name suffix to guide you in choosing the correct check box. For example, inserting a file that is generated with the export utility named `test_user_t_t_f.txt` means that you check the enable authentication proxy and CTI application use check box.

---

**Note**

---

BAT does not disable CTI application use, Call Park retrieval, or Enable Authentication Proxy Rights for a user if the user has already enabled them.

---

**Step 8** (Optional) In the User Default Values area, provide the following information if you have not already done so in the CSV file.

- **Password**—Enter the password, up to 20 characters, that users should provide when they log on to the Cisco IP Phone User Options window. You should only specify a value here when you want to specify the default password for access to the Cisco IP Phone User Options window and when you have not already specified individual passwords for each user in the CSV file.

**Note**

---

Password values that are specified in the CSV file take precedence over any values that you enter here.

---

- **Confirm Password**—Reenter the password.
- **PIN**—Enter the PIN, up to 20 characters, that users should provide when they log in to a Cisco IP Phone 7960 or 7940 for extension mobility. You should only specify a value here when you want to specify the default PIN for extension mobility and when you have not already specified individual PINs for each user in the CSV file. PIN values that are specified in the CSV file take precedence over any values that you enter here.
- **Confirm PIN**—Reenter the PIN.



---

**Note** You must specify PIN and Password values, either on the CSV file or during file insertion in BAT.

---

- **User Locale**—Choose 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 CallManager user windows and phones.
- **User Device Profile**—Enter the user device profile for this user and device. The User Device Profile must exist in Cisco CallManager Administration for the Cisco CallManager database to accept this record.

**Step 9** Click **Insert**.

A message displays that advises you of approximately how long it will take to insert the records to the Cisco CallManager database. You can cancel the transaction if you feel it may cause performance degradation.

**Step 10** To insert users, click **OK** or click **Cancel** to cancel the transaction.

If you clicked OK, a Transaction Status window displays. You can click the **Show Latest Status** button to see the transaction in progress.

**Step 11** When the transaction completes, check the Status message. BAT displays a status completed or failed message.

You can click **View Latest Log File** to see a log file that indicates the number of records that are added and the number of records that failed, including an error code. For more information on log files, see [Chapter 11, “Troubleshooting BAT and TAPS.”](#)

---

### Related Topics

- [Creating the CSV File for Users, page 4-2](#)
- [Updating Users to Cisco CallManager, page 4-18](#)
- [Deleting Users from Cisco CallManager, page 4-21](#)

# Updating Users

You can use BAT to update user information to the Cisco CallManager database/Lightweight Directory Access Protocol (LDAP) Directory in batches, rather than individually.

To update users to the Cisco CallManager database/LDAP Directory in bulk, you must perform these steps:

1. Create a comma separated values (CSV) file to define individual values for each user that you want to update. Cisco recommends that you create the CSV file by using the Excel file, **BAT.xlt**.
2. Use BAT to insert the CSV file to update users to the Cisco CallManager database.

## Related Topics

- [Creating the CSV File for Updating Users, page 4-12](#)
- [Updating Users to Cisco CallManager, page 4-18](#)
- [Adding Users to Cisco CallManager, page 4-8](#)
- [Deleting Users from Cisco CallManager, page 4-21](#)

## Creating the CSV File for Updating Users

To update users to Cisco CallManager, you must create a comma separated values (CSV) file. You can create a CSV file two ways. You can use the Microsoft Excel template called **BAT.xlt** or create the CSV by using a program like Notepad or Microsoft Word, by using the sample text file and the following instructions as reference. Each CSV file type, such as phones, phones and users combined, and so on, provides a sample text file. However, Cisco recommends that you use the BAT.xlt template because the data is validated automatically when you export to CSV format.

The **BAT.xlt** file provides data file templates with macros, support for multiple phone lines, error checking, and exports the values into CSV files for phones, users, CTI ports, phone/user combinations, CTI port/user combinations, Cisco VG200 gateways, and FXS ports on Cisco Catalyst 6000 analog interface modules.

For instructions on creating the CSV file, see

- [Creating a CSV File for Updating Users Using BAT.xlt, page 4-13](#) (recommended method)
- [Creating a Text-Based CSV File for Updating Users, page 4-15](#)

## Creating a CSV File for Updating Users Using BAT.xlt

Use this procedure to create the CSV file for bulk-updating users. BAT uses the information that you provide here to update users to the Cisco CallManager database.

### Procedure

---

**Step 1** The BAT.xlt file resides on the publisher database server. If you do not have Microsoft Excel installed on the publisher database server, you must copy the file from the publisher database server and move it to a local machine with Microsoft Excel installed.

Using a floppy disk or a mapped network drive, open the path C:\CiscoWebs\BAT\ExcelTemplate on the publisher database server and copy the file **BAT.xlt** to a local machine where Microsoft Excel is installed.

**Step 2** Double-click **BAT.xlt**.

**Step 3** When prompted, click the **Enable Macros** button.

**Step 4** Click the **Update Users** tab.

**Step 5** 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.



---

**Caution** The system treats blank rows in the spreadsheet as “End of File” and discards subsequent records.

---

In each row, provide the following information:

- In the UserID field, enter the user ID of the user whose profile you are updating. This mandatory entry can contain as many as 30 characters.
- In the Manager field, enter the user ID of the manager of whose profile you are updating. This optional field can contain as many as 30 characters.

- In the Department field, enter the department number for the user whose profile you are updating. This optional field can contain as many as 50 characters.
- In the User Device Profile field, enter the user device profile for this user and device. This optional field can contain as many as 50 characters. The User Device Profile must exist in Cisco CallManager Administration for the Cisco CallManager database to accept this record.
- In the User Locale field, enter the language and country 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 CallManager user windows and phones.
- In the MAC Address field, enter the MAC Address for this user.
- In the Directory Number field, enter the directory number for the primary extension (usually Line 1) for the user's phone. This optional field can contain as many as 50 integer characters.
- 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. If you enter "#" for the value for fields to be ignored, a CSV file like the following example tells BAT to keep the Manager field the same as the one that was previously entered in the DC directory but to overwrite User Device Profile and User Locale for this user in the DC directory and set them to blank.

```
userid,#,department,,123456789012,
```

- Step 6** Click the **Export to BAT format** button to transfer the data from the BAT Excel spreadsheet into a CSV file.

The system saves the file to c:\XlsDataFiles\ (or to your choice of another existing folder) as

**Update\_Users#timestamp.txt** (or to your choice of filename)

- Step 7** For BAT to access the CSV file that you created, you must save it to the publisher database server. However, because you normally would not have Microsoft Excel running on the publisher database server, this step assumes that you have saved the CSV file to the local machine (not the publisher database server). In that case, you must copy the file to publisher database server.

Using a floppy disk or a mapped network drive, copy the CSV file from C:\XLSDataFiles\ to the C:\BATFiles\Users\Update Users folder on the server that is running the publisher database for Cisco CallManager.

For information on how to read the exported CSV file, click the link to **View Sample File** in the Insert Users window in BAT (**Configure > Users**).

---

## Creating a Text-Based CSV File for Updating Users

If you do not use the BAT.xlt file for data input when you are adding users, you must create the comma separated values (CSV) file by using lines of ASCII text with values separated by commas.

If you created the CSV file by using the BAT.xlt file, you can skip the following procedure in this section.



### Tips

---

Use **BAT.xlt** to input data because data validation is performed on that file.

---

The CSV file provides a common textual way of providing tabular information. You can create a data file by using any file format, such as Microsoft Notepad, Microsoft Word, and so on. Save the CSV file to C:\BATFiles\Users\Update Users\ on the server that is running the publisher database for Cisco CallManager.

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 update to the user, enter the values for each user attribute that you want to add to Cisco CallManager. See [Tips for Creating a Text-Based CSV File, page 4-7](#), for detailed information about the formatting that you must use in the text-based CSV file.



### Note

---

Do not leave blank rows in the spreadsheet. You will receive an error message.

---

**Step 3** Save the file to C:\BATFiles\Users\Update Users on the publisher server.



**Note** For BAT inserts, you cannot use CSV files to update users that are saved anywhere but C:\BATFiles\Users\Update Users\ on the server that is running the publisher database for Cisco CallManager.

## Tips for Creating a Text-Based CSV File

The following example format shows the field length and string types followed by an example of a CSV file for users.

**UserID**(Mandatory, 1 to 30 characters),**Manager**(Optional, up to 30characters, must use existing ID in global directory),**Department**(Optional, up to 50 characters),**User Device Profile**(Optional, up to 50 characters),**User Locale** (Optional, up to 50 characters),**MAC Address**(Optional, up to 12 characters),**Directory Number** (Optional, (Optional, up to 24 numerals and special characters))



### Timesaver

You can keep values that were previously stored in the DC directory.

To retain your previously entered values, refer to [“Retaining Stored Values” section on page 4-17](#).

### Example

```
johns,Daviss,123, johnProfile,English United
States,8612113425AC,9725557154
```

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

If the manager for a user is blank

```
johns,,123, johnProfile,English United States,8612113425AC,9725557154
```

### Example

Enter your preferred language first, followed by the country. Use the following three examples as a guide:

```
English United States, French France, German Germany
```

### Example

You do not have to supply information for the optional fields, if only the mandatory fields are completed. If you have stored the optional fields previously in the DC directory, leaving them blank here will reset the values to blank. See [“Retaining Stored Values” section on page 4-17](#) for information on keeping previously stored values.

```
John,Daviss,123, johnProfile,,,
```

## Retaining Stored Values

Use this procedure to keep values that were previously stored in the Cisco CallManager database.

### Procedure

---

- Step 1** Start BAT. (See [Starting BAT, page 1-3.](#))
- Step 2** Choose **Configure > Users**.  
The Insert Users window displays.
- Step 3** In the right corner of the window, click **Update Users**.  
The Update Users window displays.
- Step 4** Note the value in the **Value for fields to be ignored** box. You entered this value while you were performing [“Updating Users to Cisco CallManager” section on page 4-18.](#)  
If you have not completed the [“Updating Users to Cisco CallManager” section on page 4-18,](#) decide what you want to enter into the **Value for fields to be ignored** box and use the same symbol here.
- Step 5** Enter the value from the **Value for fields to be ignored** box into the CSV file.

For example, if you entered “#” in the **Value for fields to be ignored**, a CSV file like the following example tells BAT to keep the Manager field the same as the one that was previously entered in the DC directory but to overwrite User Device Profile and User Locale for this user in the DC directory and set them to blank.

```
userid,#,department,,123456789012,
```

---

## Updating Users to Cisco CallManager

Use this procedure to bulk-update users to Cisco CallManager.

### Before You Begin

You must create a CSV file before you attempt to update users.

### Procedure

---

- Step 1** Start BAT. (See [Starting BAT, page 1-3.](#))
- Step 2** Choose **Configure > Users**.  
The Insert Users window displays.
- Step 3** In the right corner of the window, click **Update Users**.  
The Update Users window displays.
- Step 4** From File Name drop-down list box, choose the CSV file that you created for this type of bulk transaction.  
See [“Creating the CSV File for Updating Users” section on page 4-12](#) for instructions.
- 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.

If you enter “#” for the value for fields to be ignored, a CSV file like the following example tells BAT to keep the Manager field the same as the one that was previously entered in the DC directory but to overwrite User Device Profile and User Locale for this user in the DC directory and set them to blank:

```
userid,#,department,,123456789012,
```

- Step 6** (Optional) If you want all users that are added in this transaction to be able to log on to a phone on behalf of someone else, check the **Enable Authentication Proxy Rights** check box. Users with authentication proxy rights enabled represent “super users” or “admin users” who act as the single point of authentication through which all users connect for extension mobility. You must perform further configuration in Application Administration on the Cisco CRA server.



---

**Note** You cannot disable existing authentication proxy rights for users by unchecking the **Enable Authentication Proxy Rights** check box.

---

- Step 7** If you want to set the User Device Profile as the Default Device Profile, check the **Set User Device Profile as Default Device Profile** check box.
- Step 8** If you want to enable CTI Application use for all users in the CSV file, check the **Enable CTI Application Use** check box.



---

**Note** You cannot disable existing CTI Application Use for users by unchecking the **Enable CTI Application Use** check box.

---

- Step 9** Check the **Call Park Retrieval Allowed** check box if you want to enable Call Park Retrieval for all users.



---

**Note** BAT does not disable Call Park Retrieval for a user if a user has Call Park Retrieval enabled and the **Call Park Retrieval Allowed** check box is not checked when users are updated.

---

- Step 10** Check the **Reset Password** check box if you want to reset the password for all users.

Enter the password that users should provide when they log on to the Cisco IP Phone User Options window. You should only specify a value here when you want to specify the default password for access to the Cisco IP Phone User Options window.

Reenter the password in the Confirm Password field.

- Step 11** Check the **Reset PIN** check box if you want to reset the PIN for all users.

Enter the PIN that users should provide when they log in to a Cisco IP Phone model 7960 or 7940 for extension mobility.

Reenter the PIN in the Confirm PIN field.

- Step 12** In the User Locale drop-down list box, choose 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 CallManager user windows and phones.



---

**Note** The values that you entered for User Locale in the CSV file will override the User Locale values that you specify in the user interface.

---

- Step 13** In the User Device Profile drop-down list box, choose the user information that you want to associate with this user.



---

**Note** The values that you entered for User Device Profile in the CSV file will override the User Device Profile values that you specify in the user interface.

---

- Step 14** Click **Update**.
- 

#### Related Topics

- [Creating the CSV File for Updating Users, page 4-12](#)
- [Deleting Users from Cisco CallManager, page 4-21](#)
- [Adding Users to Cisco CallManager, page 4-8](#)

## Deleting Users

You can use BAT to delete user profiles from the Cisco CallManager database/Lightweight Directory Access Protocol (LDAP) Directory in batches, rather than individually.

#### Related Topics



- [Updating Users to Cisco CallManager, page 4-18](#)
- [Adding Users to Cisco CallManager, page 4-8](#)

# Deleting Users from Cisco CallManager

Use this procedure to bulk-delete users from Cisco CallManager.

## Procedure

---

- Step 1** Start BAT. (See [Starting BAT, page 1-3.](#))
- Step 2** Choose **Configure > Users**.  
The Insert Users window displays.
- Step 3** In the right corner of the window, click **Delete Users**.  
The Delete Users window displays. To locate the users that you want to delete, define the filter.
-  **Caution** If you do not define a filter, BAT deletes all users.
- Step 4** In the first drop-down list box, choose a field to query such as User ID, Department, First Name, or Last Name.
- Step 5** In the second drop-down list box, choose contains or is exactly.
- Step 6** In the third box, which is the search field/list box, either choose or enter the value that you want to locate, such as a specific user.
-  **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 7** Click **Add To Query** button to add the defined filter to the query.  
If you make a mistake, click the **Clear Query** button to remove the query; then, return to [Step 4](#) and start over.
- Step 8** Click **View Query Result** to display the records that are going to be affected.  
Specify the setting that you want to update for all the records that you defined in your query.
- Step 9** Click **Delete** to delete the chosen users.

A message displays that advises you of approximately how long it will take to delete the records in the Cisco CallManager database. You can cancel the transaction or click **OK** to continue.

- Step 10** When the transaction completes, check the Status message. BAT displays a status completed or failed message.

You can click **View Latest Log File** to see a log file that indicates the number of records that were deleted and the number of records that failed, including an error code. For more information on log files, see [Chapter 11, “Troubleshooting BAT and TAPS.”](#)

---

#### Related Topics

- [Adding Users to Cisco CallManager, page 4-8](#)
- [Updating Users to Cisco CallManager, page 4-18](#)



## Working with User Device Profiles

---

The User Device Profiles (UDP) option in BAT allows you to bulk-add or bulk-delete large numbers of user device profiles. This chapter describes the options for managing user device profiles.

Used in conjunction with the extension mobility feature, UDP contains attributes such as device profile name, description, phone template, softkey template, expansion modules, directory numbers, subscribed services, forward busy destination, forward no answer destination, call pickup group, and speed-dial information.

The following topics explain user device profiles in more detail:

- [Configuring User Device Profiles, page 5-1](#)
- [Creating a Template for Inserting User Device Profiles, page 5-2](#)
- [Creating the CSV File for User Device Profiles, page 5-4](#)
- [Inserting User Device Profiles, page 5-13](#)
- [Deleting User Device Profiles, page 5-17](#)
- [Field Descriptions for Adding a Line to a UDP Template, page 5-18](#)

## Configuring User Device Profiles

Use the following sections to create templates, create CSV files, insert UDPs, and delete UDPs:

- [Creating a Template for Inserting User Device Profiles, page 5-2](#)

- [Inserting User Device Profiles, page 5-13](#)
- [Deleting User Device Profiles, page 5-17](#)
- [Field Descriptions for Adding a Line to a UDP Template, page 5-18](#)

## Creating a Template for Inserting User Device Profiles

Use this procedure to create a template to add user device profiles in bulk.

### Procedure

---

- Step 1** Start BAT. (See [Starting BAT, page 1-3.](#))
- Step 2** Choose **Configure > Template > User Device Profile**.
- Step 3** Enter a unique name in the User Device Profile Name field. This name can comprise up to 50 characters.
- Step 4** To specify the audio source that is played when a user initiates a hold action, choose the audio source from the list that displays in the User Hold Audio Source drop-down list.

If you do not choose an audio source, Cisco CallManager uses the audio source that is defined in the device pool or the system default if the device pool does not specify an audio source ID.



---

**Note** You define audio sources in the Music On Hold Audio Source Configuration window in Cisco CallManager Administration. Refer to the *Cisco CallManager Administration Guide* for details.

---

- Step 5** From the phone button template list, choose a phone button template.
- Step 6** You can configure one or two expansion modules for this device profile by choosing phone buttons from the expansion module drop-down lists in the expansion module fields.



---

**Note** You can view a phone button list at any time by choosing the View button list link next to the phone button template fields. A separate dialog box pops up, displaying the phone buttons for that particular expansion module.

---

**Step 7** In the Softkey Template field, choose the appropriate softkey template for the phone from the drop-down list box.

**Step 8** In the Login User ID field, enter a valid login user ID.



---

**Note** 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.

---



---

**Note** 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 9** Click **Insert**.

**Step 10** A dialog box appears that asks you to scroll down to insert lines. Click **OK** and scroll down.

**Step 11** Depending on how many lines you chose in your template, you will see links to add lines. Click **Add Line 1** or **Add Line 2** as appropriate.

The Directory Number Configuration window displays.

**Step 12** Enter or choose the appropriate values for the line settings that are described in [“Field Descriptions for Adding a Line to a UDP Template”](#) section on page 5-18.

**Step 13** Click **Insert**.

No further prompts appear. You have successfully inserted a template for adding user device profiles.

---

#### Related Topics

- [Configuring User Device Profiles, page 5-1](#)
- [Creating the CSV File for User Device Profiles, page 5-4](#)
- [Creating a Text-Based CSV File for User Device Profile, page 5-7](#)
- [Inserting User Device Profiles, page 5-13](#)
- [Deleting User Device Profiles, page 5-17](#)

## Creating the CSV File for User Device Profiles

Three ways to create a CSV file exist. You can use the export utility to extract existing records from a Cisco CallManager database into a CSV file. You can use the Microsoft Excel template called BAT.xlt or create a CSV file by using the sample text file. Cisco recommends that if you are creating new records, you use BAT.xlt template because the data is validated automatically when you export to CSV format.

Use this procedure to create a new CSV file for inserting user device profiles. Use the information that you provide here, in combination with the information provided in the BAT template for user device profiles, to add the user device profiles to the Cisco CallManager database.

#### Procedure

---

**Step 1** The BAT.xlt file resides on the publisher database server. However, because you need Microsoft Excel to open BAT.xlt and you normally would not have Microsoft Excel running on the publisher database server, you must copy the file from the publisher database server to the local machine on which you plan to work.

Using a floppy disk or a mapped network drive, open the path C:\CiscoWebs\BAT\ExcelTemplate\ on the publisher database server and copy the file **BAT.xlt** to a local machine where Microsoft Excel is installed.

**Step 2** Double-click **BAT.xlt**.

**Step 3** When prompted, click **Enable Macros**.

- Step 4** To add user device profiles, click the **User Device Profiles** tab at the bottom of the spreadsheet.
- Step 5** Scroll to the right side of the template until you see the Number of Phone Lines box. In that box, enter the number of lines that equals the number of directory numbers. For values other than 1, enter the appropriate value for the appropriate number of lines and click anywhere in a column. The screen then refreshes to match the value that you entered. For example, if you enter two lines, the screen refreshes to display additional columns where appropriate.



---

**Note** The number of lines that you specify here must match the number of lines that are configured in the BAT user device profile template, or an error will result when you attempt to insert a BAT user device profile template and CSV with mismatched number of lines.

---

- Step 6** In the Number of Speed Dials box, enter the number of speed dials that are configured on the BAT phone template. For values other than 1, enter the appropriate value for the appropriate number of speed dials and click anywhere in a column. The screen then refreshes to match the value that you entered. For example, if you enter two speed dials, the screen refreshes to display two more columns, Speed Dial Number 2 and Speed Dial Label 2.



---

**Note** The number of speed dials that you specify here must match the number of speed dials that are configured in the BAT template, or an error will result when you attempt to insert the BAT phone template and CSV file.

---

- Step 7** Complete all mandatory fields and any relevant, optional fields. Each column heading specifies the maximum length of the field and whether it is required or optional. If you have multiple user device profiles, several fields will appear multiple times, once for each device.



---

**Caution** The system treats blank rows in the spreadsheet as “End of File” and discards subsequent records.

---

In each row, provide the following information:

- In the Device Profile Name field, enter a unique name of the user device profile.

- In the Description field, enter something descriptive. For text, use anything that will describe this particular user device profile.
- In the Login User ID field, enter a valid user ID, which is usually found in the DC directory, for the user to whom this user device profile will be issued.
- In the Directory Number 1 field, enter the directory number that is associated to the user device profile.
- In the Display 1 field, use the user name or the directory number. Leave this field blank to have the system display the extension.
- In the Line Text label field, enter text that identifies this directory number for a line. Use this field only if you do not want the directory number that is shown on the line appearance.
- In the Forward Busy Destination 1 field, enter the directory number to which a call is forwarded when the line is in use.
- In the Forward No Answer 1 field, enter the directory number to which a call is forwarded when the line is unanswered.
- In the Call Pickup Group 1 field, enter the directory number that can be dialed to answer calls placed to directory number that is assigned to this user device profile.
- In the Speed Dial Number 1 field, enter the directory number that can be dialed when the user presses the speed-dial button.
- In the Speed Dial Label 1 field, enter the alphanumeric characters that will appear next to the speed-dial button.

**Step 8** Click **Export to BAT Format** to transfer the data from the BAT Excel spreadsheet into a CSV file.

The system saves the file to **C:\XLSDataFiles\** (or to your choice of another existing folder) as

**tabname#timestamp.txt** (or to your choice of filename)

where “tabname” represents the type of CSV file that you created (such as user device profiles), and “timestamp” represents the precise date and time that the file was created.

**Step 9** To be accessible by BAT, the CSV file must reside on the publisher database server. However, you normally would not have Microsoft Excel running on the publisher database server. So, this step assumes that you have saved the CSV file to the local machine (not the publisher database server). In that case, you must copy the file to publisher database server.

Using a floppy disk or a mapped network drive, copy the CSV file from C:\XLSDataFiles\ to the appropriate C:\BATFiles\ folder on the server that is running the publisher database for Cisco CallManager. For user device profiles, you would copy the CSV file to C:\BATFiles\User Device Profiles\.

For information on how to read the exported CSV file, click the link to **View Sample File** in the Insert User Device Profiles window in BAT (**Configure > User Device Profiles**).

---

#### Related Topics

- [Configuring User Device Profiles, page 5-1](#)
- [Understanding the BAT.xlt File, page 3-9](#)
- [Creating a Template for Inserting User Device Profiles, page 5-2](#)
- [Creating a Text-Based CSV File for User Device Profile, page 5-7](#)
- [Inserting User Device Profiles, page 5-13](#)
- [Deleting User Device Profiles, page 5-17](#)

## Creating a Text-Based CSV File for User Device Profile

If you do not use the BAT.xlt file for data input when you are adding user device profiles, you must create the comma separated values (CSV) file by using lines of ASCII text with values separated by commas.

If you created the CSV file by using the BAT.xlt file, you can skip the following procedure in this section.



#### 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.

---

**Tips**

---

Use **BAT.xlt** to input data because data validation is performed on that file.

---

The CSV file provides a common textual way of providing tabular information. You can create a data file by using any file format, such as Microsoft Notepad, Microsoft Word, and so on. Save the CSV file to C:\BATFiles\User Device Profiles\ on the server that is running the publisher database for Cisco CallManager.

Use this procedure to create a CSV text file for users.

**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 CallManager. See [Tips for Creating a Text-Based CSV File, page 5-9](#), for detailed information about the formatting that you must use in the text-based CSV file.
- Step 3** Save the file C:\BATFiles\User Device Profiles\ on the publisher server.

**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.

---

**Note**

---

You cannot use UDP CSV files that are saved anywhere besides C:\BATFiles\User Device Profiles\ on the publisher server.

---

**Related Topics**

- [Configuring User Device Profiles, page 5-1](#)
- [Creating the CSV File for User Device Profiles, page 5-4](#)
- [Understanding the BAT.xlt File, page 3-9](#)
- [Inserting User Device Profiles, page 5-13](#)
- [Deleting User Device Profiles, page 5-17](#)

- [Tips for Creating a Text-Based CSV File](#), page 5-9
- [Tips for Creating a Text-Based CSV File with Two Lines and Two Speed Dials](#), page 5-10

## Tips for Creating a Text-Based CSV File

The following example format shows the field length and string types of a CSV file for user device profiles. To view an online example, choose **Configure > User Device Profiles**; then, click **View Sample File**.

**User 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 50 numerals),**Display**(Optional, for internal Caller ID, up to 30 characters),**Line Text Label**(Optional, up to 30 characters),**Forward Busy Destination**(Optional, up to 50 numerals),**Forward No Answer Destination**(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)

### Example

```
John Profile,John's Profile,Johns,9728437154,9728437154,  
Mike,9728437172,9728437196,9728437121/TollByPass,1230000000,Helpdesk
```

### Example

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,9725557172,9725557196,9725557121/TollByPass,1230000000,Helpdesk
```

### Example

If it is a 0-line profiles and only mandatory fields are added, use the following example:

```
John Profile,,,,
```

**Example**

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,,,,,
```

**Tips for Creating a Text-Based CSV File 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 50 numerals),**Display1**(Optional, for internal Caller ID, up to 30 characters),**Line Text Label1**(Optional, up to 30 characters),**Forward Busy Destination1**(Optional, up to 50 numerals),**Forward No Answer Destination1**(Optional, up to 50 numerals),**Call Pickup Group1**(Optional, up to 50/50 characters),**Directory Number2**(Optional, up to 50 numerals),**Display2**(Optional, for internal Caller ID, up to 30 characters),**Line Text Label2**(Optional, up to 30 characters),**Forward Busy Destination2**(Optional, up to 50 numerals),**Forward No Answer 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,Johns,9725557154,9725557154,
Mike,9725557172,9725557196,9725557121/TollByPass,9725557154,
9725557154,Mike L2,9725557172,9725557196,9725557121/TollByPass,
1230000000,Receptionist,1234000000,Helpdesk
```

**Fields in a Export File Generated Using All User Device Profile Details Option in the Export Utility**

The following sample format shows the length and type of fields in the file that is generated by using All User Device Profile Details option in the export utility.

**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. The login user ID and Product Specific XML fields have to be accurate to work properly and must not be edited. Use BAT to update the product specific configurations.

<<DEVICE>>**User Device Profile name**(Mandatory, 1 to 50 characters),, **Description**(Optional, 1 to 50 characters),**Device Pool** (Mandatory, up to 50 characters),**Calling Search Space**(Optional, up to 24 characters),**AAR Calling Search Space**(Optional, up to 24 characters),**Media Resource Group List**(Mandatory, up to 50 characters),**User Hold Audio Service**(Optional, up to 50 characters), **Network hold audio source**(Optional, up to 50 characters),**Login UserID**(Optional, up to 30 characters),**User Locale**(Optional, up to 50 characters),**Network Locale**(Optional, up to 100 characters),**Phone Button Template**(Mandatory, up to 50 characters),**Expansion Module 1**(Optional, up to 50 characters),**Expansion Module 2**(Optional, up to 50 characters),**Softkey Template**(Optional, up to 50 characters),**Phone Load name**(Optional, up to 32 characters),**Module I load name**(Optional, up to 32 characters),**Module II load name**(Optional, up to 32 characters)

<<MODEL SPECIFIC>>**Information**(Optional, up to 255 characters),**Directory**(Optional, up to 255 characters), **Messages**(Optional, up to 255 characters), **Services**(Optional,, up to 255 characters), **Authentication Server**(Optional, up to 255 characters), **Proxy Server**(Optional, up to 255 characters),**Idle**(Optional,, up to 255 characters),**Idle timer**(Optional, up to 5 numerals), **Enable extension mobility**(Optional, boolean),**Logout Profile**(Optional,1 to 50 characters),**Login User ID**(Optional, 1 to 30 characters-),**Logout time**(Written by login service),**Login time**(Written by login service),**Product Specific XML**(Optional)

<<LINE>>**Directory number**(Optional, up to 50 numerals), **Partition**(Optional, up to 50 characters),**Voice mail Profile**(Optional, up to 50 characters),**Calling Search Space**(Optional, up to 24 characters), **AAR Group**(Optional, up to 20 characters),**User Hold Audio Source**(Optional, up to 50 characters), **Network hold audio source**(Optional, up to 50 characters),**Call waiting**(Optional, boolean),**Auto Answer**(Mandatory, up to 50 characters), **Forward all to Voice Mail**(Optional, up to 50 numerals), **Forward all destination**(Optional, up to 50 numerals), **Forward all CSS**(Optional, up to 24 numerals), **Forward Busy to Voice Mail**(Optional, up to 50 numerals), **Forward Busy destination**(Optional, up to 50 numerals),**Forward Busy CSS**(Optional, up to 24 numerals), **Forward**

**No Answer to Voice Mail**(Optional, up to 50 numerals),**Forward No Answer destination**(Optional, up to 50 numerals),**Forward No Answer CSS**(Optional, up to 24 numerals),**Forward on Failure to Voice Mail**(Optional, up to 50 numerals),**Forward on Failure destination**(Optional, up to 50 numerals),**Forward on Failure CSS**(Optional, up to 24 numerals), **Call Pickup Group**(Optional, up to 50/50 characters), **Display**(Optional, for internal Caller ID, up to 30 characters),**External phone mask**(Optional, up to 30 numerals or Xs, where the Xs represent the mask), **Message Waiting Lamp Policy**(Optional, up to 50 characters),**Ring Setting when idle**(Optional, up to 50 characters),**Ring Setting when Active**(Optional, up to 50 characters),**Line Text label**Optional, up to 30 characters)

<<USER>>**User ID**(Optional, 1 to 30 characters)

<<SPEEDDIALS>>**Speed Dial Number 1**(Optional, up to 50 numerals and special characters), **Speed Dial Label 1**(Optional, up to 30 characters)

<<SERVICES>>**Service Name 1**(Optional, up to 100 characters),**Subscribed Service Name 1**(Optional, up to 50 characters),**Parameter Name 1**(Optional, up to 50 characters), **Parameter Value 1**(Optional, up to 100 characters)

True and False are used for settings with Boolean values.

## Validating User Device Profiles

If you are inserting a large number of records, you can validate your CSV file against the publisher database and correct any errors before you insert the user device profile in the Cisco Callmanager database. The following section describe how to validate user device profiles against the publisher database.

**Perform the following task before you begin:**

- You must create a BAT user device profile template before you attempt to add phones to Cisco CallManager.

---

**Step 1** Start BAT. (See [Starting BAT, page 1-3.](#))

**Step 2** Choose **Configure > User Device Profiles**.

The Insert User Device Profiles window displays.

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

- Step 4** Choose the Insert Option. Choose the **Specific Details** radio button if you are validating User Device Profile records that follow the Default User Device Profile CSV template format. Choose the **All Details** radio button if you are validating User Device Profile records from a file that was generated with the export utility by using the All Details option.
- Complete Step 5 if you chose the **Specific Details** radio button. Skip to Step 6 if you chose the **All Details** radio button.
- Step 5** In the User Device Profile Template Name field, choose the BAT template that you created for this type of bulk transaction. Skip to step 6.
- Step 6** Click **Validate** to check the selected CSV file for errors against the publisher database.
- Step 7** Click **View Latest Log File** to see a log file that displays the devices or user that would not be added and the error code that would be encountered.
- 

## Inserting User Device Profiles

The following sections describe how to insert user device profiles in bulk.



### Tip

---

If you choose **Based on devices controlled by users**, BAT can assist you in setting up extension mobility quickly by generating and inserting profiles for all IP phone users. BAT only generates one user device profile per user regardless of the number of devices that are controlled by the user. The Cisco IP phone 7960 button template provides the basis for all profiles.

---

### Perform the following task before you begin:

- If you are inserting user device profiles, you must create a BAT user device profile template before you attempt to add phones to Cisco CallManager. Refer to [“Creating a Template for Inserting User Device Profiles”](#) section on [page 5-2](#).

### Procedure

---

- Step 1** Start BAT. (See [Starting BAT](#), page 1-3.)

**Step 2** Choose **Configure > User Device Profiles**.

The Insert User Device Profiles window displays.

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

**Step 4** Choose your insert option. Choose **Specific Details** radio button if you want to insert user device profile records that follow the Default user default profile CSV template format. Choose the **All Details** radio button if you want to insert user device profile records from a file that was generated with the export utility by using the All Details option. Choose **Based on devices controlled by users** radio button if you want BAT to generate and insert a user device profile record that is based on the user's current IP phone.

The file that is generated with the export All Details option includes information that BAT will use to associate a user with a user device profile during the insert operation. A CSV file that follows the default user default profile CSV template does not contain user information. You will need to make the association by using Cisco CallManager Administration.

See [Table 5-1](#) for information on the fields in the Default user default profile CSV file.

See [Table 5-1](#) and [Table 5-2](#) for information on the fields in a file when you export with the All Details option.

Complete Step 5 if you chose the **Insert** radio button. Skip to step 6 if you chose the **Insert all User Device Profile Details** radio button. Complete Step 7 if you chose the **Based on devices controlled by users** radio button.

**Step 5** In the User Device Profile Template Name field, choose the BAT template that you created for this type of bulk transaction. Skip to Step 8.

**Step 6** In the Model list box, choose the type of device or specific model. The current default specifies Cisco 7960. Skip to Step 8.

**Step 7** Check the Set User Device Profile as Log Out Profile for the device check box if you want the device to use the generated user device profile as the logout profile.

**Step 8** Click **Insert**.

A window appears and displays estimated time for the insertion to complete. If you want to proceed, click **OK**.



---

**Note** You may want to insert UDP during nonpeak hours because this process may adversely affect call processing.

---

A window displays to show you the Total Number Of Records, Records Passed, and Records Failed.

If your CSV files are inconsistent with your template, you will receive a window that alerts you of an error. You must fix the inconsistency before you can insert the UDP.

**Step 9** To check the status of your insertion, read the status line, which is located above the Insert button. If the status indicates that you inserted UDP successfully, you are finished with this operation. If the status bar displays a failure, click **View Latest Log File** to display a window that will help you determine where the operation failed.



---

**Note** You may need to read the release notes for the Bulk Administration Tool for this release to determine why the operation failed.

---

### Related Topics

- [Configuring User Device Profiles, page 5-1](#)
- [Creating the CSV File for User Device Profiles, page 5-4](#)
- [Understanding the BAT.xlt File, page 3-9](#)
- [Deleting User Device Profiles, page 5-17](#)
- [Tips for Creating a Text-Based CSV File, page 5-9](#)
- [Tips for Creating a Text-Based CSV File with Two Lines and Two Speed Dials, page 5-10](#)

## Adding Lines

You can use BAT to add lines for user device profiles. You can access the Add Lines window from the Insert User Device Profiles window.

Use this procedure to add lines to a User Device Profile.

### Procedure

---

- Step 1** Start BAT. (See Starting BAT, page 1-3.)
- Step 2** Choose **Configure > User Device Profile** and click the **Add Lines** link in the upper, right corner of the window.
- The Add Lines window displays. Follow Step 3 through Step 8 in [Chapter 3, “Adding Lines to Existing Phones.”](#)
- 

## Updating Lines

You can use BAT to bulk-update line attributes for user device profiles. You can access the Update Lines window from the Insert User Device Profiles window.



### Note

Lines for both phone and user device profile get updated at the same time when you get query results that contain line information for both phone and user device profile.

---

Use this procedure to update lines.

### Procedure

---


- Step 1** Start BAT. (See Starting BAT, page 1-3.)
- Step 2** Choose **Configure > User Device Profile** and click the **Update Lines** link in the upper, right corner of the window.
- The Update Lines window displays. To locate the records that you want to update, define the filter.
- Follow Step 3 through Step 10 in [Chapter 3, “Updating Lines.”](#)
-

## Deleting User Device Profiles

Use this procedure to bulk-delete user device profiles from Cisco CallManager.

### Procedure

---

- Step 1** Start BAT. (See [Starting BAT, page 1-3.](#))
- Step 2** Choose **Configure > Users Device Profiles**.  
The Insert User Device Profiles window displays.
- Step 3** In the right corner of the window, click **Delete User Device Profiles**.  
The Delete User Device Profiles window displays. To locate the user device profiles that you want to delete, define the filter.
-  **Caution** If you do not define a filter, BAT deletes all user device profiles.
- Step 4** In the first drop-down list box, choose a field to query such as Device Name or Description.
- Step 5** In the second drop-down list box, choose contains, is exactly, not equal to, begins with, ends with, is empty, or is not empty.
- Step 6** In the third box, which is the search field/list box, either choose or enter the value that you want to locate, such as a specific user.
- Step 7** Click **Add To Query** button to add the defined filter to the query.  
If you make a mistake, click the **Clear Query** button to remove the query; then, return to [Step 4](#) and start over.
- Step 8** Click **View Query Result** to display the records that are going to be affected.  
Specify the setting that you want to update for all the records that you defined in your query.
- Step 9** Click **Delete** to delete the chosen user device profiles.  
A message advises you of approximately how long it will take to delete the records in the Cisco CallManager database. You can cancel the transaction or click **OK** to continue.

If the deletion fails, click **View Latest Log File** to display a window that will help you determine where the operation failed.

### Related Topics

- [Configuring User Device Profiles, page 5-1](#)
- [Creating the CSV File for User Device Profiles, page 5-4](#)
- [Understanding the BAT.xlt File, page 3-9](#)
- [Inserting User Device Profiles, page 5-13](#)
- [Tips for Creating a Text-Based CSV File, page 5-9](#)
- [Tips for Creating a Text-Based CSV File with Two Lines and Two Speed Dials, page 5-10](#)

## Field Descriptions for Adding a Line to a UDP Template

[Table 5-1](#) describes the optional fields for adding line details to UDP template.

**Table 5-1** *Field Descriptions for Adding a Line to a UDP Template*

Field	Description
Directory Number	
Partition	<p>Choose a partition. A partition indicates the route partition to which the directory number belongs.</p> <p><b>Note</b> The directory number can appear in more than one partition; however, make sure the directory number and Partition combination is unique.</p>
Directory Number Settings	
Voice Mail Profile	<p>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-mail server configured for this phone.</p>

**Table 5-1** Field Descriptions for Adding a Line to a UDP Template (continued)

Field	Description
Calling Search Space	<p>This field contains a collection of partitions that are searched for numbers that are called from this directory number.</p> <p><b>Note</b> Changes cause an update of the numbers listed in the Call Pickup Group field. The setting applies to all devices that are using this directory number.</p>
AAR Group	<p>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.</p>
User Hold Audio Source	<p>This field specifies the music on hold audio source that is to be played when the user places a call on hold (presses the Hold button or soft key).</p>
Network Hold Audio Source	<p>This field specifies the music on hold audio source that is to be played when the system places a call on hold (such as when user transfers a call or initiates a conference or call park).</p>
Call Waiting	<p>The choice that you make in this field applies to all devices that are using this directory number and specifies whether this directory number uses call waiting when a line is busy (On), responds with a busy signal (Off), or uses the system-wide default setting (Default).</p>
Auto Answer	<p>(Not used for CTI ports) The choice that you make in this field applies to all devices that are using this directory number and specifies whether this directory number uses Auto Answer with handset or Auto Answer with speakerphone.</p>

**Table 5-1** Field Descriptions for Adding a Line to a UDP Template (continued)

Field	Description
<b>Call Forward and Pickup Settings</b>	
Voice Mail	<p>Check this check box if you want calls to forward to the number that you chose in the voice-mail profile.</p> <p>If you choose this box, the forward all destination field and forward all calling search space box have no relevance.</p>
Forward All Destination	<p>This field indicates the directory number to which all calls are forwarded.</p> <p><b>Note</b> Setting applies to any dialable phone number, including an outside destination unless restricted, and to all devices that are using this directory number.</p>
Forward All Calling Search Space	<p>This optional field setting applies to all devices that are using this directory number and indicates the calling search space to use when forwarding to the specified destination.</p>
Voice Mail	<p>Check this check box if you want calls to forward to the number that you chose in the voice-mail profile.</p> <p>If you choose this box, the forward all destination field and forward all calling search space box have no relevance.</p>
Forward Busy Destination	<p>This field indicates the directory number to which a call is forwarded when the line is in use.</p> <p><b>Note</b> This setting applies to any dialable phone number, including an outside destination unless restricted, and to all devices that are using this directory number.</p>
Forward Busy Calling Search Space	<p>This setting applies to all devices that are using this directory number and indicates the calling search space to use when forwarding to the specified destination.</p>

**Table 5-1** Field Descriptions for Adding a Line to a UDP Template (continued)

Field	Description
Voice Mail	<p>Check this check box if you want calls to forward to the number that you chose in the voice-mail profile.</p> <p>If you choose this box, the forward all destination field and forward all calling search space box have no relevance.</p>
Forward No Answer Destination	<p>This field indicates the directory number to which a call is forwarded when the phone is not answered.</p> <p><b>Note</b> Setting applies to any dialable phone number, including an outside destination unless restricted, and to all devices that are using this directory number.</p>
Forward No Answer Calling Search Space	<p>This setting applies to all devices that are using this directory number and indicates the calling search space to use when forwarding to the specified destination. The setting appears only if it is configured in the system.</p>
Call Pickup Group	<p>This field indicates a number that can be dialed to answer calls to this directory number (in the specified partition); for example, 3003/Partitionl.</p>
<b>Line Settings for this Device</b>	
External Phone Number Mask	<p>This setting indicates the phone number (or mask) that is used to send Caller ID information when a call is placed from this line. This setting uses a maximum of 30 number and “X” characters; the X characters must appear at the end of the pattern.</p>
Message Waiting Lamp Policy	<p>This field indicates how the Message Waiting Indicator behaves for the device. You can have the MWI always come on or never come on or use the system policy, as defined in Cisco CallManager Administration.</p>

**Table 5-1** Field Descriptions for Adding a Line to a UDP Template (continued)

Field	Description
Ring Setting when idle	This setting designates the type of ring for an incoming call on a phone.
Ring Setting when active	This setting designates the type of ring for an incoming call on a phone that is busy.
Line Text Label	Use this field only if you do not want the directory number that is shown on the line appearance. Enter text that identifies this directory number for a line/phone combination.

[Table 5-2](#) describes the optional fields for adding line details to the All UDP details template.

**Table 5-2** Additional Field Descriptions for Inserting All UDP Details Template

Field	Description
User Locale	For this optional field, 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 CallManager user windows and phones.
<b>Note</b>	Values appear in the Phone Button Template and Expansion Module fields. Use Cisco CallManager Administration to configure these templates in the system.
Phone Button Template	Choose the button template to be used for all phones in this group. This field does not apply if you chose CTI Ports in the Model field.  Button templates determine the configuration of buttons on a phone and identify which feature (line, speed dial) that each button designates.
Expansion Module 1	For this optional field (Cisco IP Phone 7960 only), choose the button template to be used for the first expansion module.

**Table 5-2 Additional Field Descriptions for Inserting All UDP Details Template (continued)**

Field	Description
Expansion Module 2	For this optional field (Cisco IP Phone 7960 only), choose the button template to be used for the second expansion module.
Softkey Template	Choose the softkey template to be used for all phones in this group.





# Working with Cisco IP Manager Assistant

---

BAT supports the Cisco IP Manager Assistant (IPMA) feature in Cisco CallManager. BAT allows you to add, update, and delete managers or assistants.



Note

---

Cisco IPMA feature only works with Cisco IP Phone models 7940 and 7960.

---

Reference the following documentation for further information related to Cisco IPMA.

- *Cisco CallManager Features and Services Guide*
- *Cisco IP Manager Assistant User Guide*

## Setting up the Phones and Lines for Use with Cisco IPMA

You can use BAT to set up the phones that are used by the managers or assistants. Before using BAT to create manager-assistant association, you will need to run the IPMA Configuration wizard on the BAT server, delete manager or assistant phones that are currently configured for a normal user, and reinsert managers and assistants phones by using the new phone templates that were created by the IPMA Configuration wizard. Follow the appropriate procedures for setting up new phones or existing phones.

### Before You Begin

You must set up and configure the phones, route points, partitions, and calling search space for managers and assistants. Cisco recommends that you use IPMA Configuration Wizard to set up and configure phone services, route points, partitions, and calling search space. Refer to the *Cisco CallManager Features and Services Guide* for more information on the IPMA configuration wizard.



#### Note

---

The IPMA configuration wizard can only be used one time to set up the phones, route points, partitions and calling search space. Once setup is completed, the IPMA configuration wizard will only allow you to view your configuration.

---

## Setting Up Lines on New Phones

Use the following procedures to set up new manager and assistant phones.

### Procedure for Setting Up Manager Phones

- 
- Step 1** (Optional) The IPMA Manager Phone template that was created by the IPMA configuration wizard sets the defaults that are specified in [Table 6-1](#). Edit the template fields as needed by choosing **Configure > Template > Phone** and choosing the IPMA Manager Phone template. You may want to make a copy of the template before you edit the template fields.
  - Step 2** Create the CSV file for new manager phones by following the IPMA Manager phone template.
  - Step 3** Insert Manager phone by using the IPMA Manager Phone template.
- 

### Procedure for Setting Up Assistant Phones

- 
- Step 1** (Optional) The IPMA Assistant Phone template that was created by the IPMA configuration wizard sets the defaults that are specified in [Table 6-2](#). Edit the template field as needed by choosing **Configure > Template > Phone** and choosing the IPMA Assistant Phone template. You may want to make a copy of the template before you edit the template fields.

- Step 2** Create the CSV file for new Assistant phones by following the IPMA Assistant phone template.
- Step 3** Insert Assistant phone by using the IPMA Assistant Phone template.
- 

## Setting Up Lines on Existing Phones

Use the procedure in [Chapter 3, “Adding Lines to Existing Phones”](#) to set up manager and assistant phones on existing phones and choose the IPMA Manager or IPMA Assistant Phone template. The IPMA Manager Phone template that was created by the IPMA configuration wizard sets the defaults that are specified in [Table 6-1](#). The IPMA Assistant Phone template that was created by the IPMA configuration wizard sets the defaults that are specified in [Table 6-2](#).



**Note** If you changed the default parameter in the IPMA configuration wizard, remember to use the name you specified for the different fields when you are editing the template.

---

**Table 6-1** *Default Settings for Manager Phone Template*

Field	Default Value
Softkey template	Standard IPMA Manager
Phone Button Template	Standard Cisco 7960 (2 lines)
Line1	Primary Line <ul style="list-style-type: none"> <li>CSS = Generated_IPMA_CSS_I_E</li> <li>Partition = Generated_IPMA_Managers</li> </ul>
Line 2	Incoming Intercom Line <ul style="list-style-type: none"> <li>CSS = Generated_IPMA_CSS_I_E</li> <li>Partition = Generated_IPMA_Everyone</li> <li>Also configure Auto Answer with Speaker Phone or headset option.</li> </ul>
Services	IPMA Service

**Table 6-2** Default Setting for Assistant Phone Template

Field	Default Value
Softkey template	Standard IPMA Assistant
Phone Button Template	Standard 7960 with 1 configured line
Expansion Module 1	14-Button Expansion Module with 6 Configured Lines template
Line 1 (On Cisco 7960)	Primary Line <ul style="list-style-type: none"> <li>• CSS = Generated_IPMA_CSS_I_E</li> <li>• Partition = Generated_IPMA_Everyone</li> </ul>
Line 2 - Line 6 (On Expansion Module)	Proxy Line 1 - 5 with each proxy line defaulted to <ul style="list-style-type: none"> <li>• CSS = IPMA_CSS_M_E</li> <li>• Partition = Generated_IPMA_Everyone</li> </ul>
Line 7 (On Expansion Module)	Intercom Line <ul style="list-style-type: none"> <li>• CSS = Generated_IPMA_CSS_I_E</li> <li>• Partition = Generated_IPMA_Everyone</li> <li>• Also configure Auto Answer with Speaker Phone or headset option.</li> </ul>

## Creating the CSV File for Manager-Assistant Associations

BAT includes a Microsoft Excel file (BAT.xlt) that provides data file templates with macros and error checking and exports the values into a CSV file for use when you are adding, updating, or deleting manager-assistant associations.

### Related Topics

- [Creating a CSV File for Manager-Assistant Association by Using BAT.xlt, page 6-5](#)
- [Creating a Text-Based CSV File for Manager-Assistant Association, page 6-8](#)
- [Deleting Manager-Assistant from Cisco CallManager, page 6-15](#)

# Creating a CSV File for Manager-Assistant Association by Using BAT.xlt

Use the following procedures to create the CSV file for inserting, updating, and deleting manager-assistant association. If you want to create manager-assistant association with default line configuration, follow the procedure for creating default manager-assistant files. Table 6-3 and Table 6-4 list the default line configurations for the manager and assistant. If you want to assign proxy lines that do not follow the default line configuration, follow the procedure for creating custom manager-assistant files. BAT uses the information that you provide here to assign assistants to a manager in the Cisco CallManager database.

## Procedure for Creating Default Manager-Assistant Files

- 
- Step 1** The BAT.xlt file resides on the publisher database server; however, you normally would not have Microsoft Excel installed on the publisher database server. In that case, you must copy the file from the publisher database server and move it to the local machine, which must have Microsoft Excel installed.
- Using a floppy disk or a mapped network drive, open the path C:\CiscoWebs\BAT\ExcelTemplate on the publisher database server and copy the file **BAT.xlt** to a local machine where Microsoft Excel is installed.
- Step 2** Double-click **BAT.xlt**.
- Step 3** When prompted, click **Enable Macros** button.
- Step 4** Click the **Default Managers-Assistants** tab at the bottom of the sheet to create the manager-assistant association.
- Step 5** Scroll to the right side of the template until you see the radio buttons for **One manager, multiple assistants** and **One assistant, multiple managers**. Choose **One manager, multiple assistants** if you want to assign multiple assistants to a manager or **One assistant, multiple managers** if you want to assign an assistant to one or more managers.
- Step 6** Complete all mandatory fields and any relevant, optional fields.



### Caution

The system treats blank rows in the spreadsheet as “End of File” and discards subsequent records.

If you choose the **One manager, multiple assistants** radio button, enter the following information in each row:

- In the ManagerID field, enter the userID of the manager, up to 30 characters.
- In the AssistantID # field, enter the user IDs for the assistants to whom the manager will be associated, up to 30 characters.

The # symbol represents the number of assistants that will be assigned to a manager.




---

**Note** Click the **Add more Assistants** button if you want to add more assistants.

---

If you choose the **One assistant, multiple managers** radio button, enter the following information in each row:

- In the AssistantID field, enter the userID of the assistant, up to 30 characters.
- In the ManagerID # field, enter the user IDs for the managers to whom the assistant will be associated, up to 30 characters.

The # symbol represents the number of managers that will be assigned to an assistant.




---

**Note** Click the **Add more Managers** button if you want to add more managers.

---

**Step 7** Click the **Insert** or **Delete** button to choose the type of operation to perform.




---

**Note** Use the insert operation if you want to create new manager-assistant association. Use the delete operation if you want to delete a manager or an assistant from a manager-assistant association.

---

**Step 8** Click **Export to BAT Format** button to transfer the data from the BAT Excel spreadsheet into a CSV file.

The system saves the file to **C:\XLSDataFiles** (or to your choice of another existing folder) as

<type of operation>ManagerAssistants#timestamp.txt (or to your choice of file name)

where <type of operation> specifies the type of operation that was chosen in Step 7, and “timestamp” represents the precise date and time that the file was created.

- Step 9** To be accessed by BAT, the CSV file must reside on the publisher database server; however, you normally would not have Microsoft Excel running on the publisher database server. This step assumes that you have saved the CSV file to the local machine (not the publisher database server). In that case, you must copy the file to publisher database server.

Using a floppy disk or a mapped network drive, copy the CSV file from C:\XLSDataFiles to the following folder on the server that is running the publisher database for Cisco CallManager based on the chosen operation:

- Insert or Updates C:\BATFiles\ManagersAssistants\Insert.
- Delete C:\BATFiles\ManagersAssistants\Delete.

For information on how to read the exported CSV file, click the link to **View Sample File** in the Insert Managers/Assistants.

---

### Procedure for Creating Custom Manager-Assistant Files

---

- Step 1** The BAT.xlt file resides on the publisher database server; however, you normally would not have Microsoft Excel installed on the publisher database server. In that case, you must copy the file from the publisher database server and move it to the local machine, which must have Microsoft Excel installed.

Using a floppy disk or a mapped network drive, open the path C:\CiscoWebs\BAT\ExcelTemplate on the publisher database server and copy the file **BAT.xlt** to a local machine where Microsoft Excel is installed.

- Step 2** Double-click **BAT.xlt**.
- Step 3** When prompted, click **Enable Macros** button.
- Step 4** Click the **Custom Managers-Assistants** tab at the bottom of the sheet to create the manager-assistant association.
- Step 5** 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 will be assigning to an assistant.

Complete all mandatory fields and any relevant, optional fields.

- Step 6** Click **Export to BAT Format** button to transfer the data from the BAT Excel spreadsheet into a CSV file.
- The system saves the file to **C:\XLSDataFiles** (or to your choice of another existing folder) as
- Custom Manager-Assistants#timestamp.txt (or to your choice of file name).
- Step 7** To be accessed by BAT, the CSV file must reside on the publisher database server; however, you normally would not have Microsoft Excel running on the publisher database server. This step assumes that you have saved the CSV file to the local machine (not the publisher database server). In that case, you must copy the file to publisher database server.
- Using a floppy disk or a mapped network drive, copy the CSV file from C:\XLSDataFiles to C:\BATFiles\ManagersAssistants\Insert on the server that is running the publisher database for Cisco CallManager.
- For information on how to read the exported CSV file, click the link to **View Sample File** in the Insert Managers/Assistants page.
- 

## Creating a Text-Based CSV File for Manager-Assistant Association

If you do not use the BAT.xlt file for data input when you assign assistants to a manager, you must create the comma separated values (CSV) file by using lines of ASCII text with values separated by commas.

If you created the CSV file by using the BAT.xlt file, you can skip the following procedure in this section.



### Tips

---

Use **BAT.xlt** to input data because data validation is performed on that file.

---

The CSV file provides a common textual way of providing tabular information. You can create a data file by using any file format, such as Microsoft Notepad. Save the CSV file to C:\BATFiles\ManagersAssistants\Insert on the server that is running the publisher database for Cisco CallManager.

Use this procedure to create a CSV text file for users.

## 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 CallManager. See [Tips for Creating a Text-Based CSV File, page 6-10](#), for detailed information about the formatting that you must use in the text-based CSV file.



**Caution** Do not leave blank rows in the spreadsheet. BAT interprets a blank line as the end of the file and discards any subsequent information.

---

You can assign multiple assistants to a manager by entering the userIDs of the manager and assistants separated by a comma at the end of the record.

- Step 3** Save the CSV file in the following folder on the server that is running the publisher database for Cisco CallManager based on the type of operation:
- For Inserts or Updates C:\BATFiles\ManagersAssistants\Insert.
  - For Deletes C:\BATFiles\ManagersAssistants\Delete.



**Note** You cannot use CSV files for manager-assistant that are saved anywhere but the specific folder that is designated for the specific operation. For example if you want to insert new manager-assistant association, you must save the CSV file in C:\BATFiles\ManagersAssistants\Insert on the server that is running the publisher database for Cisco CallManager for BAT inserts.

---

## Tips for Creating a Text-Based CSV File

The following example format and samples show the field length and string types. Use the UserID of the manager for the Manager ID and the userID of the assistant for the Assistant ID.

Default Manager-Assistant Association

**ManagerID**(Mandatory, 1 to 30 characters),**AssistantID 1**(Mandatory, 1 to 30 characters),**AssistantID 2** (Mandatory, 1 to 30 characters)...**AssistantID #**(Mandatory, 1 to 30 characters)

### Example

Johns ,Mikeh ,Larryh

Custom Manager-Assistant Association

**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, 1 to 24 characters),**Manager Line DN**(Mandatory, 1 to 24 characters)

### Example

Johns ,SEP1231123245AB ,90001 ,Mikeh ,SEP2342342342AB ,20001 ,20002 ,90002

# Adding or Modifying Manager-Assistant Associations

You can use BAT to add, update or delete manager-assistant associations in the Cisco CallManager database.

## Related Topics

- [Adding/Updating Manager-Assistant to the Cisco CallManager, page 6-11](#)
- [Deleting Manager-Assistant from Cisco CallManager, page 6-15](#)

## Adding/Updating Manager-Assistant to the Cisco CallManager

Use this procedure to add or update new manager-assistant associations to Cisco CallManager database. When BAT updates manager assistant associations, it does not change existing Cisco IPMA line configurations. When you create an association for a new manager, you will need to enter a device name and intercom DN. These fields are optional when you update a manager with an existing IPMA record. See [Manager and Assistant Line Configurations, page 6-12](#), for information how BAT assigns line configuration 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.



### Caution

Manager-Assistant association fails when the assistant phone does not have enough lines to support the minimum Cisco IPMA configuration.

### Before You Begin

You must create a CSV file before you attempt to add manager-assistant associations to Cisco CallManager.

### Procedure

- Step 1** Start BAT. (See [Starting BAT, page 1-3](#).)
- Step 2** Choose **Configure > Managers/Assistants**.  
The Insert Managers/Assistants page displays.
- Step 3** In the File Name field, choose the CSV file that you created for this type of bulk transaction.
- Step 4** Check the **Configure managers as mobile managers** check box if the managers will be using Extension Mobility to log in.
- Step 5** If you want to assign multiple assistants to a manager, click the radio button for **Associate assistants to a manager**. If you want to assign an assistant to multiple managers, choose the radio button for **Associate managers to an assistant**.
- Step 6** Click **Insert**.

A message displays that advises you of approximately how long it will take to insert the records to the Cisco CallManager database. You can cancel the transaction if you feel that it may cause performance degradation.

**Step 7** To insert the manager-assistant association, click **OK**, or to cancel the transaction, click **Cancel**.

If you clicked OK, a Transaction Status window displays. To see the transaction in progress, you can click the **Show Latest Status** button.

When the transaction completes, you can click **View Latest Log File** to see a log file that indicates 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 11, “Troubleshooting BAT and TAPS.”](#)

**Step 8** You must restart Cisco IPMA service for changes to take effect. Use Microsoft Windows Administrative Tools -> Services to stop and restart Cisco Tomcat service.

**Caution**

---

Restarting the Cisco Tomcat Service will disrupt other services that use the Cisco Tomcat Service. Cisco recommends that you restart the Cisco Tomcat Service at a non-critical time to reduce the impact to these services. Cisco also recommends that you back up your system prior to restarting the Cisco Tomcat Service.

---

## Manager and Assistant Line Configurations

BAT assigns Cisco IPMA line configurations by matching primary lines of a manager to proxy lines of an assistant. Every proxy line for an assistant corresponds to a manager primary line. For example, when you assign two managers to an assistant and you use the phone template that the Cisco IPMA wizard created for the manager and assistant phones, BAT sets the following line configurations on the manager and assistant phone.

The line configurations for both managers follow:

- Line 1 gets configured as the manager primary line.
- Line 2 gets configured as the manager intercom line.

The line configurations for the assistant are follow:

- Line 1 gets configured as the assistant primary line.
- Line 2 gets configured as the proxy line for Manager 1.

- Line 3 gets configured as the proxy line for Manager 2.
- Lines 4 through 6 do not get configured.
- Line 7 gets configured as the intercom line.

You can add lines 4 through 6 as proxy lines for other managers.

When you add multiple managers to an assistant, BAT creates manager-assistant associations based on the order in the CSV file. BAT creates the first manager-assistant association by assigning all the primary lines for the manager to the unassigned lines of the assistant as proxy lines. It continues creating individual manager-assistant associations based on the order of CSV record until all lines on the assistant phones are assigned or all managers in the CSV record are associated. For example, if you assign two managers with two lines to an assistant on a new phone with six unassigned lines, BAT sets the following line configurations on the manager and assistant phone.

The line configurations for both managers follow:

- Line 1 and line 2 get configured as the manager primary line.
- Line 3 gets configured as the manager intercom line.

The line configurations for the assistant follow:

- Line 1 gets configured as the assistant primary line.
- Line 2 gets configured as the proxy line for Manager 1 Line 1.
- Line 3 gets configured as the proxy line for Manager 1 Line 2.
- Line 4 gets configured as the proxy line for Manager 2 Line 1.
- Line 5 gets configured as the proxy line for Manager 2 Line 2.
- Line 6 gets configured as the intercom line.

When you create an Cisco IPMA association with a manager phone with preexisting primary lines, you must ensure that the number of unassigned lines on the assistant phone is greater than the number of primary lines on the manager phone. For example, 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 three available lines that have not been configured.

When you add multiple assistants to a manager, BAT assigns assistants to a manager based on the order in the CSV file. When more than one assistant is listed in the CSV file, BAT sets the primary line of a manager based on the number of available lines for the first assistant. For example, if you have a manager with a phone that can be configured with 2 primary lines, but the first assistant listed in

the CSV file only has 1 available line, BAT will create one primary line for the manager and one proxy line on all the assistant phones that are listed in the CSV record.

[Table 6-3](#) lists the default line configuration for a manager phone, and [Table 6-4](#) lists the default line configuration for the assistant phones that BAT sets during manager-assistant associations.

**Table 6-3** *Manager Phone Configuration*

Number of Lines	Configuration
One Line	Manager-assistant association fails.
Two Line (Default IPMA manager phone template)	L1-primary line L2-intercom line
More Than Two lines	Last line gets configured as the intercom line.  The number of available lines that are not currently assigned on the associated assistant phone provides the basis for the number of lines that get configured as primary lines on a manager phone.

**Table 6-4** *Assistant Phone Configuration*

Number of Lines	Configuration
One Line	Manager-assistant association fails.
Two Line	Manager-assistant association fails.
Three Lines	L1 Assistant's own line. L2-proxy line. L3-intercom line

**Table 6-4 Assistant Phone Configuration**

Number of Lines	Configuration
More Than Three Lines	L1 Assistant's own line. Last line gets configured as the intercom line. All other lines get configured as proxy lines.
Seven Lines (Default IPMA assistant phone template)	L1 Assistant's own line. L2 - L6 get configured as proxy lines. Last line gets configured as the intercom line.

## Deleting Manager-Assistant from Cisco CallManager

You can use BAT to delete a specific manager-assistant association from the Cisco CallManager database. See [Deleting Managers or Assistants, page 6-16](#), if you want to delete a manager or assistant from all manager-assistant associations. For example, Assistant jmorgan is assigned to two managers rrcraig and dbaker. If you want to changed the manager assistant association such that jmorgan is only assigned to rrcraig, you can delete the jmorgan, dbaker association by creating a CSV file with the following entry:

### Example

```
jmorgan,dbaker.
```

Use this procedure to bulk-delete specific manager-assistant associations from Cisco CallManager.

### Before You Begin

You must create a CSV file before you attempt to delete specific manager-assistant associations.

### Procedure

- 
- Step 1** Start BAT. (See [Starting BAT, page 1-3](#).)
  - Step 2** Choose **Configure > Managers/Assistants**.  
The Insert Managers/Assistants page displays.

- Step 3** In the right corner of the window, click **Delete Managers/Assistants**.  
The Delete Managers/Assistants page displays.
- Step 4** In the File Name field, choose the CSV file that you created for this type of bulk transaction. Refer to [Creating a CSV File for Manager-Assistant Association by Using BAT.xlt, page 6-5](#)
- Step 5** Click **Delete**.  
A message displays that advises you of approximately how long it will take to delete the records from the Cisco CallManager database. You can cancel the transaction if you feel it may cause performance degradation.  
When the transaction completes, you can click **View Latest Log File** to see a log file that indicates the number of records that are added and the number of records that failed, including an error code. For more information on log files, see [Chapter 11, “Troubleshooting BAT and TAPS”](#)
- Step 6** You must restart Cisco IPMA service for changes to take effect. Use Microsoft Windows Administrative Tools -> Services to stop and restart Cisco Tomcat service.

**Caution**

---

Restarting the Cisco Tomcat Service will disrupt other services that use the Cisco Tomcat Service. Cisco recommends that you restart the Cisco Tomcat Service at a non-critical time to reduce the impact to these services. Cisco also recommends that you back up your system prior to restarting the Cisco Tomcat Service.

---

## Deleting Managers or Assistants

You can use BAT to delete a manager or an assistant from all manager-assistant associations.

### Related Topics

- [Deleting Managers from Cisco CallManager, page 6-17](#)
- [Deleting Assistants from Cisco CallManager, page 6-18](#)

## Deleting Managers from Cisco CallManager

You can use BAT to delete managers from the Cisco CallManager database/Lightweight Directory Access Protocol (LDAP) Directory in batches rather than individually. Deleting a manager will delete the manager from all manager-assistant associations. Cisco CallManager maintains information on the manager as a user in the directory. For example, if `rmartinez` is a manager with two assistants, `dbell`, `jkent`, you can disassociate `rmartinez` from both assistants by deleting `rmartinez` as a manager in the Cisco CallManager database. The directory still shows `rmartinez` as a user.

Use this procedure to bulk-delete managers from Cisco CallManager.

### Procedure

- 
- Step 1** Start BAT. (See [Starting BAT, page 1-3](#).)
- Step 2** Choose **Configure > Managers/Assistants**.  
The Insert Managers/Assistants page displays.
- Step 3** In the right corner of the page, click **Delete Managers**.  
The Delete Managers page displays. To locate the Managers that you want to delete, define the filter.



#### Caution

If you do not define a filter, BAT deletes all managers.

- Step 4** In the first drop-down list box, choose a field to query such as User ID, Department, First Name, or Last Name.
- Step 5** In the second drop-down list box, choose contains or is exactly.
- Step 6** In the third box, which is the search field/list box, either choose or enter the value that you want to locate, such as a specific manager.



#### Note

To choose managers from more than one department, enter multiple departments in this field. For example, to choose managers from departments 12 and 34, enter **12, 34** in the third box instead of performing two operations.

- Step 7** To add the defined filter to the query, click **Add To Query** button
- If you make a mistake, click the **Clear Query** button to remove the query; then, return to [Step 4](#) and start over.
- Step 8** To display the records that are going to be affected, click **View Query Result**.
- Specify the setting that you want to update for all the records that you defined in your query.
- Step 9** To delete the chosen managers, click **Delete**.
- A message displays that advises you of approximately how long it will take to delete the records in the Cisco CallManager database. You can cancel the transaction or click **OK** to continue.
- When the transaction completes, you can click **View Latest Log File** to see a log file that indicates the number of records that are added and the number of records that failed, including an error code. For more information on log files, see [Chapter 11, “Troubleshooting BAT and TAPS”](#)
- Step 10** You must restart Cisco IPMA service for changes to take effect. Use Microsoft Windows Administrative Tools -> Services to stop and restart Cisco Tomcat service.

**Caution**


---

Restarting the Cisco Tomcat Service will disrupt other services that use the Cisco Tomcat Service. Cisco recommends that you restart the Cisco Tomcat Service at a non-critical time to reduce the impact to these services. Cisco also recommends that you back up your system prior to restarting the Cisco Tomcat Service.

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## Deleting Assistants from Cisco CallManager

You can use BAT to delete assistants from the Cisco CallManager database in batches rather than individually. Deleting an assistant will delete the assistant from all manager-assistant associations. Cisco 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 CallManager database. The directory still shows thudson as a user.

Use this procedure to bulk-delete assistants from Cisco CallManager.

### Procedure

---

- Step 1** Start BAT. (See [Starting BAT, page 1-3.](#))
- Step 2** Choose **Configure > Managers/Assistants**.  
The Insert Managers/Assistants page displays.
- Step 3** In the right corner of the page, click **Delete Assistants**.  
The Delete Assistants page displays. To locate the Assistants that you want to delete, define the filter.



---

**Caution** If you do not define a filter, BAT deletes all assistants.

---

- Step 4** In the first drop-down list box, choose a field to query such as User ID, Department, First Name, or Last Name.
- Step 5** In the second drop-down list box, choose **contains** or **is exactly**.
- Step 6** In the third box, which is the search field/list box, either choose or enter the value that you want to locate, such as a specific assistant.



---

**Note** To choose assistants from more than one department, enter multiple departments in this field. For example, to choose assistants from departments 12 and 34, enter **12, 34** in the third box instead of performing two operations.

---

- Step 7** To add the defined filter to the query, click **Add To Query** button.  
If you make a mistake, click the **Clear Query** button to remove the query; then, return to [Step 4](#) and start over.

- Step 8** To display the records that are going to be affected, click **View Query Result**. Specify the setting that you want to update for all the records that you defined in your query.
- Step 9** To delete the chosen assistants, click **Delete**.  
A message displays that advises you of approximately how long it will take to delete the records in the Cisco CallManager database. You can cancel the transaction or click **OK** to continue.  
When the transaction completes, you can click **View Latest Log File** to see a log file that indicates the number of records that are added and the number of records that failed, including an error code. For more information on log files, see [Chapter 11, “Troubleshooting BAT and TAPS”](#)
- Step 10** You must restart Cisco IPMA service for changes to take effect. Use Microsoft Windows Administrative Tools -> Services to stop and restart Cisco Tomcat service.

**Caution**

---

Restarting the Cisco Tomcat Service will disrupt other services that use the Cisco Tomcat Service. Cisco recommends that you restart the Cisco Tomcat Service at a non-critical time to reduce the impact to these services. Cisco also recommends that you back up your system prior to restarting the Cisco Tomcat Service.

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# Working with Client Matter Codes and Forced Authorization Codes

---

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

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

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

This chapter contains information on the following topics:

- [CMC and FAC Configuration Checklist, page 7-2](#)
- [Important BAT Considerations, page 7-3](#)
- [Creating a CSV File by Using BAT.xlt, page 7-4](#)
- [Creating a Custom Text-Based CSV File, page 7-5](#)
- [Editing an Existing CMC or FAC CSV File, page 7-7](#)
- [Deleting Code Settings, page 7-8](#)
- [CMC and FAC CSV File Settings, page 7-12](#)
- [Using BAT to Update the Cisco CallManager Database, page 7-14](#)

# CMC and FAC Configuration Checklist

[Table 7-1](#) provides steps in the order in which you should use BAT to implement CMC and FAC.

**Table 7-1 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.	<ul style="list-style-type: none"> <li>• <a href="#">Important BAT Considerations, page 7-3</a></li> <li>• <i>Cisco CallManager Features and Services Guide</i></li> </ul>
Step 2	Create a CSV file for CMC or FAC and enter the CMC and FAC configuration information.	<ul style="list-style-type: none"> <li>• <a href="#">Creating a CSV File by Using BAT.xlt, page 7-4</a></li> <li>• <a href="#">Creating a Custom Text-Based CSV File, page 7-5</a></li> <li>• <a href="#">CMC and FAC CSV File Settings, page 7-12</a></li> </ul>
Step 3	To update the Cisco CallManager database, insert the CSV file in BAT.	<ul style="list-style-type: none"> <li>• <a href="#">Using BAT to Update the Cisco CallManager Database, page 7-14</a></li> <li>• <a href="#">BAT Settings for Updating the Cisco CallManager Database, page 7-16</a></li> </ul>
Step 4	Enable FAC or CMC by adding or updating route patterns in Cisco CallManager Administration.	<ul style="list-style-type: none"> <li>• <i>Cisco CallManager Administration Guide</i></li> <li>• <i>Cisco CallManager Features and Services Guide</i></li> </ul>
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 works.	<i>Cisco CallManager Features and Services Guide</i>

# 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:

```
1234,John Smith,20
```

```
1235,Lisa Mendez,10
```

```
5551,Debbie Dunn,30
```



## Caution

---

When you use BAT.xlt or a custom Notepad file, be aware that BAT treats blank rows in the file/spreadsheet as "End of File" and discards subsequent records.

---

- To add new codes at the same time that you update codes in an existing CSV file, you must enter all required information. When you add new codes, you must complete all required fields; for example, forced authorization code, authorization code name, authorization level, or client matter code. If the procedure specifies an entry as mandatory, you must provide the information in file.
- Deleting information from a file and leaving the information blank does not remove the information from the Cisco 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.
- On the publisher database server, BAT provides separate directories for CMC and FAC; for example, C:\BATFiles\CMC\Insert or C:\BATFiles\FAC\Insert. Make sure that you copy the appropriate CSV files to the correct directory.

- You must save CSV files to the directory that BAT designates for the specific operation; for example, if you want to delete authorization code settings, you must copy the CSV file to C:\BATFiles\FAC>Delete on the publisher database server.
- 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 CallManager Database”](#) section on page 7-14.

## 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 publisher database server; however, you normally do not have Microsoft Excel installed on the publisher database server. In that case, you must copy the file from the publisher database server and move it to the local machine, which must have Microsoft Excel installed.
  - Step 2** Browse to **C:\CiscoWebs\BAT\ExcelTemplate** on the publisher database server.
  - Step 3** Copy **BAT.xlt** to a local machine where Microsoft Excel is installed.
  - Step 4** In Microsoft Excel, open **BAT.xlt**.



---

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

---

- Step 5** 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 6** Use [Table 2](#) to enter CMC or FAC settings in the columns.
- Step 7** Repeat [Step 6](#) until you enter all codes.
- Step 8** To transfer the Excel spreadsheet format to a CSV file, click **Export to BAT Format**.

The system automatically saves CSV files to C:\XlsDatafiles on the local machine.

- Step 9** Copy the CSV file to the following directory on the publisher database server.
- For CMC—C:\BATFiles\CMC\Insert\
  - For FAC—C:\BATFiles\FAC\Insert\
- Step 10** You must add the CSV file to BAT. To insert the CSV file in BAT, see the [“Deleting Code Settings” section on page 7-8](#).
- 

## Creating a Custom Text-Based CSV File

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 CMC CSV file or a FAC CSV file, as described in the following steps:
- For CMC—[Step 3](#), [Step 5](#) and [Step 6](#)
  - For FAC—[Step 4](#), [Step 5](#) and [Step 6](#)



---

**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:



---

**Tip** For a detailed description of the following fields, see [Table 2](#).

---

- 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** Save the CSV file to the following directory on the publisher database server, depending on what you want to accomplish:

- For CMC additions/updates—**C:\BATFiles\CMC\Insert**
- For FAC additions/updates—**C:\BATFiles\FAC\Insert**

**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 CallManager Database”](#) section on page 7-14.
  - If you plan to delete code settings, see the [“Deleting Code Settings”](#) section on page 7-8.
- 

## 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, browse to the following directory on the publisher database server:
- For CMC—**C:\BATFiles\CMC\Insert**
  - For FAC—**C:\BATFiles\FAC\Insert**
- 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 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** Copy the CSV file to the following directory on the publisher database server:
- For CMC additions/updates—**C:\BATFiles\CMC\Insert**
  - For CMC deletions—**C:\BATFiles\CMC\Delete**
  - For FAC additions/updates—**C:\BATFiles\FAC\Insert**
  - For FAC deletions—**C:\BATFiles\FAC\Delete**
- 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 CallManager Database”](#) section on page 7-14.
- 

## Deleting Code Settings

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.

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 the 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, perform the following procedure:

#### Procedure

---

- Step 1** 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 7-9 and [“Example for FAC \(Existing CSV File\)”](#) section on page 7-9; after you insert the CSV file into BAT, see [Step 4](#) through [Step 13](#).
  - To delete existing codes from existing CSV file, see [Step 2](#) through [Step 13](#).
- Step 2** On the publisher database server, browse to the following directory:
- For CMC—**C:\BATFiles\CMC\Insert**
  - For FAC—**C:\BATFiles\FAC\Insert**
- Step 3** In Notepad, open and edit the existing CSV file to delete the entries.

- Step 4** Save the CSV file and copy it to the following directory on the publisher database server:
- For CMC—**C:\BATFiles\CMC\Delete\**
  - For FAC—**C:\BATFiles\FAC\Delete\**
- Step 5** In Cisco CallManager Administration, choose **Application > BAT**.
- Step 6** In BAT, choose one of the following options, depending on whether you plan to delete client matter codes or forced authorization codes:
- For CMC—**Configure > Client Matter Codes**
  - For FAC—**Configure > Forced Authorization Codes**
- Step 7** From the drop-down list box, choose the file that contains the codes that you want to delete.
- Step 8** In the upper, right corner of the window, click one of the following links, depending on whether you plan to delete client matter codes or forced authorization codes:
- For CMC—**Delete Client Matter Codes**
  - For FAC—**Delete Forced Authorization Codes**
- Step 9** Choose a custom file from the drop-down list box and click **Add to Query**.
- Step 10** To view which records the system will delete, click **View Query Result**. If the file does not contain the expected records, click **Clear Query** and return to [Step 1](#).
- Step 11** If the file contains the records that you want to delete, click **Delete**.
- Step 12** A confirmation dialog box indicates the time that it takes to complete the operation. Click **OK**.

**Tip**

To see the progression of the operation, click the **Show Latest Status** button.

- Step 13** After the transaction completes, click **View Latest Log File** to view a log file that indicates whether the system added all files successfully.

# CMC and FAC CSV File Settings

Use [Table 2](#) in conjunction with the following sections:

- [Creating a CSV File by Using BAT.xlt, page 7-4](#)
- [Creating a Custom Text-Based CSV File, page 7-5](#)
- [Editing an Existing CMC or FAC CSV File, page 7-7](#)
- [Deleting Code Settings, page 7-8](#)

**Table 2** Configuration Settings for CMC

Setting/Column	Description
<b>For CMC CSV file</b>	
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.
<b>For FAC CSV File</b>	
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 2** Configuration Settings for CMC (continued)

Setting/Column	Description
Authorization Code Name	<p>Enter a unique name that is no more than 50 characters. The authorization code name ties the authorization code to a specific user or group of users; this name displays in the CDRs for calls that use this code.</p> <p><b>Tip</b> If you plan to assign an authorization code to every user in the system, make sure that the code name includes an identifier for the user, such as the user name or another unique, non-sensitive identifier; for example, an email alias or employee/student number. Do not use identifiers such as a social security number because the authorization code name writes to CDRs, which are not secure.</p>
Authorization Level	<p>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.</p>


# Using BAT to Update the Cisco CallManager Database

To update the Cisco 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 CallManager, you must create or edit a CMC or FAC CSV file.

## Procedure

- 
- Step 1** In Cisco CallManager Administration, choose **Application > BAT**.
- Step 2** Choose one of the following options, depending on whether you used a CMC or FAC CSV file:
- For CMC—**Configure > Client Matter Codes**
  - For FAC—**Configure > Forced Authorization Codes**
- Step 3** 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 4** If you updated an existing list of codes, check the **Override the existing configuration** check box, as described in [Table 3](#).
- Step 5** Click **Insert**.

**Step 6** A confirmation dialog box indicates the that time it takes to complete the operation. Click **OK**.



---

**Tip** To see the progression of the operation, click the **Show Latest Status** button.

---

**Step 7** After the transaction completes, click **View Latest Log File** to view a log file that indicates whether the system added all files successfully.

---

# BAT Settings for Updating the Cisco CallManager Database

Use [Table 3](#) in conjunction with the “Using BAT to Update the Cisco CallManager Database” section on page 7-14.

**Table 3** Settings in BAT for Inserting CSV Files

Setting in BAT	Description
Field Name	From the drop-down list box, choose the CMC or FAC file that you want to insert.
Override the existing configuration	<p>This check box applies if you are updating code for existing settings.</p> <p>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.</p> <p><b>Note</b> The system inserts new codes that are included in the updated file, even if you do not check the Override the existing configuration check box.</p>



## Working with Gateways and Ports

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You can use BAT to add or delete Cisco VG200: Cisco IP Telephony Voice Gateways with ports and to add, update, and delete FXS ports on Cisco Catalyst 6000 24 Port FSX Analog Interface Modules. You must add the Cisco Catalyst 6000 to Cisco CallManager database before adding FXS ports. A provided Gateway Directory Number template allows you to specify directory number configuration for POTS port types on Cisco VG200 gateways or Cisco Catalyst 6000 24 Port FSX Analog Interface Modules.

To add gateway models other than Cisco VG200, you must use Cisco CallManager Administration. You can choose **Configure > Gateways > Catalyst 6000 (FXS)** and then click **Add Gateways** link in the upper, right corner. This action takes you to the Add Gateways window in Cisco CallManager Administration.



### Note

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Before using BAT to add Cisco VG200 gateways to the Cisco CallManager database, you must first configure the gateway by using the Cisco IOS software command line interface (CLI). For procedures and commands that are required to perform this configuration, refer to the configuration documentation that is supplied with the gateway.

---

# Cisco VG200 Gateways and Ports

BAT allows you to bulk-add or bulk-delete Cisco VG200 gateways and ports.

## Related Topics

- [Adding Cisco VG200 Gateways and Ports, page 8-2](#)
- [Creating a Gateway Directory Number Template, page 8-32](#)
- [Deleting Cisco VG200 Gateways, page 8-17](#)

## Adding Cisco VG200 Gateways and Ports

You can use BAT to add Cisco VG200 gateways and their ports to the Cisco CallManager database in batches, rather than add each gateway and port individually.

To add Cisco VG200 gateways to Cisco CallManager, you must perform the following steps:

1. Configure the gateway by using Cisco IOS software command line interface. See documentation that was supplied with your gateway for configuration instructions.
2. Create a Cisco VG200 gateway template to define common values for a set of gateways and ports.
3. Create a CSV file to define individual values for each gateway and port that you want to add.
4. Use BAT to insert gateways and ports in the Cisco CallManager database.

## Related Topics

- [Creating a Cisco VG200 Gateway Template, page 8-3](#)
- [Creating CSV Files for Cisco VG200 FXS or FXO Gateways, page 8-7](#)
- [Adding Cisco VG200 Gateways to Cisco CallManager, page 8-15](#)
- [Deleting Cisco VG200 Gateways, page 8-17](#)

## Creating a Cisco VG200 Gateway Template

The BAT Cisco VG200 template and comma separated values (CSV) file work together in bulk transactions. You can create a template that has the common settings for all the gateways that are to be added in that batch, such as the module in slot, type of endpoint identifier, and so on. BAT stores these templates, so they are reusable for other batches. You can configure a template with some basic attributes and use it for batches later.



### Note

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Before using BAT to add Cisco VG200 gateways to the Cisco CallManager database, you must first configure the gateway by using the Cisco IOS software command line interface (CLI). For procedures and commands that are required to perform this configuration, refer to the configuration documentation that is supplied with the gateway.

---

The CSV file stores the details for each individual port, such as directory number, description of port, and partition. See [Creating CSV Files for Cisco VG200 FXS or FXO Gateways, page 8-7](#), for more details about CSV files. For POTS port types, you can also specify a Gateway Directory Number template as a part of Cisco VG200 gateway template.

To create the Cisco VG200 template and then add endpoint identifiers, perform the following steps. If you already created the template but did not add endpoint identifiers, skip to [Updating the Endpoint Identifiers for Cisco VG200 Gateway, page 8-7](#).

### Procedure

---

- Step 1** Start BAT. (See [Starting BAT, page 1-3](#).)
- Step 2** Choose **Configure > Template > VG200 Gateway**.  
The VG200 Gateway Template Configuration window displays.
- Step 3** Enter values for the following fields:
  - **VG200 Gateway Template Name**—Enter a name for this BAT template, up to 50 alphanumeric characters, hyphens, underscores, spaces, and/or addition symbols. This name identifies the unique Cisco VG200 gateway template that is used only in BAT.

- Cisco CallManager Group—Choose the Cisco CallManager Group to which this gateway should belong.
- Step 4** In the Module in Slot 1 field in the Installed Voice Interface Cards area, choose the type of module that is installed in slot 1:
- 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 for either T1-CAS or T1-PRI, or E1-PRI.
  - None—No network modules are installed.
- Step 5** In the Product Specific Configuration area, enter values for the following fields:
- Global ISDN Switch Type—For this optional field, choose the ISDN switch type.
  - Switchback Timing—Choose the timing mechanism that is used to switch back to a primary Cisco CallManager.
  - Switchback Uptime-Delay—For this optional field, choose the delay, in minutes, that applies when delayed switchback is used. You must make an entry in this field if you chose “Delayed” in the Switchback Timing field.
  - Switchback Schedule—This optional field designates the schedule, in hours and minutes, that applies when scheduled switchback is used. You must make an entry in this field if you chose “Scheduled” in the Switchback Timing field.
- Step 6** Click **Insert**.
- The Status indicates that the insert completed, and a new field displays on the pane.
- Step 7** In the Sub-Unit field(s), choose the appropriate type for each sub-unit 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
- EM-4FX0-EM0—FXO voice interface card with four endpoints
- EM-4FX0-EM1—FXO voice interface card with four endpoints
- EM-8FXS-EM0—FXS voice interface card with eight endpoints
- EM-8FXS-EM1—FXS voice interface card with eight endpoints

**Step 8** Click **Update**.

The Status indicates that the update completed, and the endpoint identifiers display on the pane.

**Step 9** Click the link for the endpoint identifier. You can tell which endpoint identifiers need to be configured because a small question mark displays above the icon for the endpoint identifier.

The Cisco VG200 Endpoint Configuration window displays with settings for the endpoints.

**Step 10** Complete the following step for the trunk type that you are configuring:

- If you are configuring FXS trunks, enter the trunk settings. See [Field Descriptions for FXS Trunks on a Cisco VG200 Gateway, page 8-35](#), for more information.
- When you finish entering settings for FXS ports, skip to [Step 18](#).
- If you are configuring FXO trunks, enter the trunk settings. See [Field Descriptions for FXO Trunks on a Cisco VG200 Gateway, page 8-37](#), for more information.
- When you finish entering settings for FXO trunks, skip to [Step 18](#).
- If you are configuring T1 trunks, skip to [Step 11](#).
- If you are configuring E1 trunks, skip to [Step 13](#).

**Step 11** If you are configuring T1 trunks, choose either T1-CAS or T1-PRI signaling protocol.

**Step 12** Complete the following step for the protocol that you are configuring:

- If you are configuring T1-CAS protocol, enter the protocol settings. See [Field Descriptions for T1-CAS Trunks on a Cisco VG200 Gateway, page 8-39](#), for more information. When you finish entering settings, skip to [Step 13](#).

- If you are configuring T1-PRI protocol, enter the protocol settings. See [Field Descriptions for T1-PRI or E1-PRI Trunks on a Cisco VG200 Gateway, page 8-44](#), for more information.

When you finish entering settings for the T1-PRI protocol, skip to [Step 18](#).

- If you are configuring E1 trunks, enter the trunk settings. See [Field Descriptions for T1-PRI or E1-PRI Trunks on a Cisco VG200 Gateway, page 8-44](#), for more information.

When you finish entering settings for E1 trunks, skip to [Step 18](#).

**Step 13** To configure the ports for T1-CAS, click **Add a New Port**.

The Port Configuration popup window displays.

**Step 14** Choose values for the following fields:

- Port Number—Choose All Ports or individual ports numbered 1 through 24.
- End Port Number—Choose All Ports or individual ports numbered 1 through 24.
- Enter the port settings. See [Fields Descriptions for T1-CAS Ports, page 8-42](#), for more information.

**Step 15** Click **Insert and Close**.

The popup window closes, and the ports display in the left column on the VG200 Gateway Template Configuration window.

**Step 16** To configure more ports, repeat [Step 14](#) and [Step 15](#).

**Step 17** Click **Back to VG200 Template Configuration**.

**Step 18** In the column on the left, click the next endpoint in the list. You can tell which endpoints have not been configured because a small question mark symbol displays next to the endpoint identifier icon. When an endpoint identifier is configured, the icon displays along with the corresponding trunk type.

Repeat [Step 7](#) and [Step 8](#) for any additional endpoint identifiers.

---

### Related Topics

- [Creating CSV Files for Cisco VG200 FXS or FXO Gateways, page 8-7](#)
- [Adding Cisco VG200 Gateways to Cisco CallManager, page 8-15](#)
- [Deleting Cisco VG200 Gateways, page 8-17](#)

## Updating the Endpoint Identifiers for Cisco VG200 Gateway

If you already created the Cisco VG200 gateway template, but did not add the endpoint identifiers, you can use the following steps to complete the template.

### Procedure

- 
- Step 1** Start BAT. (See [Starting BAT, page 1-3.](#))
  - Step 2** Choose **Configure > Template > VG200 Gateway.**
  - Step 3** In the list of VG200 Gateway Templates, click the BAT template to which you want to add endpoint identifier attributes.
  - Step 4** In the Installed Voice Interface Cards area, choose the appropriate voice interface card for the Sub-Unit(s).
  - Step 5** Click **Update.**
  - Step 6** Click the endpoint identifier that you want to configure. See Step 10 in the [“Creating a Cisco VG200 Gateway Template” section on page 8-3](#) for complete instructions.
  - Step 7** Repeat [Step 6](#) until all endpoint identifiers are configured.
- 

## Creating CSV Files for Cisco VG200 FXS or FXO Gateways

BAT includes a Microsoft Excel file (BAT.xlt) that provides data file templates with macros and error checking and exports the values into a CSV file for use when Cisco VG200 gateways are added in BAT. Each record on the CSV file contains information about a Cisco VG200 gateway and its ports. You can open this file by double-clicking BAT.xlt on the publisher database server in the C:\CiscoWebs\BAT\ExcelTemplate folder. When prompted, be sure to enable macros, or the BAT.xlt file will not export the data.

After you have created the Cisco VG200 gateway template in BAT and the CSV file as described in this section, you can insert the Cisco VG200 gateways into the Cisco CallManager database. See [Adding Cisco VG200 Gateways to Cisco CallManager, page 8-15](#), for more information.

## Procedure

**Step 1** The BAT.xlt file resides on the publisher database server; however, you normally would not have Microsoft Excel running on the publisher database server. In that case, you must copy the file from the publisher database server to the local machine on which you plan to work.

Using a floppy disk or a mapped network drive, open the path C:\CiscoWebs\BAT\ExcelTemplate on the publisher database server and copy the file **BAT.xlt** to a local machine where Microsoft Excel is installed.

**Step 2** Double-click **BAT.xlt**.

**Step 3** When prompted, click **Enable Macros**.

**Step 4** Click the **VG200 FXS FXO** tab.

**Step 5** In each row, provide the following information:

- In the MGCP Domain Name field, enter a name that identifies the gateway, from 1 to 64 characters. 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. If you are using the host name as it is configured on the Cisco IOS gateway, the name that you enter here must match exactly. 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.
- In the Description field, enter a description for the gateway, up to 100 characters. Make the description something that will help you locate the gateway if you ever need to locate it in a list of gateways.
- In the Port 1 Description field, enter a description for port 1, up to 50 characters. Make the description something useful for identifying the port in a list of ports. This applies to the description field for port 2 through port 4.
- In the Port 1 Directory Number field, enter the directory number for this port, up to 24 numerals and special characters. This applies to the directory number field for port 2 through port 4.
- In the Port 1 Partition, enter the name of the route partition to which you want this port to belong, up to 50 characters. Make sure that the route partition is already configured in Cisco CallManager Administration. This applies to the partition field for port 2 through port 4.

- Step 6** Click **Export to BAT Format** to transfer the data from the BAT Excel spreadsheet into a CSV file.
- 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.
- Step 7** To be accessed by BAT, the CSV file must reside on the publisher database server; however, you normally would not have Microsoft Excel running on the publisher database server. This step assumes that you have saved the CSV file to the local machine (not the publisher database server). In that case, you must copy the file to publisher database server.
- Using a floppy disk or a mapped network drive, copy the CSV file from C:\XLSDataFiles to the C:\BATFiles\VG200Gateways folder on the server that is running the publisher database for Cisco CallManager.
- Step 8** For information on how to read the exported CSV file, click the link to **View Sample File** in the Insert Gateways window in BAT (**Configure > Gateways > VG200**).
- 

#### Related Topics

- [Adding Cisco VG200 Gateways to Cisco CallManager, page 8-15](#)
- [Deleting Cisco VG200 Gateways, page 8-17](#)

## Creating CSV Files for Cisco VG200 T1-CAS, T1-PRI, or E1-PRI Gateways

BAT includes a Microsoft Excel file (BAT.xlt) that provides data file templates with macros and error checking and exports the values into a CSV file for use when Cisco VG200 gateways are added in BAT. Each record on the CSV file contains information about a Cisco VG200 gateway and its ports. You can open this file by double-clicking BAT.xlt on the publisher database server in the C:\CiscoWebs\BAT\ExcelTemplate folder. When prompted, be sure to enable macros, or the data will not be exported.

After you have created the Cisco VG200 gateway template in BAT and the CSV file as described in this section, you can insert the Cisco VG200 gateways into the Cisco CallManager database. See [Adding Cisco VG200 Gateways to Cisco CallManager, page 8-15](#), for more information.

### Procedure

---

**Step 1** The BAT.xlt file resides on the publisher database server; however, you normally would not have Microsoft Excel running on the publisher database server. In that case, you must copy the file from the publisher database server to the local machine on which you plan to work.

Using a floppy disk or a mapped network drive, open the path C:\CiscoWebs\BAT\ExcelTemplate on the publisher database server and copy the file **BAT.xlt** to a local machine where Microsoft Excel is installed.

**Step 2** Double-click **BAT.xlt**.

**Step 3** When prompted, click **Enable Macros**.

**Step 4** Click the **VG200 T1-Pri T1-Cas E1-Pri** tab.

**Step 5** Scroll to the end of the fields 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 6** In each row, provide the following information:

- In the MGCP Domain Name field, enter a name that identifies the gateway, from 1 to 64 characters. 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. If you are using the host name as it is configured on the Cisco IOS gateway, the name that you enter here must match exactly. 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.
- In the MGCP Description field, enter a description for the gateway, up to 100 characters. Make the description something that will help you locate the gateway if you ever need to locate it in a list of gateways.

- In the Port Identifier 1 field, enter the numerical representation, up to three numerals, for the port identifier. Make the first digit either 0 or 1 (signifying either endpoint identifier 0 or endpoint identifier 1), followed by the port number, 01 to 24. Acceptable values range from 001 through 024 or 101 through 124.



**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 file, you can specify none, some, or all ports that were configured in the template, but do not configure any ports in the CSV file that were not also configured in the template. If so, 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. If in the same example, you configured ports 5 and 6 in the CSV when they are not configured in the template, an error will result when you try to insert the template and CSV file in BAT.

**Step 7** Click **Export to BAT Format** to transfer the data from the BAT Excel spreadsheet into a CSV file.

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.

**Step 8** To be accessed by BAT, the CSV file must reside on the publisher database server; however, you normally would not have Microsoft Excel running on the publisher database server. This step assumes that you have saved the CSV file to the local machine (not the publisher database server). In that case, you must copy the file to publisher database server.

Using a floppy disk or a mapped network drive, copy the CSV file from **C:\XLSDataFiles** to the **C:\BATFiles\VG200Gateways** folder on the server that is running the publisher database for Cisco CallManager.

- Step 9** For information on how to read the exported CSV file, click the link to **View Sample File** in the Insert Gateways window in BAT (**Configure > Gateways > VG200**).
- 

## Creating a Text-Based CSV Text File

If you do not use the BAT.xlt file for data input when you add Cisco VG200 gateways, you must create the CSV file by using lines of ASCII text with values separated by commas. You do not need to follow the instructions in this section if you created the CSV file by using the BAT.xlt file.



### Note

If you use comma or double quotes as part of string in one of the fields, the entire text string must be enclosed with double quotes.

---

The sections, [FXO or FXS Trunks, page 8-13](#), and [T1-CAS, T1-PRI, or E1-PRI Trunks, page 8-14](#), provide descriptions and examples.



### Tips

Use the **BAT.xlt** file to input data because data validation is performed on that file.

---

The comma separated values (CSV) file provides a common textual way of providing tabular information. You can create a data file using any file format, such as Microsoft Notepad, Microsoft Word, and so on. Save the CSV file to C:\BATFiles\VG200Gateways\ on the server that is running the publisher database for Cisco CallManager.

Use this procedure to create a CSV text file for Cisco VG200 gateways.

### 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 CallManager. See [Creating CSV Files for Cisco VG200 FXS or FXO Gateways, page 8-7](#), or [Creating CSV Files for Cisco VG200 T1-CAS, T1-PRI, or E1-PRI Gateways, page 8-9](#), 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** Save or copy the file to C:\BATFiles\VG200Gateways on the server that is running the publisher database for Cisco CallManager.




---

**Note** You cannot use Cisco VG200 gateway CSV files that were saved anywhere except C:\BATFiles\VG200Gateways on the server that is running the publisher database for Cisco CallManager for BAT inserts.

---

## FXO or FXS Trunks

The following example format shows the required field length and string types followed by an example of a CSV file for a Cisco VG200 gateway.

**MGCP Domain Name**(Mandatory, 1 to 64 characters),**Description**(Optional, up to 100 characters),**Port 1 Description**(Optional, up to 50 characters),**Port 1 Directory Number**(Optional, up to 24 numerals and special characters),**Port 1 Partition**(Optional, up to 50 characters),**Port 2 Description**(Optional, up to 50 characters),**Port 2 Directory Number**(Optional, up to 24 numerals and special characters),**Port 2 Partition**(Optional, up to 50 characters),**Port 3 Description**(Optional, up to 50 characters),**Port 3 Directory Number**(Optional, up to 24 numerals and special characters),**Port 3 Partition**(Optional, up to 50 characters),**Port 4 Description**(Optional, up to 50 characters),**Port 4 Directory Number**(Optional, up to 24 numerals and special characters),**Port 4 Partition**(Optional, up to 50 characters)

### Example

```
MGCPTest, VG200 Lab Gateway, Port 1, 97255572001, Partition1,
Port 2, 97255572002, Partition2, Port 3, 97255572003, Partition3,
Port 4, 97255572004, Partition4
```

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.

Refer to the following examples and sample CSV records when creating CSV files.

### Examples

If the Description for a Cisco VG200 gateway is blank

```
MGCPTest,,Port 1,97255572001,Partition1,Port 2,97255572002,Partition2,
Port 3,97255572003,Partition3,Port 4,97255572004,Partition4
```

If the Cisco VG200 gateway template has only Port 1 and Port 2 as POTS type

```
MGCPTest,VG200 Lab Gateway,Port 1,97255572001,Partition1,
Port 2,97255572002,Partition2,,,,,
```

## T1-CAS, T1-PRI, or E1-PRI Trunks

The following example format shows the required field length and string types followed by an example of a CSV file for a Cisco VG200 gateway:

**MGCP Domain Name**(Mandatory, 1 to 64 characters),**MGCP Description**(Optional, up to 100 characters),**Port Identifier 1**(Optional, up to 3 numerals)

### Example

```
MGCPTest,VG200 Lab Gateway,001
```

You must include comma separators even if a field is blank.

Refer to the following examples and sample CSV records when creating CSV files.

### Examples

If the Description for a Cisco VG200 gateway is blank

```
MGCPTest,,001
```

If you provide only the mandatory value

```
MGCPTest ,
```

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

```
MGCPTest ,VG200 Lab Gateway,001,002,003
```

## Adding Cisco VG200 Gateways to Cisco CallManager

Use this procedure to add several Cisco VG200 gateways to Cisco CallManager.

### Before You Begin

You must create a Cisco VG200 gateway template and CSV file before you add trunks to Cisco CallManager. If you want to insert directory number details, you need to configure the Gateway Directory Number template. See [Creating a Gateway Directory Number Template, page 8-32](#), for more information.

### Procedure

- 
- Step 1** Start BAT. (See [Starting BAT, page 1-3](#).)
  - Step 2** Choose **Configure > Gateways > VG200**.  
The Insert Gateways window displays.
  - Step 3** In the File Name field, choose the name of the CSV file that contains the Cisco VG200 gateways to be added.
  - Step 4** In the VG200 Gateway Template Name field, choose the name of the VG200 gateway template that you created for this type of bulk transaction.
  - Step 5** Click **Insert**.  
A message displays that indicates the number of records that can be inserted per minute. Use this information to evaluate whether Cisco CallManager performance will be degraded if you perform the bulk transaction.
  - Step 6** Click **OK** to start the transaction or **Cancel** to cancel it.

**Step 7** If you clicked **OK**, a Transaction Status window displays. When the transaction completes, the transaction window disappears, and the Insert Gateways window displays the Status of the insert.

If the Status of the insert is anything other than Insert Completed, view the log file for transaction details. If the Status is Insert Completed, the transaction was successful, and you do not need to view the log file unless you are interested in statistical information.

**Step 8** Click **View Latest Log File**. BAT generates a log file that indicates the number of records that were added and the number of records that failed, including an error code.



---

**Note** After the trunks are added to Cisco CallManager, BAT generates a log file that indicates 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 11, “Troubleshooting BAT and TAPS.”](#)

---

#### Related Topics

- [Creating a Cisco VG200 Gateway Template, page 8-3](#)
- [Deleting Cisco VG200 Gateways, page 8-17](#)
- [Creating a Gateway Directory Number Template, page 8-32](#)

## Copying a Cisco VG200 BAT Template

You can copy the properties of a Cisco VG200 gateway template into a new Cisco VG200 gateway template. This action proves useful when you have similar bulk-add transactions and only a few details need to be changed.

Use this procedure to copy an existing BAT Cisco VG200 gateway template.

#### Procedure

---

- Step 1** Start BAT. (See [Starting BAT, page 1-3.](#))
- Step 2** Choose **Configure >Template > VG200 Gateway**.

The VG200 Gateway Template Configuration window displays.

- Step 3** In the VG200 Gateway Templates column on the left, click the template that you want to copy.

The chosen template details display in the VG200 Gateway Template Configuration window.

- Step 4** Verify that this is the template that you want to copy and click **Copy**.

BAT creates a copy of the template. The copy duplicates all the values that were specified in the original template.

- Step 5** In the VG200 Gateway Template Name field, enter a new template name.

- Step 6** Update the fields as needed for the new template. See [Field Descriptions, page 8-35](#), for more information.

- Step 7** Click **Insert** to save the copied template.

The template that was added to BAT displays in the VG200 Gateway Templates column on the left.

---

#### Related Topic

- [Creating a Cisco VG200 Gateway Template, page 8-3](#)

## Deleting Cisco VG200 Gateways

You can delete all Cisco VG200 gateway records from the Cisco CallManager database by using the following procedure.



#### Caution

If you do not want to delete **all** Cisco VG200 gateways from the Cisco CallManager database, be sure to specify a query before clicking the Delete button.

---

Use this procedure to delete all Cisco VG200 gateways.

#### Procedure

---

- Step 1** Start BAT. (See [Starting BAT, page 1-3](#).)

- Step 2** Choose **Configure > Gateways > VG200**.
- Step 3** Click the **Delete VG200 Gateways** link.  
The Delete Gateways window displays.
- Step 4** From the drop-down list box, choose the field that you want to search, such as MGCP Domain Name or Description.
- Step 5** From the drop-down list box, choose the search criteria, such as begins with, contains, is empty, and so on.
- Step 6** In the search field, enter the value that you want to locate, such as the MGCP domain name or description.
- Step 7** Click **Add to Query** to add the defined filter to the query.
- Step 8** Click **AND** or **OR** to add multiple filters to the query.
- Step 9** Click View Query Results to verify the records that are going to be deleted.
- Step 10** Click **Delete** to delete the records.



---

**Caution** If you have not specified a query (as described in [Step 4](#) through [Step 7](#)), clicking the **Delete** button deletes all Cisco VG200 gateways.

---

After the Cisco VG200 gateways are deleted from Cisco CallManager, BAT generates a log file that indicates the number of records that were deleted and the number of records that failed, including an error code. For more information on log files, see [Chapter 11, “Troubleshooting BAT and TAPS.”](#)

---

#### Related Topics

- [Creating a Cisco VG200 Gateway Template, page 8-3](#)
- [Creating CSV Files for Cisco VG200 FXS or FXO Gateways, page 8-7](#)
- [Updating the Endpoint Identifiers for Cisco VG200 Gateway, page 8-7](#)

# Cisco Catalyst 6000 24 Port FXS Analog Interface Module Ports

BAT allows you to bulk-add, bulk-update, and bulk-delete ports on Cisco Catalyst 6000 24 Port FXS analog interface module gateways.

**Note**

---

You can add ports for up to 500 Cisco Catalyst 6000 analog interface modules in any one transaction. Do not attempt to add ports for more than 500 modules in a given transaction.

---

**Related Topics**

- [Adding or Updating Ports to Cisco Catalyst 6000 24 Port FXS Analog Interface Module Gateways, page 8-19](#)
- [Deleting All Ports for Cisco Catalyst 6000 24 Port FXS Analog Interface Module Gateway, page 8-30](#)
- [Creating a Gateway Directory Number Template, page 8-32](#)

## Adding or Updating Ports to Cisco Catalyst 6000 24 Port FXS Analog Interface Module Gateways

You can use BAT to add or update FXS ports of Cisco Catalyst 6000 analog interface modules to the Cisco CallManager database in batches, rather than add each port individually. You can even add or update ports for more than one gateway in one batch.

**Note**

---

BAT does not add Cisco Catalyst 6000 24 Port FXS analog interface module gateways. You need to add gateways by using Cisco CallManager Administration and then use BAT to bulk-add or bulk-update ports for these gateways.

---

Use this procedure to add or update ports to Cisco CallManager:

- 
- Step 1** Create a Catalyst 6000 (FXS) Ports BAT template to define common values for a set of ports.

- Step 2** (Optional) Create a Gateway Directory Number BAT template. Although this step is optional for adding ports, you must perform it for adding directory number details to ports.
- Step 3** Create a comma separated values (CSV) file to define individual values for each port that you want to add.
- 

#### Related Topics

- [Creating a Cisco Catalyst 6000 \(FXS\) Ports Template, page 8-20](#)
- [Creating CSV Files for Cisco Catalyst 6000 \(FXS\) Ports, page 8-21](#)
- [Adding Cisco Catalyst 6000 \(FXS\) Ports to Cisco CallManager, page 8-26](#)
- [Updating Cisco Catalyst 6000 24 Port FXS Analog Interface Module Ports in Cisco CallManager, page 8-29](#)
- [Deleting All Ports for Cisco Catalyst 6000 24 Port FXS Analog Interface Module Gateway, page 8-30](#)

## Creating a Cisco Catalyst 6000 (FXS) Ports Template

The port template and comma separated values (CSV) files work together in bulk transactions. You can create a template that has the common analog details for all the ports in that batch, such as the port direction, port level, and so on. The system stores these templates, so they are reusable for other batches.

The CSV file stores the details for each individual port, such as its gateway MAC address, port number (which you add in this section), directory number for this port, and its partition. See [Creating CSV Files for Cisco Catalyst 6000 \(FXS\) Ports, page 8-21](#), for more details about CSV files.

Use this procedure to create a Cisco Catalyst 6000 FXS ports template. You must complete all fields unless otherwise noted.

#### Procedure

---

- Step 1** Start BAT. (See [Starting BAT, page 1-3](#).)
- Step 2** Choose **Configure > Template > Catalyst 6000 (FXS) Ports**.

The Catalyst 6000 (FXS) Ports Template Configuration window displays.

Enter the settings for the fields. See [Field Descriptions for FXS Ports on a Cisco Catalyst 6000 24 Port Analog Interface Module](#), page 8-57, for more information.

**Step 3** Click **Insert**.

The status shows that the insert completed.

**Step 4** Create a CSV file. Go to [Creating CSV Files for Cisco Catalyst 6000 \(FXS\) Ports](#), page 8-21, for more information.

---

### Related Topics

- [Creating CSV Files for Cisco Catalyst 6000 \(FXS\) Ports](#), page 8-21
- [Adding Cisco Catalyst 6000 \(FXS\) Ports to Cisco CallManager](#), page 8-26
- [Updating Cisco Catalyst 6000 24 Port FXS Analog Interface Module Ports in Cisco CallManager](#), page 8-29
- [Deleting All Ports for Cisco Catalyst 6000 24 Port FXS Analog Interface Module Gateway](#), page 8-30
- [Creating a Gateway Directory Number Template](#), page 8-32

## Creating CSV Files for Cisco Catalyst 6000 (FXS) Ports

BAT includes a Microsoft Excel file (BAT.xlt) that provides data file templates with macros and error checking and exports the values into CSV files for Cisco Catalyst 6000 (FXS) ports. You can open this file by double-clicking BAT.xlt on the publisher database server in the C:\CiscoWebs\BAT\ExcelTemplate folder. When you are prompted, be sure to enable macros. See [Using the Cisco Catalyst 6000 \(FXS\) Ports Tab in BAT.xlt](#), page 8-23, to learn how to use this spreadsheet.

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.

The following example format shows the required field length and string types followed by an example of a CSV file for Catalyst 6000 (FXS) ports.

**Note**


---

If values are set for Partition in the CSV file for some record, the value in the CSV file for that record overrides any value that may appear in the BAT template.

---

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.

**MAC Address**(Mandatory, 12 characters),**Port Number**(Mandatory, 2 numerals),**Directory Number**(Optional, up to 24 numerals and special characters),**Partition**(Optional, up to 50 characters)

**Example**

```
1231123245AB,23,9725557250,Partition1
```

You must include comma separators even if a field is blank. Do not specify a partition unless you have also specified a directory number.

If you specify a directory number in the CSV file, you must also create a Gateway Directory Number template. See [Creating a Gateway Directory Number Template, page 8-32](#), for more information.

See the following examples and sample CSV records when creating CSV files.

**Examples**

If the directory number for a port is blank

```
1231123245AB,23,,
```

If you want to add only the mandatory values

```
1231123245AB,23,,
```

**Note**


---

For the MAC address, enter MAC address values for an existing Cisco Catalyst 6000 (FXS) gateway. This MAC address comprises the last 12 characters in the Gateway Name. BAT does not add Cisco Catalyst 6000 (FXS) gateways. It simply adds or updates ports to an existing gateway.

---

**Related Topics**

- [Adding Cisco Catalyst 6000 \(FXS\) Ports to Cisco CallManager, page 8-26](#)

- [Updating Cisco Catalyst 6000 24 Port FXS Analog Interface Module Ports in Cisco CallManager, page 8-29](#)

## Using the Cisco Catalyst 6000 (FXS) Ports Tab in BAT.xlt

Use this procedure to add ports to existing Cisco Catalyst 6000 24 Port FXS analog interface modules.



### Note

---

You can add ports for up to 500 Cisco Catalyst 6000 analog interface modules in any one transaction. Do not attempt to add ports for more than 500 modules in a given transaction.

---

### Procedure

---

**Step 1** The BAT.xlt file resides on the publisher database server; however, you normally would not have Microsoft Excel running on the publisher database server. In that case, you must copy the file from the publisher database server to the local machine on which you plan to work.

Using a floppy disk or a mapped network drive, open the path C:\CiscoWebs\BAT\ExcelTemplate on the publisher database server and copy the file **BAT.xlt** to a local machine where Microsoft Excel is installed.

**Step 2** Double-click **BAT.xlt**.

**Step 3** When prompted, click **Enable Macros**.

**Step 4** Click the **Catalyst 6000 (FXS) Ports** tab.

**Step 5** Complete all mandatory fields and any relevant, optional fields. Each column heading specifies the length of the field.

- In the MAC Address field, enter the 12-character MAC address.
- In the Port Number field, enter the port number that you want to add to the gateway.
- (Optional) In the Directory Number field, enter a directory number for this port, up to 24 numerals and special characters. You must enter a directory number if you have specified a partition.

- (Optional) In the Partition field, enter the route partition to which you want this port to belong, up to 50 characters. Do not specify a partition unless you have also specified a directory number.

**Caution**


---

The system treats blank rows in the spreadsheet as End of File and discards subsequent records.

---

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

The system saves the file to C:\XLSDataFiles\Catalyst6000\_24PortsFXSGateway (or to your choice of another existing folder) as

Catalyst6000\_24PortsFXSGateway#timestamp.txt

where “timestamp” represents the precise date and time that the file was created.

- Step 7** To be accessed by BAT, the CSV file must reside on the publisher database server; however, you normally would not have Microsoft Excel running on the publisher database server. So, this step assumes that you have saved the CSV file to the local machine (not the publisher database server). In that case, you must copy the file to publisher database server.

Using a floppy disk or a mapped network drive, copy the CSV file from C:\XLSDataFiles\Catalyst6000\_24PortsFXSGateway to the C:\BATFiles\Catalyst6000\_24PortsFXSGateway folder on the server that is running the publisher database for Cisco CallManager.

- Step 8** For information on how to read the exported CSV file, click the link to **View Sample File** in the Configure Ports window in BAT (**Configure > Gateways > Catalyst 6000 (FXS)**).

**Tip**


---

If you specified directory numbers in the CSV file, you must create a Gateway Directory Number template prior to attempting to insert the Gateway Template and this CSV file in BAT. See [“Creating a Gateway Directory Number Template” section on page 8-32](#), for more information.

---

## Creating a Text-Based CSV Text File

If you do not use the BAT.xlt file for data input when you add ports to Cisco Catalyst 6000 FXS analog interface modules, you must create the CSV file by using lines of ASCII text with values separated by commas. You do not need to follow the instructions in this section if you created the CSV file by using the BAT.xlt file.

**Tip**

---

Use the **BAT.xlt** file to input data because data validation is performed on that file.

---

The comma separated values (CSV) file provides a common textual way of providing tabular information. You can create a data file by using any file format, such as Microsoft Notepad, Microsoft Word, and so on. Save the CSV file to C:\BATFiles\Catalyst6000\_24PortsFXSGateway on the server that is running the Publisher database for Cisco CallManager.

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 CallManager. See [Creating CSV Files for Cisco Catalyst 6000 \(FXS\) Ports, page 8-21](#), 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** Save or copy the file to C:\BATFiles\Catalyst6000\_24PortsFXSGateway on the server that is running the publisher database for Cisco CallManager.

**Note**

You cannot use CSV files for FXS ports on Cisco Catalyst 6000 modules that are saved anywhere except C:\BATFiles\Catalyst6000\_24PortsFXSGateway on the server that is running the publisher database for Cisco CallManager for BAT inserts.

## Adding Cisco Catalyst 6000 (FXS) Ports to Cisco CallManager

Follow this procedure to add several ports on Cisco Catalyst 6000 24 Port FXS analog interface modules to Cisco CallManager.

**Note**

BAT can add ports for up to 500 Cisco Catalyst 6000 analog interface modules in any one transaction. Do not attempt to add ports for more than 500 modules in a given transaction.

### Before You Begin

You must create a Cisco Catalyst 6000 Ports template and CSV file before you add ports to Cisco CallManager. If you want to add or update Directory Number details, you need to create a Gateway Directory Number template. See [Creating a Gateway Directory Number Template, page 8-32](#), for more information.

**Note**

You must create a Gateway Directory Number template if you specified directory numbers in the CSV file.

### Procedure

- Step 1** Start BAT. (See [Starting BAT, page 1-3](#).)
- Step 2** Choose **Configure > Gateways > Catalyst 6000 (FXS)**.  
The Configure Ports window displays.
- Step 3** In the File Name field, choose the CSV file for Cisco Catalyst 6000 ports that you created for this type of bulk transaction.

- Step 4** In the Catalyst 6000 (FXS) Ports Template field, choose the BAT template that you created for adding Cisco Catalyst 6000 FXS ports.
- Step 5** Treat this field as optional if you are adding ports but treat the field as mandatory if you are adding any records that have directory number details on the CSV file.
- In the Gateway Directory Number Template Name, choose the BAT template that you created for adding directory numbers to Cisco Catalyst 6000 FXS ports.



---

**Note** If you have not specified directory number details on the CSV file, BAT inserts only analog details for that port, but no number will be configured for the port.

---

- Step 6** Click **Insert**.

A message displays to indicate the time that it will take to perform the transaction. Performance on the gateways will be impacted, including the termination of all calls on the affected gateways.

After the ports are added to Cisco CallManager, BAT generates a log file that indicates the number of records that were added and the number of records that failed, including an error code. You can click **View Latest Log File** link to open the log file for this transaction. BAT adds ports only for existing Cisco Catalyst 6000 (FXS) gateways. If a port with this specified port number and gateway already exists, BAT rejects that record. See [Chapter 11, “Troubleshooting BAT and TAPS,”](#) for more information about errors.

---

### Related Topics

- [Creating CSV Files for Cisco Catalyst 6000 \(FXS\) Ports, page 8-21](#)
- [Updating Cisco Catalyst 6000 24 Port FXS Analog Interface Module Ports in Cisco CallManager, page 8-29](#)
- [Creating a Gateway Directory Number Template, page 8-32](#)
- [Copying a Cisco Catalyst 6000 FXS Ports BAT Template, page 8-28](#)
- [Deleting All Ports for Cisco Catalyst 6000 24 Port FXS Analog Interface Module Gateway, page 8-30](#)

## Copying a Cisco Catalyst 6000 FXS Ports BAT Template

You can copy the properties of a Cisco Catalyst 6000 FXS ports template into a new Cisco Catalyst 6000 FXS ports template. This function proves useful when you have similar bulk-add transactions, and only a few details need to change. Use this procedure to insert the Catalyst 6000FXS port.

### Procedure

---

- Step 1** Start BAT. (See [Starting BAT, page 1-3](#).)
- Step 2** Choose **Configure >Template > Catalyst 6000 (FXS) Ports**.  
The Catalyst 6000 (FXS) Ports Template Configuration window displays.
- Step 3** In the Catalyst 6000 (FXS) Ports Templates column on the left, click the template that you want to copy.  
The details for the selected template display in the Catalyst 6000 (FXS) Ports Template Configuration window.
- Step 4** Verify that this is the template that you want to copy and click **Copy**.  
BAT creates a copy of the template. The copy duplicates all the values that were specified in the original template.
- Step 5** In the Catalyst 6000 (FXS) Ports Template Name field, enter a new template name.
- Step 6** Update the fields as needed for the new template. See [Field Descriptions for FXS Ports on a Cisco Catalyst 6000 24 Port Analog Interface Module, page 8-57](#), for more information.
- Step 7** Click **Insert**.  
The template that is added to BAT displays in the Catalyst 6000 (FXS) Ports Templates column on the left.
- 

### Related Topics

- [Creating CSV Files for Cisco Catalyst 6000 \(FXS\) Ports, page 8-21](#)
- [Creating a Gateway Directory Number Template, page 8-32](#)

# Updating Cisco Catalyst 6000 24 Port FXS Analog Interface Module Ports in Cisco CallManager

Use this procedure to update ports for Cisco Catalyst 6000 24 Port FXS analog interface modules to Cisco CallManager.

## Before You Begin

You must create a Cisco Catalyst 6000 (FXS) Ports BAT template and CSV file before you modify ports in Cisco CallManager. If you want to modify Directory Number details, you need to configure a Gateway Directory Number BAT template. See [Creating a Gateway Directory Number Template, page 8-32](#), for more information.

## Procedure

- 
- Step 1** Start BAT. (See [Starting BAT, page 1-3](#).)
  - Step 2** Choose **Configure > Gateways > Catalyst 6000 (FXS)**.  
The Configure Ports window displays.
  - Step 3** In the File Name field, choose the CSV file for Cisco Catalyst 6000 ports that you created for this type of bulk transaction.
  - Step 4** In the Catalyst 6000 (FXS) Ports Template field, choose the BAT template that you created for updating Cisco Catalyst 6000 FXS ports.
  - Step 5** (Although this field is optional if you are updating ports, you must fill it in if you are updating any records that have directory number details on the CSV file.) In the Gateway Directory Number Template Name, choose the BAT template that you created for updating directory numbers to Cisco Catalyst 6000 FXS ports.



---

**Note** If you have not specified directory number details on the CSV file, BAT inserts only analog details for that port, but no directory number will be configured for the port.

---

- Step 6** Click **Update**.  
A message displays to indicate the time that it will take to perform the transaction. Be aware that performance on the gateways will be impacted, including dropped calls if any are active on the affected gateways.

After the ports are updated in Cisco CallManager, BAT generates a log file that indicates the number of records that were updated and the number of records that failed, including an error code.



---

**Note** If you click Insert instead of Update, the ports that you want to update do not get updated.

---

- Step 7** The results of the Update display. You can click **View Latest Log File** link to open the log file for this transaction. BAT updates ports only for existing Cisco Catalyst 6000 (FXS) gateways. If a port with this specified port number and gateway already exists, BAT rejects that record. See [Chapter 11, “Troubleshooting BAT and TAPS,”](#) for more information about errors.
- 

#### Related Topics

- [Creating CSV Files for Cisco Catalyst 6000 \(FXS\) Ports, page 8-21](#)
- [Adding Cisco Catalyst 6000 \(FXS\) Ports to Cisco CallManager, page 8-26](#)
- [Creating a Gateway Directory Number Template, page 8-32](#)

## Deleting All Ports for Cisco Catalyst 6000 24 Port FXS Analog Interface Module Gateway

Use this procedure to delete all ports of a Cisco Catalyst 6000 24 Port FXS analog interface module.

#### Procedure

---

- Step 1** Start BAT. (See [Starting BAT, page 1-3.](#))
- Step 2** Choose **Configure > Gateways > Catalyst 6000 (FXS)**.  
The Configure Ports window displays.
- Step 3** Click the **Delete All Ports** link in the upper, right side of the window.  
The Delete Ports window displays.

- Step 4** Choose the name of the Cisco Catalyst 6000 Gateway(s) for which you want to delete all ports and click the arrow buttons to move the gateways between the **Available Gateways** and **Selected Gateways** lists. When you click Delete All Ports, BAT deletes all the ports for only gateways shown in the Selected Gateways list box.
- Step 5** Click **Delete All Ports**.
- A message displays that indicates the time that it will take to perform the transaction.
- BAT generates a log file that indicates the number of gateways for which the Delete All operation was successful and the number of gateways for which it failed, including an error code.
- Step 6** The results of the Delete operation display. You can click **View Latest Log File** link to open the log file for this transaction. See [Chapter 11, “Troubleshooting BAT and TAPS,”](#) for more information about errors.
- 

#### Related Topics

- [Adding Cisco Catalyst 6000 \(FXS\) Ports to Cisco CallManager, page 8-26](#)
- [Creating CSV Files for Cisco Catalyst 6000 \(FXS\) Ports, page 8-21](#)
- [Updating Cisco Catalyst 6000 24 Port FXS Analog Interface Module Ports in Cisco CallManager, page 8-29](#)

## Gateway Directory Number

You use the Gateway Directory Number template when directory numbers are added to FXS ports on Cisco VG200 gateways or Cisco Catalyst 6000 analog interface modules. If you specified directory numbers in the CSV file for either of these devices, you must create a Gateway Directory Number template to use when you insert the gateways or ports in BAT.

## Creating a Gateway Directory Number Template

You need to create a Gateway Directory Number template if you want to assign directory numbers to POTS ports. If you are working with POTS ports on Cisco VG200 gateways, or with Cisco Catalyst 6000 (FXS) 24 Port analog interface modules, and you specified directory numbers in the CSV file for either of these devices, you must create a Gateway Directory Number template.

The BAT templates and comma separated values (CSV) files work together in bulk transactions. You can create a template that has common directory number details such as partition, calling search space, and so on, for POTS port types. The system stores these templates, so they are reusable for other batches.

The CSV file stores the details for each individual port, such as the gateway MAC address, Port Number (which you are adding in this section), Directory Number for this Port, and its Partition. See [Creating CSV Files for Cisco VG200 FXS or FXO Gateways, page 8-7](#), or [Creating CSV Files for Cisco Catalyst 6000 \(FXS\) Ports, page 8-21](#), for more details about CSV files.

Use this procedure to create a Gateway Directory Number template. Treat all fields as optional unless otherwise noted.

### Procedure

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- Step 1** Start BAT. (See [Starting BAT, page 1-3](#).)
  - Step 2** Choose **Configure > Template > Gateway Directory Number**.  
The Gateway Directory Number Template Configuration window displays.
  - Step 3** In the Gateway Directory Number Template Name field, enter a unique name for this template, up to 50 alphanumeric characters.
  - Step 4** Enter settings for the fields. See [Field Descriptions for Gateway Directory Number Template, page 8-59](#), for more information.
  - Step 5** Click **Insert**.  
The new template is added.
  - Step 6** Create a CSV file. See [Creating CSV Files for Cisco VG200 FXS or FXO Gateways, page 8-7](#), or [Creating CSV Files for Cisco Catalyst 6000 \(FXS\) Ports, page 8-21](#), for more information.
-

### Related Topics

- [Creating a Cisco VG200 Gateway Template, page 8-3](#)
- [Creating a Cisco Catalyst 6000 \(FXS\) Ports Template, page 8-20](#)
- [Creating CSV Files for Cisco VG200 FXS or FXO Gateways, page 8-7](#)
- [Creating CSV Files for Cisco Catalyst 6000 \(FXS\) Ports, page 8-21](#)
- [Adding Cisco VG200 Gateways to Cisco CallManager, page 8-15](#)
- [Adding Cisco Catalyst 6000 \(FXS\) Ports to Cisco CallManager, page 8-26](#)
- [Copying a Gateway Directory Number BAT Template, page 8-33](#)

## Copying a Gateway Directory Number BAT Template

You can copy the properties of a Gateway Directory Number template into a new Gateway Directory Number template. This function proves useful when you have similar bulk-add transactions, and you need to change only a few details.

Use this procedure to copy an existing BAT Gateway Directory Number template.

### Procedure

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- Step 1** Start BAT. (See [Starting BAT, page 1-3](#).)
- Step 2** Choose **Configure > Template > Gateway Directory Number**.  
The Gateway Directory Number Template Configuration window displays.
- Step 3** In the Gateway Directory Number Templates column on the left, click the template that you want to copy.  
The chosen template details displays in the Gateway Directory Number Template Configuration window.
- Step 4** Verify that this is the template that you want to copy and click **Copy**.  
BAT creates a copy of the template. The copy duplicates all the values that were specified in the original template.
- Step 5** In the Gateway Directory Number Template Name field, enter a new template name.
- Step 6** Update the fields as needed for the new template. See [Field Descriptions for Gateway Directory Number Template, page 8-59](#), for more information.

**Step 7** Click **Insert**.

The template that was added to BAT displays in the Gateway Directory Number Templates column on the left.

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#### Related Topic

- [Creating a Gateway Directory Number Template, page 8-32](#)

## Deleting Templates

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

#### Procedure

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- Step 1** Start BAT. (See [Starting BAT, page 1-3](#).)
- Step 2** Choose **Configure > Template > *the type of template you want to delete, such as Phone or VG200 Gateway***.
- The Template Configuration window displays.
- Step 3** In the Templates column on the left, click the template that you want to delete. The chosen template details display in the Template Configuration window.
- Step 4** 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 5** To delete the template, click **OK** or click **Cancel** to cancel the delete operation without deleting the template. BAT deletes the template, and you can no longer use it in bulk transactions.
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# Field Descriptions

This section provides descriptions of the fields that are used in the various BAT templates.

## Related Topics

- [Field Descriptions for FXS Trunks on a Cisco VG200 Gateway, page 8-35](#)
- [Field Descriptions for FXO Trunks on a Cisco VG200 Gateway, page 8-37](#)
- [Field Descriptions for T1-CAS Trunks on a Cisco VG200 Gateway, page 8-39](#)
- [Fields Descriptions for T1-CAS Ports, page 8-42](#)
- [Field Descriptions for T1-PRI or E1-PRI Trunks on a Cisco VG200 Gateway, page 8-44](#)
- [Field Descriptions for FXS Ports on a Cisco Catalyst 6000 24 Port Analog Interface Module, page 8-57](#)

## Field Descriptions for FXS Trunks on a Cisco VG200 Gateway

Use the following field descriptions when you are adding or updating values for FXS trunks on a Cisco VG200 gateway.

Unless otherwise noted, assume that fields are mandatory.

**Table 8-1** *Field Descriptions for FXS Trunks on Cisco VG200 Gateways*

Field	Description
<b>Gateway Information</b>	
Device Pool	<p>This field shows the values that were configured in Cisco CallManager Administration. Choose the device pool to which this group of gateways/ports should belong.</p> <p>A device pool defines sets of common characteristics for devices, such as region, date/time group, Cisco CallManager group, and calling search space for auto-registration.</p>

**Table 8-1** Field Descriptions for FXS Trunks on Cisco VG200 Gateways (continued)

Field	Description
Calling Search Space	<p>For this optional field, choose the calling search space to which this group of gateways/ports should belong.</p> <p>A calling search space specifies the collection of route partitions that are searched to determine how a dialed number should be routed.</p>
Media Resource Group List	<p>For this optional field, choose the media resource group list (MRGL) to which this group of gateways/ports should belong.</p> <p>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 defined in the MRGL.</p>
Network Hold Audio Source	<p>For this optional field, choose the music on hold audio source that is to be played when the system places a call on hold (such as when user transfers a call or initiates a conference or call park).</p>
User Hold Audio Source	<p>For this optional field, choose the music on hold audio source that is to be played when the user places a call on hold (presses the Hold button or soft key).</p>
Location	<p>For this optional field, choose the location to which this group of gateways/ports should belong.</p> <p>A location indicates the remote location that is accessed by using restricted bandwidth connections.</p>

**Table 8-1** Field Descriptions for FXS Trunks on Cisco VG200 Gateways (continued)

Field	Description
Network Locale	<p>For this optional field, choose the network locale that you want to associate with this gateway.</p> <p>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.</p> <p><b>Note</b> Network Locale only applies when Cisco IP Phones 7940 and 7960 are used.</p>
Gateway Directory Number Template Name	<p>Use this optional field unless you have specified directory numbers for FXS ports.</p> <p>If you are adding a POTS port type and want to assign a directory number to that port, you must have already configured a Gateway Directory Number template.</p> <p>Choose the Gateway Directory Number template to be used for these ports.</p>
<b>Port Information</b>	
Prefix DN	<p>For this optional field, specify the prefix digits that are appended to the digits received on incoming calls.</p>
Num Digits	<p>Specify the number of digits to collect, from 0 to 32. Cisco CallManager counts significant digits from the right (last digit) of the number called.</p>
Expected Digits	<p>Specify the number of digits that are expected on the inbound side of the trunk. Use the default value (zero) if you are unsure.</p>

## Field Descriptions for FXO Trunks on a Cisco VG200 Gateway

Use the following field descriptions when you are adding or updating values for FXO trunks on a Cisco VG200 gateway.

Unless otherwise noted, assume that fields are mandatory.

Table 8-2 Field Descriptions for FXO Trunks on Cisco VG200 Gateways

Field	Description
<b>Gateway Information</b>	
Port Type	Choose the type of port, either Ground Start or Loop Start.
Device Pool	<p>This field shows the values that were configured in Cisco CallManager Administration. Choose the device pool to which this group of gateways/ports should belong.</p> <p>A device pool defines sets of common characteristics for devices, such as region, date/time group, Cisco CallManager group, and calling search space for auto-registration.</p>
Calling Search Space	<p>For this optional field, choose the calling search space to which this group of gateways/ports should belong.</p> <p>A calling search space specifies the collection of route partitions that are searched to determine how a dialed number should be routed.</p>
Media Resource Group List	<p>For this optional field, choose the media resource group list (MRGL) to which this group of gateways/ports should belong.</p> <p>An MRGL specifies a list of prioritized media resource groups. An application can select required media resources from among the available ones according to the priority order that is defined in the MRGL.</p>
Network Hold Audio Source	For this optional field, choose the music on hold audio source that is to be played when the system places a call on hold (such as when user transfers a call or initiates a conference or call park).
User Hold Audio Source	For this optional field, choose the music on hold audio source that is to be played when the user places a call on hold (presses the Hold button or soft key).

Table 8-2 Field Descriptions for FXO Trunks on Cisco VG200 Gateways (continued)

Field	Description
Location	For this optional field, choose the location to which this group of gateways/ports should belong.  A location indicates the remote location that is accessed by using restricted bandwidth connections.
<b>Port Information</b>	
Port Direction	Specify the direction of calls that are passing through this port: <ul style="list-style-type: none"> <li>• Inbound—Use for incoming calls only.</li> <li>• Outbound—Use for outgoing calls.</li> <li>• Both Ways—Use for inbound and outbound calls. This choice represents the default value.</li> </ul>
Attendant DN	For this optional field, enter the directory number to which you want incoming calls routed; for example, zero for an attendant.

#### Product Specific Configuration for Loop Start or Ground Start trunks

The gateway manufacturer defines the model-specific fields under Product Specific Configuration. Because the fields 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 window. In some cases, the displayed information may not be enough to help you understand the field. If you need more information, refer to the documentation for the specific gateway that you are configuring.

## Field Descriptions for T1-CAS Trunks on a Cisco VG200 Gateway

Use the following field descriptions when you are adding or updating values for the T1-CAS signaling protocol on a Cisco VG200 gateway.

Unless otherwise noted, assume that fields are mandatory.

**Table 8-3** Field Descriptions for T1-CAS Trunks on Cisco VG200 Gateways

Field	Description
Device Pool	<p>This field shows the values that were configured in Cisco CallManager Administration. Choose the device pool to which this group of gateways/ports should belong.</p> <p>A device pool defines sets of common characteristics for devices, such as region, date/time group, Cisco CallManager group, and calling search space for auto-registration.</p>
Calling Search Space	<p>For this optional field, choose the calling search space to which this group of gateways/ports should belong.</p> <p>A calling search space specifies the collection of route partitions that are searched to determine how a dialed number should be routed.</p>
Media Resource Group List	<p>For this optional field, choose the media resource group list (MRGL) to which this group of gateways/ports should belong.</p> <p>An MRGL specifies a list of prioritized media resource groups. An application can chose required media resources from among the available ones according to the priority order that is defined in the MRGL.</p>
Network Hold Audio Source	<p>For this optional field, choose the music on hold audio source that is to be played when the system places a call on hold (such as when user transfers a call or initiates a conference or call park).</p>
User Hold Audio Source	<p>For this optional field, choose the music on hold audio source that is to be played when the user places a call on hold (presses the Hold button or soft key).</p>

Table 8-3 Field Descriptions for T1-CAS Trunks on Cisco VG200 Gateways (continued)

Field	Description
Location	<p>For this optional field, choose the location to which this group of gateways/ports should belong.</p> <p>A location indicates the remote location that is accessed by using restricted bandwidth connections.</p>
Network Locale	<p>For this optional field, 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.</p> <p><b>Note</b> Network Locale only applies when Cisco IP Phones 7940 and 7960 are used.</p>
Load Information	<p>For this optional field, enter the appropriate load information for the custom software for gateway. The values that you enter here override the default values for this gateway.</p> <p>Leave this field blank to use the default load.</p>
Port Selection Order	<p>Choose the order in which ports are chosen. If you are not sure which port order to use, choose TOP_DOWN:</p> <ul style="list-style-type: none"> <li>• TOP_DOWN—Chooses ports in descending order, from first port (port 1) to the last port.</li> <li>• BOTTOM_UP—Chooses ports in ascending order, from the last port to the first port (port 1).</li> </ul>

### Product Specific Configuration

The gateway manufacturer defines the model-specific fields under Product Specific Configuration. Because the fields 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 window. In some cases, the displayed information may not be enough to help you understand the field. If you need more information, refer to the documentation for the specific gateway that you are configuring.

## Fields Descriptions for T1-CAS Ports

Use the following field descriptions when you are adding or updating values for ports for the T1-CAS signaling protocol on a Cisco VG200 gateway.

Unless otherwise noted, assume that fields are mandatory.

**Table 8-4** Field Descriptions for T1-CAS Ports

Field	Description
Port Direction	Choose the direction of calls that are passing through this port: <ul style="list-style-type: none"> <li>• Inbound—Use for incoming calls only.</li> <li>• Outbound—Use for outgoing calls.</li> <li>• Both Ways—Use for inbound and outbound calls. This choice represents the default value.</li> </ul>
Calling Party Selection	Because any outbound call on a gateway can send directory number information, choose which directory number to send: <ul style="list-style-type: none"> <li>• Originator—Send the directory number of the calling device. This choice represents the default value.</li> <li>• First Redirect Number—Send the directory number of the redirecting device.</li> <li>• Last Redirect Number—Send the directory number of the last device that redirected the call.</li> </ul>
Digit Sending	Choose one of the following digit sending types for out-dialing: <ul style="list-style-type: none"> <li>• DTMF—Dual-tone multifrequency as normal touchtone dialing, this choice represents the default value.</li> <li>• MF—Multifrequency</li> </ul>

Table 8-4 Field Descriptions for T1-CAS Ports (continued)

Field	Description
Caller ID Type	<p>Choose the type of caller ID that displays to the called party:</p> <ul style="list-style-type: none"> <li>• ANI—Automatic number identification displays the number of the calling party and provides the default value.</li> <li>• DNIS—Dialed number identification service displays the number that the caller dialed.</li> </ul>
Caller ID DN	<p>For this optional field, enter the pattern that you want to use for caller ID, from 0 to 24 digits.</p> <p>For example, in North America</p> <ul style="list-style-type: none"> <li>• 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.</li> <li>• 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.</li> </ul>
Prefix DN	<p>For this optional field, enter the prefix digits that are appended to the called party number on incoming calls.</p> <p>The Cisco CallManager adds prefix digits after first truncating the number in accordance with the Num Digits setting.</p>
Num Digits	<p>Enter the number of significant digits to collect, from 0 to 32. Cisco CallManager counts significant digits from the right (last digit) of the number called. The default is 4.</p>

**Table 8-4** Field Descriptions for T1-CAS Ports (continued)

Field	Description
Expected Digits	Enter the number of digits expected on the inbound side of the trunk. Use zero if you are unsure. The default is 4.

#### Product Specific Configuration

The gateway manufacturer defines the model-specific fields under Product Specific Configuration. Because the fields 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 window. In some cases, the displayed information may not be enough to help you understand the field. If you need more information, refer to the documentation for the specific gateway that you are configuring.

## Field Descriptions for T1-PRI or E1-PRI Trunks on a Cisco VG200 Gateway

Use the following field descriptions when you are adding or updating values for T1-PRI or E1-PRI trunks on a Cisco VG200 gateway.

Unless otherwise noted, assume that fields are mandatory.

**Table 8-5** Field Descriptions for T1-PRI or E1-PRI Trunks on Cisco VG200 Gateways

Field	Description
Device Pool	<p>This field shows the values that were configured in Cisco CallManager Administration. Choose the device pool to which this group of gateways/ports should belong.</p> <p>A device pool defines sets of common characteristics for devices, such as region, date/time group, Cisco CallManager group, and calling search space for auto-registration.</p>
Calling Search Space	<p>For this optional field, choose the calling search space to which this group of gateways/ports should belong.</p> <p>A calling search space specifies the collection of route partitions that are searched to determine how a dialed number should be routed.</p>
Media Resource Group List	<p>For this optional field, choose the media resource group list (MRGL) to which this group of gateways/ports should belong.</p> <p>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.</p>
Network Hold Audio Source	<p>For this optional field, choose the music on hold audio source that is to be played when the system places a call on hold (such as when user transfers a call or initiates a conference or call park).</p>
User Hold Audio Source	<p>For this optional field, choose the music on hold audio source that is to be played when the user places a call on hold (presses the Hold button or soft key).</p>

Table 8-5 Field Descriptions for T1-PRI or E1-PRI Trunks on Cisco VG200 Gateways (continued)

Field	Description
Network Locale	<p>For this optional field, choose the network locale that you want to associate with this gateway.</p> <p>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.</p> <p><b>Note</b> Network Locale only applies when Cisco IP Phones 7940 and 7960 are used.</p>
Location	<p>For this optional field, choose the location to which this group of gateways/ports should belong.</p> <p>A location indicates the remote location that is accessed by using restricted bandwidth connections.</p>
Load Information	<p>For this optional field, enter the appropriate load information for the custom software for gateway. The values that you enter here override the default values for this gateway.</p> <p>Leave this field blank to use the default load.</p>
Channel Selection Order	<p>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.</p> <p>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.</p>
Protocol Side	<p>Choose the appropriate protocol side. This setting specifies whether the gateway connects to a Central Office/Network device or to a User device.</p> <p>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.</p>

**Table 8-5** Field Descriptions for T1-PRI or E1-PRI Trunks on Cisco VG200 Gateways (continued)

Field	Description
Caller ID DN	<p>For this optional field, enter the pattern that you want to use for caller ID, from 0 to 24 digits.</p> <p>For example, in North America</p> <ul style="list-style-type: none"> <li>• 55XXXXX = Variable caller ID, where X equals an extension number. The CO appends the number with the area code if you do not specify it.</li> <li>• 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.</li> </ul>
Calling Party Selection	<p>Any outbound call on a gateway can send directory number information. Choose which directory number is sent:</p> <ul style="list-style-type: none"> <li>• Originator—Send the directory number of the calling device. This specifies the default value.</li> <li>• First Redirect Number—Send the directory number of the redirecting device.</li> <li>• Last Redirect Number—Send the directory number of the last device that redirected the call.</li> </ul>

**Table 8-5** Field Descriptions for T1-PRI or E1-PRI Trunks on Cisco VG200 Gateways (continued)

Field	Description
Channel IE Type	<p>Choose one of the following values to specify whether channel selection is presented as a channel map or a slot map:</p> <ul style="list-style-type: none"> <li>• Number—B-channel usage always presents a channel map format.</li> <li>• Slotmap—B-channel usage always presents a slotmap format.</li> <li>• 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.</li> </ul>
Interface Identifier Present	<p>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.</p>
Interface Identifier Value	<p>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.</p>
Display IE Delivery	<p>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.</p>
Redirecting Number IE Delivery—Outbound	<p>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.</p> <p>This setting applies to the SETUP message only on all protocols for digital access gateways.</p>

**Table 8-5** Field Descriptions for T1-PRI or E1-PRI Trunks on Cisco VG200 Gateways (continued)

Field	Description
Redirecting Number IE Delivery—Inbound	<p>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.</p> <p>This setting applies to the SETUP message only on all protocols for digital access gateways.</p>
Delay for First Restart	<p>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.</p> <p>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.)</p>
Delay Between Restarts	<p>For this optional field, 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.</p>
Num Digits	<p>Choose the number of significant digits to collect, from 0 to 32. Cisco CallManager counts significant digits from the right (last digit) of the number called. The default value specifies 23.</p> <p>Use this field if you check the Sig Digits check box. Use this field for processing 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.</p>

Table 8-5 Field Descriptions for T1-PRI or E1-PRI Trunks on Cisco VG200 Gateways (continued)

Field	Description
Sig Digits	<p>This optional 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 provided on an inbound call.</p> <p>Enable or disable this check box depending on whether you want to collect significant digits:</p> <ul style="list-style-type: none"> <li>• If you do not check the check box, Cisco CallManager does not truncate the inbound number.</li> <li>• If you check the check box, you also need to choose the number of significant digits to collect. By default, the box remains checked.</li> </ul>
Prefix DN	<p>For this optional field, enter the prefix digits that are appended to the digits that this trunk receives on incoming calls.</p> <p>Cisco CallManager adds prefix digits after first truncating the number in accordance with the Num Digits setting.</p>
Presentation Bit	<p>Choose whether you want the central office to transmit or block caller ID:</p> <ul style="list-style-type: none"> <li>• Allowed—As the default value, the Central Office will send caller ID.</li> <li>• Restricted—The Central Office will not send caller ID.</li> </ul>

**Table 8-5** Field Descriptions for T1-PRI or E1-PRI Trunks on Cisco VG200 Gateways (continued)

Field	Description
Called Party IE Number Type Unknown	<p>Choose the format for the type of number in called party directory numbers. Cisco 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 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.</p> <p>Choose one of the following options:</p> <ul style="list-style-type: none"> <li>• CallManager—For the default setting, the Cisco CallManager sets the directory number type. This represents the default value.</li> <li>• International—Use when you are dialing outside the dialing plan for your country.</li> <li>• National—Use when you are dialing within the dialing plan for your country.</li> <li>• Unknown—This option specifies that the dialing plan is unknown.</li> </ul>

**Table 8-5** Field Descriptions for T1-PRI or E1-PRI Trunks on Cisco VG200 Gateways (continued)

Field	Description
Calling Party Number Type IE Unknown	<p>Choose the format for the type of number in calling party directory numbers.</p> <p>Cisco 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 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.</p> <p>Choose one of the following options:</p> <ul style="list-style-type: none"> <li>• CallManager—The Cisco CallManager sets the directory number type. This represents the default value.</li> <li>• International—Use when you are dialing outside the dialing plan for your country.</li> <li>• National—Use when you are dialing within the dialing plan for your country.</li> <li>• Unknown—The dialing plan is unknown.</li> </ul>

**Table 8-5** Field Descriptions for T1-PRI or E1-PRI Trunks on Cisco VG200 Gateways (continued)

Field	Description
Called Numbering Plan	<p>Choose the format for the numbering plan in called party directory numbers.</p> <p>Cisco 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 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.</p> <p>Choose one of the following options:</p> <ul style="list-style-type: none"> <li>• CallManager—For the default setting, the Cisco CallManager sets the Numbering Plan in the directory number.</li> <li>• ISDN—Use when you are dialing outside the dialing plan for your country.</li> <li>• National Standard—Use when you are dialing within the dialing plan for your country.</li> <li>• Private—Use when you are dialing within a private network.</li> <li>• Unknown—The dialing plan is unknown.</li> </ul>

**Table 8-5** Field Descriptions for T1-PRI or E1-PRI Trunks on Cisco VG200 Gateways (continued)

Field	Description
Calling Numbering Plan	<p>Choose the format for the numbering plan in calling party directory numbers.</p> <p>Cisco 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 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.</p> <p>Choose one of the following options:</p> <ul style="list-style-type: none"> <li>• CallManager—For the default setting, the Cisco CallManager sets the Numbering Plan in the directory number. This represents the default value.</li> <li>• ISDN—Use when you are dialing outside the dialing plan for your country.</li> <li>• National Standard—Use when you are dialing within the dialing plan for your country.</li> <li>• Private—Use when you are dialing within a private network.</li> <li>• Unknown—This action specifies that the dialing plan is unknown.</li> </ul>

Table 8-5 Field Descriptions for T1-PRI or E1-PRI Trunks on Cisco VG200 Gateways (continued)

Field	Description
PRI Protocol Type	<p>Choose the communications protocol for the span:</p> <p>For E1 PRI spans, you have two options:</p> <ul style="list-style-type: none"> <li>• PRI AUSTRALIAN—Australian ISDN</li> <li>• PRI EURO—European ISDN</li> </ul> <p>T1 PRI spans have several options, depending on the carrier or switch:</p> <ul style="list-style-type: none"> <li>• 4E —AT&amp;T InterExchange carrier</li> <li>• 5E8 Custom—Cisco IP Phone</li> <li>• 5E9 and NI2—AT&amp;T family local exchange switch or carrier</li> <li>• DMS—MCI family local exchange switch or carrier</li> <li>• ETSI SC—European local exchange carrier on T1; also, Japanese local exchange.</li> <li>• QSIG—Inter-PBX signaling protocol</li> </ul> <p>Determine the switch to which you are connecting and the preferred protocol, as follows:</p> <ul style="list-style-type: none"> <li>• Nortel Meridian—5E8 Custom</li> <li>• Lucent Definity—4ESS or 5E8</li> <li>• Madge (Teleos) box—5E8 Teleos</li> <li>• Intecom PBX—5E8 Intecom</li> </ul> <p>Alternatively, choose the protocol based on the carrier:</p> <ul style="list-style-type: none"> <li>• MCI—DMS-250</li> <li>• Sprint—DMS-250 or DMS-100</li> <li>• AT&amp;T—4ESS</li> </ul>

**Table 8-5** Field Descriptions for T1-PRI or E1-PRI Trunks on Cisco VG200 Gateways (continued)

Field	Description
Inhibit Restarts at PRI Initialization	<p>For this optional field, a RESTART message confirms the status of the ports on a PRI span. If RESTARTs are not sent, Cisco CallManager assumes that the ports are in service. By default, the box remains checked.</p> <p>When the D-Channel successfully connects with another PRI trunk D-Channel, it sends restarts when this box is unchecked.</p>
Enable Status Poll	<p>For this optional field, check the check box to view the B-channel status in the debug window. By default, the box remains unchecked.</p>
Number of Digits to Strip	<p>Choose the number of digits to strip on outbound calls, from 0 to 32. The default value is 0.</p> <p>For example, 8889725551234 is dialed; the number of digits to strip is 3. In this example, Cisco CallManager strips 888 from the outbound number.</p>

**Table 8-5** Field Descriptions for T1-PRI or E1-PRI Trunks on Cisco VG200 Gateways (continued)

Field	Description
Setup of Non-ISDN Progress Indicator IE Enable	<p>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.</p> <p>When this setting is enabled, Cisco CallManager sends Q.931 setup messages out digital (that is, non-H.323) gateways with the Progress Indicator field set to non-ISDN.</p> <p>This message notifies the destination device that the Cisco CallManager gateway is non-ISDN and that the destination device should play in-band ringback.</p> <p>This problem usually associates with Cisco CallManagers that connect to PBXs through digital gateways.</p>

### Product Specific Configuration

The gateway manufacturer defines the model-specific fields under Product Specific Configuration. Because the fields 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 window. In some cases, the displayed information may not be enough to help you understand the field. If you need more information, refer to the documentation for the specific gateway that you are configuring.

## Field Descriptions for FXS Ports on a Cisco Catalyst 6000 24 Port Analog Interface Module

Use the following field descriptions when you are adding or updating values for FXS ports on a Cisco Catalyst 6000 analog interface module.

Unless otherwise noted, assume that all fields are mandatory.

**Table 8-6** Field Descriptions for FXS Ports on Cisco Catalyst 6000 Modules

Field	Description
Catalyst 6000 (FXS) Ports Template Name	Enter a name for the template, up to 50 alphanumeric characters.
Port Direction	Choose the direction of calls that pass through this port: <ul style="list-style-type: none"> <li>• Inbound—Use for incoming calls only.</li> <li>• Outbound—Use for outgoing calls.</li> <li>• Both Ways—For this default value, use for inbound and outbound calls.</li> </ul>
Prefix DN	For this optional field, enter the prefix digits to be appended to the digits that are received on incoming calls.
Num Digits	Enter the number of digits to collect, from 0 to 32. Cisco CallManager counts significant digits from the right (last digit) of the number called.
Expected Digits	Enter the number of digits that are expected on the inbound side of the trunk. Use zero if you are unsure.
SMDI Port Number	Enter the SMDI port number. Use the same number as the actual port number on the voice-mail system to which the analog access port connects.
<b>Product Specific Configuration</b>	
Port Level	Choose the gain of audio entering or leaving the span.
Auto Signal Adjustment into IP Network	Choose the gain or loss that you want applied to the received audio signal.
Auto Signal Adjustment from IP Network	Choose the gain or loss that you want applied to the transmitted audio signal.

**Table 8-6** Field Descriptions for FXS Ports on Cisco Catalyst 6000 Modules (continued)

Field	Description
<b>Timers</b>	
Call Restart Timer	Enter the time that must pass after the far end disconnects and the near end is still off hook before reorder tone plays. Default specifies 5000 ms.
Offhook Validation Timer	Enter the time that must pass before Cisco CallManager recognizes a valid off-hook indication. Default specifies 100 ms.
Onhook Validation Timer	Enter the time that must pass before Cisco CallManager recognizes a valid on-hook indication. Default specifies 250 ms.
HookFlash Timer	Enter the time that must pass after on-hook is recognized before going back off hook and have it recognized as hook-flash and not disconnect. Default specifies 1000 ms.

## Field Descriptions for Gateway Directory Number Template

Use the following field descriptions when you are adding or updating values for a Gateway Directory Number template.

Treat all fields as optional.

**Table 8-7** Field Descriptions for Gateway Directory Number Template

Field	Description
Partition	Choose the partition to which the directory number will be added.
<b>Directory Number Settings</b>	
Voice Message Profile	Check this check box to default the voice message box field for a directory number to the same value as the directory number. This means that the call will only ring the directory number and not roll to voice mail.

**Table 8-7** Field Descriptions for Gateway Directory Number Template (continued)

Field	Description
AAR Group	Choose the AAR group to which this directory number will be added.
Calling Search Space	Choose the calling search space to which this group of directory numbers should belong. A calling search space specifies the collection of route partitions that are searched to determine how a dialed number should be routed.
User Hold Audio Source	Choose the music on hold audio source that is to be played when the user places a call on hold (presses the Hold button or soft key).
Network Hold Audio Source	Choose the music on hold audio source that is to be played when the system places a call on hold (such as when user transfers a call or initiates a conference or call park).
In the Call Forward and Pickup Settings area, complete the following fields. If you enter a value for any of these fields, you can also choose the Calling Search Space for that field.	
Forward All	Enter the directory number to which all calls are sent. If there is a value in this field, all calls destined for the gateway directory number automatically forward to the specified directory number.
Forward Busy	Enter the directory number to which all calls are sent if the gateway directory number is busy.
Forward No Answer	Enter the directory number to which calls are sent if the gateway directory number does not answer.
Call Pickup Group	Choose the number that can be dialed to answer calls to this directory number (in the specified partition).

**Table 8-7** *Field Descriptions for Gateway Directory Number Template (continued)*

Field	Description
<b>Line Settings for This Device</b>	
External Phone Number Mask	Enter the phone number (mask) that is used to send Caller ID information when a call is placed from this directory number.
Activate Auto-Answer Message Waiting Indicator Policy	Use this field to indicate how the Message Waiting Indicator behaves for the device. You can have the MWI always come on, never come on, or use the system policy, as defined in Cisco CallManager Administration.

Field Descriptions



## Working with the Export Utility

---

The export utility in BAT allows you to manage records effectively. You can use the export utility to export phone, user, and user device profile records from a Cisco CallManager directory to a CSV file, carefully edit the CSV file with a text editor, and then reinsert the records into the same or a different Cisco CallManager database.

### Related Topics

- [Chapter 3, “Working with Phones, IP Telephony Devices, and User Combinations”](#)
- [Chapter 4, “Working with Users”](#)
- [Chapter 5, “Working with User Device Profiles”](#)

## Moving Records from one Cisco CallManager Server to Another

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

1. [Exporting User Records, page 9-8.](#)
2. [Exporting Phone Records, page 9-4.](#)
3. [Exporting User Device Profile Records, page 9-11.](#)

- (Optional) Edit the CSV file with a text editor.

**Caution**

---

The record must follow the format that is specified for that CSV template. For example, records for phones need to follow the phone CSV template. Use extreme care when editing the CSV file. Your end user will experience unexpected phone behavior if you insert records that are not in the correct format.

---

- Copy the CSV file to the appropriate C:\BATFiles\ folder on the server with the publisher database. Copy the exported phone files to the C:\BATFiles\Phones\ folder. Copy the exported user files to the C:\BATFiles\Users\Insert Users\ folder. Copy the exported user device profile file to the C:\BATFiles\User Device Profiles\ folder.
- Insert User Records.
- Insert Phone Records.
- Insert User Device Profile Records.

**Caution**

---

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

---

**Note**

---

The attributes, Enable Authentication proxy rights, Enable CTI Application usage, and Call Park Retrieval Allowed, do not get exported. You will need to configure these settings when you are inserting the records.

---

**Related Topics**

- [Creating CSV Files for Phones, IP Telephony Devices, and the User Combinations, page 3-7](#)
- [Creating the CSV File for Users, page 4-2](#)
- [Creating the CSV File for User Device Profiles, page 5-4](#)
- [Adding Phones or Other IP Telephony Device to Cisco CallManager, page 3-24](#)
- [Adding Users to Cisco CallManager, page 4-8](#)
- [Inserting User Device Profiles, page 5-13](#)

# Updating Records on one Cisco CallManager Server

Use this procedure to make changes to records on a Cisco CallManager server. Only export the records that you are interested in changing.

**Caution**

---

The format for the record must follow the format that is specified for that CSV template. For example, records for phones must follow the phone CSV template.

---

1. [Exporting User Records, page 9-8.](#)
2. [Exporting Phone Records, page 9-4.](#)
3. [Exporting User Device Profile Records, page 9-11.](#)
4. (Optional) Edit the CSV file with a text editor.
5. Move the CSV file from the export folder to the appropriate C:\BATFiles\ folder on the server. Move the exported phone file from the C:\BATFiles\export\Phones\ folder to the C:\BATFiles\Phones\ folder. Move the exported user file from the C:\BATFiles\export\Users\ folder to the C:\BATFiles\Users\Insert Users folder. Move the exported user device profile file from the C:\BATFiles\export\User Device Profiles\ folder to the C:\BATFiles\User Device Profiles\ folder.
6. Delete User Records.
7. Delete Phone Records.
8. Delete User Device Profile Records.
9. Insert User Records.
10. Insert Phone Records.
11. Insert User Device Profile Records.

**Caution**

---

Because the order in which the records are inserted is important, insert user records first. This ensures that devices are properly associated with existing users. Your end user will experience unexpected phone behavior if you insert records that are not in the correct format.

---

**Note**

---

The attributes, Enable Authentication proxy rights, Enable CTI Application usage, and Call Park Retrieval Allowed, do not get exported. You will need to configured them when you are inserting records for a group of users.

---

**Related Topics**

- [Creating CSV Files for Phones, IP Telephony Devices, and the User Combinations, page 3-7](#)
- [Creating the CSV File for Users, page 4-2](#)
- [Creating the CSV File for User Device Profiles, page 5-4](#)
- [Deleting Phones, page 3-39](#)
- [Deleting Users from Cisco CallManager, page 4-21](#)
- [Deleting User Device Profiles, page 5-17](#)
- [Adding Phones or Other IP Telephony Device to Cisco CallManager, page 3-24](#)
- [Adding Users to Cisco CallManager, page 4-8](#)
- [Inserting User Device Profiles, page 5-13](#)

## Exporting Phone Records

You have two export options. If you have phones with similar configurations, you should use the Default Phone CSV template. If you have phones with many line configurations, such as different route partitions and calling search space, you should use the All Phone Details CSV template. Use this procedure to export phone records from Cisco CallManager.

**Procedure**

- 
- Step 1** Start BAT. (See [Starting BAT, page 1-3.](#))
- Step 2** Choose **Configure > Phones**.

The Insert Phones window displays.

**Step 3** Click **Export Phones** link in upper, right corner of the window.

The Export Phones window displays.

**Step 4** In the Export file name field, enter your file name.

**Step 5** In the CSV Name Template field, choose either the Default Phone or All Phone Details CSV template. Your CSV Name Template selection determines your export option and links to the export option radio buttons.

Choosing Default phone CSV Template allows you to export records by using a defined query. You can only export phone records for specific phone type with a fixed number of lines when you choose to export by using a defined query. For example, if you want to export some records for a Cisco IP Phone model 7960 with one line and some records for a Cisco IP Phone model 7960 with two lines, you will need to use two different queries, and you will get two different CSV files.

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. You cannot use the query to limit the number of records.

[Table 9-1](#) lists the fields that are exported when you choose the Default Phone CSV template.

**Table 9-1** *Exported Fields in the Default Phone CSV Template*

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

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

**Table 9-2** Exported Fields in the All Phone Details CSV template

Field Types	Exported Fields
Device Fields	Device Name, Description, Device Pool, Calling Search Space, AAR Calling Search Space, Media Resource Group List, User Hold Audio Service, Location, User Locale, Network Locale, Consecutive Ring Setting, Phone Button Template, Expansion Module 1, Expansion Module 2, Softkey Template, Phone Load Name, Module 1 Load Name, Module 2 Load Name, Information, Directory, Messages, Services, Authentication Server, Proxy Server, Idle, Idle Timer, Disable Speakerphone, Disable Speakerphone and Headset, Forwarding Delay, PC Port, SRS Telephony Enable
Line Fields	Directory Number, Partition, Voice Mail Profile, Calling Search Space, AAR Group, User Hold Audio Source, Network Hold Audio Source, Call Waiting, Auto Answer, Forward All, Forward Busy, Forward No Answer, Call Pick Group, Display, External Phone Number Mask, Message Waiting Lamp Policy, Ring Setting when Idle, Ring Setting when Active, Line Text Label, Character Set
User Fields	User ID
Speed Dials	Speed Dials
Services	Services



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

**Step 6** If you chose All Phone Details CSV template, choose the type of device or specific model in the Model list box under the **All Details** radio button. If you chose Default Phone CSV template, choose the type of device or specific model in the Model list box under the **Specific Details** radio button.

BAT displays only the models that are currently in the Cisco CallManager directory.

Skip Step 7 through Step 12 if you chose the **All Phone Details** CSV template.

**Step 7** Choose the number of lines.

**Step 8** In the first drop-down list box, choose the field to query such as Device Name or Location.

**Step 9** In the second drop-down list box, choose the search criteria such as begins with, contains, or is empty.

**Step 10** In the search field/list box, either choose or enter the value that you want to locate, such as a device name.

**Step 11** Click **Add To Query** to add the defined filter to the query. You can click **AND** or **OR** to add multiple filters and repeat [Step 8](#) through [Step 10](#) to further define your query.

If you make a mistake, click the **Clear Query** button to remove the query; then, return to [Step 8](#) and restart.

**Step 12** Click **View Query Result** to verify the records that are going to be exported

**Step 13** Click **Export** to export the records.

A message displays that advises you of approximately how long it will take to export the records from the Cisco CallManager directory. You can cancel the transaction or click **OK** to continue.

When the transaction completes, BAT displays either an Export Completed or Export Failed status. If BAT failed to export all the records, BAT displays an Export Failed message.

Click on the **View Latest Log File** link to display the log file that was generated by BAT. The log file indicates the number of phone records that were exported, the number of phone records that failed to export, including the error code, the number of export files that were created, and the location of the files.

You can also view or download the exported file by choosing the **View/Download Exported File** link. The link does not display if BAT creates more than one export file.

BAT saves the exported file at C:\BatFiles\Export\Phones\ on the publisher server.



---

**Note** If multiple users control a phone, the export utility generates a unique record for each user.

---

When you export files by using the specific detail option, the export utility appends a numerical suffix `_n` to the export file name to indicate the lines that are configured on a phone. For example, if you entered a export file name of test and you have two line phones with lines 1 and 3 configured, the name of the file will be test\_1\_3.txt. The export utility appends BAT and a numerical suffix `_n` to the export file name when you export phones with dummy MAC addresses. Use the file name to guide you in reconfiguring the lines when you are inserting phones.

---

## Exporting User Records

Use this procedure to export User records from Cisco CallManager.

### Procedure

---

- Step 1** Start BAT. (See [Starting BAT, page 1-3.](#))
- Step 2** Choose **Configure > Users**.  
The Insert Users window displays.
- Step 3** In the right corner of the window, click **Export Users**.  
The Export Users window displays.
- Step 4** In the Export file name field, enter your file name.
- Step 5** In the CSV Name Template field, choose the CSV template. The current default specifies Default Users.
- Step 6** In the first drop-down list box, choose a field to query such as User ID, Department, First Name, or Last Name.
- Step 7** In the second drop-down list box, choose contains or is exactly.

- Step 8** In the third box, which is the search field/list box, enter the value that you want to locate, such as a specific user.



---

**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 9** Click **Add To Query** button to add the defined filter to the query.  
If you make a mistake, click the **Clear Query** button to remove the query; then, return to [Step 6](#) and start over.

- Step 10** Click **View Query Result** to display the records that are going to be exported.

- Step 11** Click **Export** to export the chosen user records.

A message displays that advises you of approximately how long it will take to export the records from the Cisco CallManager database. You can cancel the transaction or click **OK** to continue.

When the transaction completes, BAT displays either an Export Completed or Export Failed status. If BAT failed to export all the records, BAT displays an Export Failed message.

Click on the **View Latest Log File** link to display the log file that was generated by BAT. The log file indicates the number of phone records that were exported, the number of phone records that failed to export, including the error code, the number of export files that were created, and the location of the files.

You can view or download the exported file by choosing the **View/Download Exported File** link. The link does not display if BAT creates more than one export file.

BAT saves the exported file at C:\BatFiles\Export\Users\ on the publisher server.

---



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**Note** Passwords for users on Active Directory do not get exported. PINS for users on Active Directory get exported in cleartext. You must use Active Directory to set the password for users after reinserting the records.

---

The export utility sorts uses organizational hierarchy to sort users by examining the value that was entered in the manager user ID field. It saves users on the same reporting level to the same file and modifies the file name by appending the suffix `_user` or `_MgrLevel#`, where # is a number 1 through 20.

The export utility also saves users with the same CTI application use, call park retrieval, and enable authentication proxy rights settings to the same file. The export utility appends the suffix `_t` (enabled) or `_f` (disabled) for each different setting to the file name that you entered. The order of the suffix flags in the file name specifies authentication proxy rights, CTI application use, and call park retrieval.

For example, You create an export file `Test.txt` using the export utility. Cisco CallManager database has user `ThomasT` with manager `MarieA` and `MarieA` has manager `James M`. If `Thomas T` has Proxy Authentication rights enabled, CTI application use and Call Park Retrieval, and disabled, and `MarieA` and `James M` have Proxy Authentication rights and CTI application usage, enabled and call park retrieval disabled, the Export utility saves the user information in three different files. You will find `ThomasT` in the CSV file `Test_user_t_f_f.txt`, `MarieA` in the CSV file `test_MgrLevel1_t_t_f`, and `JamesM` in the CSV file `Test_MgrLevel2_t_t_f`. [Table 9-3](#) illustrates this example.

**Table 9-3 Example**

Initial File Name				Test	
User ID	Manager	Proxy Authentication Rights	CTI Application	Call Park Retrieval	Resulting File Name
ThomasT	MariaA	Enable	Disable	Disable	Test_user_t_f_f.txt
MariaA	JamesM	Enable	Enable	Disable	Test_MgrLevel1_t_t_f.txt
JamesM		Enable	Enable	Disable	Test_MgrLevel2_t_t_f.txt



**Note**

The user ID for a manager must exist in the directory prior to its use in the manager user ID field in the user record. Insert the files in descending order based on the manager level numeral suffix. Insert the file with the user suffix last to ensure that the user records for managers exist prior to using them.

**Note**

---

Use the suffix to guide you in choosing the correct settings for Proxy Authentication rights, CTI application use, and Call Park Retrieval when you insert users.

---

**Note**

---

The export utility only exports phone devices that are associated with a user. It does not export other telephony devices such as CTI ports or H.323 clients.

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**Note**

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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 CallManager Administrator.

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## Exporting User Device Profile Records

Use this procedure to export user device profiles from Cisco CallManager.

### Procedure

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- Step 1** Start BAT. (See [Starting BAT, page 1-3.](#))
- Step 2** Choose **Configure > Users Device Profiles**.  
The Insert User Device Profiles window displays.
- Step 3** In the right corner of the window, click **Export User Device Profiles**.  
The Export User Device Profiles window displays.
- Step 4** In the Export file name field, enter the file name that you want to use.
- Step 5** In the CSV Name Template field, choose either the Default User Device Profiles or All User Device Profiles details CSV template. Your CSV Name Template selection determines your export option and links to the export option radio buttons.

When you export user device profile records by using All User Device Profile details CSV, you export the different line attributes, services and User ID associated with the user device profile. You cannot use the query to limit the number of records.

[Table 9-4](#) lists the fields that are exported when you choose the Default User Device Profile CSV template.

**Table 9-4 Exported Fields in the Default User Device Profile CSV Template**

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

[Table 9-5](#) lists the fields that are exported when you choose the All User Device Profile Details CSV template.

**Table 9-5 Exported Fields in the All User Device Profile Details CSV Template**

Field Types	Exported Fields
Device Fields	MAC Address, Description, User Hold Audio Service, User Locale, Consecutive Ring Setting, Phone Button Template, Expansion Module 1, Expansion Module 2, Softkey Template, Login User ID
Line Fields	Directory Number, Partition, Voice Mail Profile, Calling Search Space, AAR Group, User Hold Audio Source, Network Hold Audio Source, Call Waiting, Auto Answer, Forward All, Forward Busy, Forward No Answer, Call Pick Group, Display, External Phone Number Mask, Message Waiting Lamp Policy, Ring Setting When Idle, Ring Setting When Active, Line Text Label, Character Set
Speed Dials	Speed Dials
User Fields	User ID

**Step 6** If you choose All User Device Profile Details CSV template, choose the type of device or specific model in the Model list box under the **All Details** radio button. If you choose Default User Device Profile CSV template, choose the type of device or specific model in the Model list box under the **Specific Details** radio button. The current default specifies Cisco IP Phone model 7960.

Skip Step 7 through Step 12 if you chose the All User Device Profile Details CSV template.

**Step 7** Choose the number of lines.

**Step 8** In the first drop-down list box, choose a field to query such as Device Name or Description.

**Step 9** In the second drop-down list box, choose contains, is exactly, not equal to, begins with, ends with, is empty, or is not empty.

**Step 10** In the third box, which is the search field/list box, either choose or enter the value that you want to locate, such as a specific user.

**Step 11** Click **Add To Query** button to add the defined filter to the query.

If you make a mistake, click the **Clear Query** button to remove the query; then, return to [Step 8](#) and start over.

**Step 12** Click **View Query Result** to display the records that are going to be exported.

**Step 13** Click **Export** to export the chosen user device profile records.

A message displays that advises you of approximately how long it will take to export the records in the Cisco CallManager database. You can cancel the transaction or click **OK** to continue. You can view the log file by clicking on **View Latest Log File** link.

When the transaction completes, BAT displays either an Export Completed or Export Failed status. If BAT failed to export all the records, BAT displays an Export Failed message.

BAT generates a log file that indicates the number of user device profile records that were exported and the number of user device profile records that failed to export, including the error code. Click on the **View Latest Log File** link to display the log file.

You can view or download the exported file by choosing the **View/Download Exported File** link.

BAT saves the exported file at C:\BatFiles\Export\UserDeviceProfiles\ on the publisher server.

**Note**

The export utility does not export any autogenerated device profiles.

## Viewing Export Log Files

BAT generates log files for each export transaction and stores them on the publisher database server in the following location:

C:\CiscoWebs\BAT\LogFiles\Export

Clicking **View Latest Log File** link displays the summary view for the export transaction as well as the detail view for the failures.

To view the log file for the export operation, click **View Latest Log File** link in the export window or go to the following location:

**C:\CiscoWebs\BAT\LogFiles\RBAT\ directory**

The log file name uses the following format:

<Type of Record export>\_<The chosen file name>#timestamp

The timestamp format for the log file name specifies *mmddyyyymmss*.



## Working with TAPS

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Use the Tool for Auto-Registered Phones Support (TAPS) in conjunction with BAT to provide two features:

- Update MAC addresses and download predefined configuration for new phones.
- Reload configuration for replacement phones.

When new phones are added to Cisco CallManager, TAPS works in conjunction with BAT to update phones that were added to BAT using dummy MAC addresses. After BAT has been used to bulk add the phones with dummy MAC addresses to Cisco CallManager Administration, you can plug the phones into the network. You or the phone's user can dial a TAPS directory number that causes the phone to download its configuration. At the same time, the phone gets updated in Cisco CallManager Administration with the correct MAC address. You must make sure that Auto-registration is enabled in Cisco CallManager Administration (**System > Cisco CallManager**) for TAPS to function.

For example, you have 100 new hires starting on Monday. You must add these users and their new phones to Cisco CallManager Administration. You can use BAT to create a phone template for these 100 users and a CSV file for phones and users. By using the dummy MAC address option in the CSV file, you do not need to input the individual MAC addresses for the 100 new phones. Now, as long as auto-registration is enabled, the phones can be plugged directly into the network and configured by you or the new hire by simply dialing the TAPS directory number and following the voice-prompt instructions.

When replacing an existing phone (due to damage, for example), use Configure TAPS, so the user can receive a new phone, plug it into the network, and dial the TAPS directory number to download the configuration that was used by the

previous phone. You must ensure that auto-registration is enabled for Configure TAPS to work. The process requires no configuration changes by the user or in Cisco CallManager Administration.

For example, John's Cisco IP Phone 7940 gets short-circuited during a lightning storm. He receives a new Cisco IP Phone 7940 and plugs it into the network. John can dial the TAPS directory number, and the new phone will download the configuration that was previously used for the damaged phone. No need exists to change directory numbers or to update device information in Cisco CallManager Administration — TAPS does it automatically. See the [“Configuring TAPS” section on page 10-3](#) for more information.

You must enable auto-registration in Cisco CallManager Administration (**System > Cisco CallManager**) for TAPS to function. If auto-registration is not enabled in Cisco CallManager Administration, TAPS will not function.

Because TAPS can replace a directory number, you may want to protect certain directory numbers from being overwritten. You can protect important numbers by using the Secure TAPS application. See the [“Securing TAPS” section on page 10-7](#) for more information.

The TAPS application, which is installed on a Cisco CRA server, also requires components to be installed on the server that is running the Cisco CallManager publisher database. Cisco recommends that you stop the TAPS service when you are not using TAPS to add phones to Cisco CallManager database. See [“Stopping TAPS” section on page 10-7](#).

**Note**

---

TAPS requires the Cisco IP Interactive Voice Response (IP IVR) application that runs on the Cisco Customer Response Application (Cisco CRA) server.

---

**Related Topics**

- [Configuring TAPS, page 10-3](#)
- [Securing TAPS, page 10-7](#)
- [Starting TAPS, page 10-6](#)
- [Stopping TAPS, page 10-7](#)
- [TAPS for End Users, page 10-11](#)

# Configuring TAPS

You must configure TAPS by adding a CTI route point, CTI ports, and users in Cisco CallManager Administration. Like any other application in the Cisco IP telephony system, TAPS requires configuring. See the Cisco CRA Release Notes for complete information. You can review the Application Server documentation by browsing to <http://www.cisco.com>. Open the documentation for instructions on how to configure an application.

You need only one CTI route point for TAPS. You will need at least one CTI port, but you can configure as many ports as you would like to make available to TAPS users.

In Cisco CallManager Administration

- Create a CTI route point and assign it a unique directory number.
- Set call forward busy, call forward no answer, and call forward on failure to the operator number on the TAPS CTI route point.
- Create one or more CTI ports with consecutive directory numbers. You can create CTI ports in BAT or Cisco CallManager Administration.

TAPS supports a maximum number of sessions equal to the number of CTI ports that are configured for TAPS. For example, if you have configured five CTI ports, up to five users can dial into TAPS at same time. The sixth caller cannot connect to TAPS.

- Create a user. The TAPS route point and ports should be in the users control devices list.
- Create an auto-registration partition/calling search space to prevent phones that have auto-registered from dialing any directory number other than the directory number that is assigned to the TAPS CTI route point. Restricting access to this directory number ensures that users download the proper configuration information for their phones.
- Upload **TAPS.aef** by using the Repository Manager on the Cisco CRA server. See Step 2 in the [“Installing TAPS” section on page 2-5](#) for instructions.

For information about how to add or assign these values, see the *Cisco CallManager Administration System Guide*.

### Related Topics

- [Allowing TAPS to Update Any Cisco IP Phone That is Added Using Auto-Registration, page 10-4](#)
- [Restricting TAPS to Update Only Cisco IP Phones That Were Added Using the Dummy MAC Address Option in BAT, page 10-5](#)

## Allowing TAPS to Update Any Cisco IP Phone That is Added Using Auto-Registration

The Configure TAPS feature allows you to use TAPS to update phones that auto-registered regardless of whether they were entered into the Cisco CallManager database by using Cisco CallManager Administration or by using BAT using a dummy MAC address. The default limits use of TAPS to only those phones that were added using the dummy MAC address option in BAT. Phones with dummy MAC addresses have a device name that starts with the prefix “BAT.” You can use Configure TAPS to allow any phone that auto-registered in the Cisco CallManager system to be updated, including phones that have a MAC address that is not preceded by “BAT.” This capability proves useful when you need to replace one phone with a same model phone. As long as auto-registration is enabled in Cisco CallManager Administration, the user can plug in the new phone and then dial the TAPS directory number to retrieve the configuration that was previously used by the old phone.

Use this procedure to configure TAPS, so the device profile of any phone on the system can be updated, not just phones that were added to BAT using the dummy MAC address option.

### Procedure

- 
- Step 1** On the machine running BAT, choosing **Start > Programs > Cisco CallManager 3.3> Bulk Admin Tool > Configure TAPS**.
- The Configure TAPS window displays.
- Step 2** Click the second button, **Allow Auto-Registered phones to be reset with any phone**.
- Step 3** Click **Set**.
- A prompt asks you whether you want to save the new setting.

**Step 4** Click **Yes**.

Another prompt confirms that TAPS will allow any phone that auto-registered to be updated using TAPS (not just phones that were added using the dummy MAC address option).

**Step 5** Click **OK**.

TAPS allows any phone that was added to the Cisco CallManager database by using auto-registration to be updated by TAPS. The Configure TAPS window automatically closes.

---

**Related Topic**

- [Restricting TAPS to Update Only Cisco IP Phones That Were Added Using the Dummy MAC Address Option in BAT, page 10-5](#)

## Restricting TAPS to Update Only Cisco IP Phones That Were Added Using the Dummy MAC Address Option in BAT

The default limits use of TAPS to only those phones that were added using the dummy MAC address option in BAT. Phones that were added to the Cisco CallManager database with dummy MAC addresses always have a device name that starts with the prefix “BAT.” However, if you have changed the configuration of TAPS to allow any phone that was added to the system using auto-registration (as explained in the section, [Allowing TAPS to Update Any Cisco IP Phone That is Added Using Auto-Registration, page 10-4](#)), you must follow these steps to restore the default setting, so TAPS can only be used to update phones with the ‘BAT’ prefix.

**Procedure**

---

**Step 1** On the machine that is running BAT, choose **Start > Programs > Cisco CallManager 3.3> Bulk Admin Tool > Configure TAPS**.

The Configure TAPS window displays.

**Step 2** Click the first button, **Allow Auto-Registered phones to be reset with a profile that has ‘BAT’ prefix in the device**.

**Step 3** Click **Set**.

A prompt asks you whether you want to save the new setting.

**Step 4** Click **Yes**.

Another prompt confirms that TAPS will allow only phones that were added using the dummy MAC address option in BAT to be updated.

**Step 5** Click **OK**.

TAPS allows only phones that were added to the Cisco CallManager database using the dummy MAC address option to be updated by TAPS. The Configure TAPS window automatically closes.

---

#### Related Topic

- [Allowing TAPS to Update Any Cisco IP Phone That is Added Using Auto-Registration, page 10-4](#)

## Starting TAPS

You must manually start the TAPS service. Use this procedure to start TAPS.

#### Procedure

---

**Step 1** On the server that is running the publisher database for Cisco CallManager, choose **Start > Programs > Administrative Tools > Services**.

The Services window displays.

**Step 2** Double-click **Cisco TAPS**.

The TAPS service is now running. If the service should fail, you must manually start TAPS again.

---

#### Related Topic

- [Stopping TAPS, page 10-7](#)

# Stopping TAPS

Stop the TAPS service from the Services window on the publisher server (where BAT is installed).

## Procedure

---

- Step 1** On the server that is running the publisher database for Cisco CallManager, choose **Start > Programs > Administrative Tools > Services**.  
The Services window displays.
- Step 2** In the list of services, right-click Cisco TAPS and click **Stop**.
- 

## Related Topic

- [Starting TAPS, page 10-6](#)

# Securing TAPS

The Secure TAPS feature lets you specify directory numbers that the TAPS feature cannot access. Use this capability when you want to protect directory numbers from being accidentally assigned.

For example, in your system, the directory number 5000 provides voice-mail access. You do not want a new user to mistakenly configure 5000 on the new phone. Secure TAPS allows you to specify the directory numbers that TAPS cannot access.

## Related Topics

- [Restricting Directory Numbers, page 10-8](#)
- [Lifting the Restriction on a Directory Number, page 10-9](#)
- [Resetting Directory Numbers, page 10-10](#)
- [Viewing a List of Restricted Directory Numbers, page 10-11](#)

## Restricting Directory Numbers

Use this procedure to block TAPS from using directory numbers that you specify.

### Procedure

---

- Step 1** On the machine that is running BAT, choose **Start > Programs > Cisco CallManager 3.3 > Bulk Admin Tool > Secure TAPS**.
- The Secure TAPS Directory Numbers window displays.
- Step 2** In the field, enter the directory number that you want to protect from TAPS.
- Step 3** Click **Add**.
- A prompt indicates that the directory number has been secured from use with TAPS.
- Step 4** Click **OK**.
- Step 5** Continue to add directory numbers by repeating Step 2 through Step 4. When you finish adding directory numbers, click **View Secure DN**.

A list box displays the directory numbers that you have protected. TAPS 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, TAPS will refuse the request.



---

**Note** The View Secure DN list box does not automatically refresh. If you want to see the latest list of secured directory numbers, click **Refresh List** to redisplay an updated list.

---

- Step 6** Click **Exit**.
- 

### Related Topics

- [Securing TAPS, page 10-7](#)
- [Lifting the Restriction on a Directory Number, page 10-9](#)
- [Resetting Directory Numbers, page 10-10](#)
- [Viewing a List of Restricted Directory Numbers, page 10-11](#)

## Lifting the Restriction on a Directory Number

Use this procedure to remove a directory number from the list of directory numbers that TAPS cannot access.

### Procedure

---

- Step 1** On the machine that is running BAT, choose **Start > Programs > Cisco CallManager 3.3 > Bulk Admin Tool > Secure TAPS**.
- The Secure TAPS Directory Numbers window displays.
- Step 2** In the field, enter the directory number that you want to unprotect from TAPS.
- Step 3** Click **Remove**.
- A prompt indicates that the directory number has been removed from the list of secured directory numbers.
- Step 4** Click **OK**.
- Step 5** Continue to remove directory numbers by repeating Step 2 through Step 4. When you finish removing directory numbers, click **View Secure DN**.

A list box displays the directory numbers that are protected. TAPS 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, TAPS will refuse the request.



**Note** The View Secure DN list box does not automatically refresh. If you want to see the latest list of secured directory numbers, click **Refresh List** to display an updated list.

---

- Step 6** Click **Exit**.
- 

### Related Topics

- [Securing TAPS, page 10-7](#)
- [Restricting Directory Numbers, page 10-8](#)
- [Resetting Directory Numbers, page 10-10](#)

- [Viewing a List of Restricted Directory Numbers, page 10-11](#)

## Resetting Directory Numbers

Use this procedure to reset the list of secured directory numbers. TAPS cannot use any directory number that has been specified in the list of secured directory numbers.

### Procedure

---

- Step 1** On the machine that is running BAT, choose **Start > Programs > Cisco CallManager 3.3> Bulk Admin Tool > Secure TAPS**.
- The Secure TAPS Directory Numbers window displays.
- Step 2** Click **Resetting DN**.
- A prompt indicates that no directory numbers will be secured from TAPS.
- Step 3** Click **Yes** to clear all directory numbers or click **No** to cancel the reset operation.
- A prompt advises you that the list of directory numbers protected from TAPS has been cleared.
- Step 4** Click **OK**.
- Using TAPS, configure TAPS, and secure TAPS, you can update every auto-registered phone with any directory number in the system. If you want to protect directory numbers, so they cannot be updated using TAPS, see [Restricting Directory Numbers, page 10-8](#).
- 

### Related Topics

- [Securing TAPS, page 10-7](#)
- [Restricting Directory Numbers, page 10-8](#)
- [Lifting the Restriction on a Directory Number, page 10-9](#)
- [Viewing a List of Restricted Directory Numbers, page 10-11](#)

## Viewing a List of Restricted Directory Numbers

Use this procedure to view a list of directory numbers that TAPS cannot access.

### Procedure

---

**Step 1** On the machine that is running BAT, choose **Start > Programs > Cisco CallManager 3.3 > Bulk Admin Tool > Secure TAPS**.

The Secure TAPS Directory Numbers window displays.

**Step 2** Click **View Secure DN**.

A list box displays. TAPS 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, TAPS will refuse the request.

**Step 3** Close the list box.

**Step 4** Click **Exit**.

---

### Related Topics

- [Securing TAPS, page 10-7](#)
- [Restricting Directory Numbers, page 10-8](#)
- [Lifting the Restriction on a Directory Number, page 10-9](#)
- [Resetting Directory Numbers, page 10-10](#)

## TAPS for End Users

Use this procedure to configure your new phone.

### Procedure

---

**Step 1** Plug the phone into a port.

The phone automatically registers and displays a number.

**Step 2** Dial the TAPS extension that is provided by your system administrator.

- Step 3** A voice prompts you to choose the language that you want to use. Choose appropriately.
- Step 4** Dial your personal extension number, provided by your system administrator, followed by #.



---

**Note** You may be instructed to enter the complete telephone number (including area code).

---

- Step 5** To confirm, enter your personal extension number again, followed by #.  
A confirmation displays.
- Step 6** Hang up the phone.  
The phone resets and displays your extension number.
- 

Contact your system administrator if you experience any problems.



# Troubleshooting BAT and TAPS

---

This chapter describes problems that you may encounter when you are using BAT or TAPS, provides the error messages, and suggests actions to help you resolve the problems.

## Related Topics

- [BAT Log Files](#)
- [Viewing BAT Log Files](#)
- [Troubleshooting BAT](#)
- [Troubleshooting TAPS on the Cisco CRA Server, page 11-6](#)

## BAT Log Files

BAT generates log files for each bulk transaction and stores the files on the publisher database server in the following location:  
C:\CiscoWebs\BAT\LogFiles\.

The log file also 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.

Clicking **View Latest Log File** link displays the summary view for the bulk transaction as well as the detail view for the failures.

**Caution**

Do not change screens while a transaction is processing. Doing so prevents the log file or status messages from displaying.

## Viewing BAT Log Files

To view the log file for the bulk operation, click **View Latest Log File** link on the BAT interface or go to the following location:

**C:\CiscoWebs\BAT\LogFiles\** directory

You can find the log files for the export utility at  
**C:\CiscoWebs\BAT\LogFiles\RBAT\** directory.

**Note**

The log file names designate the operation that was performed and the time that the operation ended.

The following timestamp format applies for the log file name: *mmddyyyyhhmmss*. File name represents the name of the CSV file used in the transaction.

[Table 11-1](#) shows examples of commands and log file names.

**Table 11-1 Log File Names**

Command	Log File Name	Example
Insert	File name#TimeStamp.log	File1#05022000133431
Update	UpdatePhone#TimeStamp.log	UpdatePhone#05022000133431
Delete	DeletePhone#TimeStamp.log	DeletePhone#05022000133431
Validate	Validate_File name_TimeStamp.txt	Validate_batphones_0502200013343

## Troubleshooting BAT

The following list describes some scenarios that could occur and provides possible resolutions.

**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 appear to do anything.

**Recommended Action** Click a blank cell. The button can appear to be disabled if the cursor is on the text in a cell or in the text box.

**Symptom** The page cannot be displayed.

**Explanation** Message can occur because of an unexpected termination of IIS Administrative service.

**Recommended Action** This indicates a display problem only. The process continues in the background. You can refer to the log file for transaction details.

**Symptom** Data files (CSV) format does not match Phone Template/Sample File.

**Explanation** The number of lines on the data file should exactly match the number of lines that are configured in the BAT phone template, but does not. For example, the phone template has four lines, and, of these, Lines 1, 3, and 4 are configured. You should use phone data file (in all the cases, there should be three fields):

1111,3333,4444 results in Line1-1111 Line2-None Line3-3333 Line4-4444

**Recommended Action** Check the BAT phone template that you intend to use. The number of lines that are specified on the CSV should exactly match the number of lines that are configured in the BAT phone template. Also, the number of speed dials that are specified in the CSV file should not exceed the maximum possible number of speed dials for the BAT phone template that you plan to use.

**Symptom** Errors occur when the dummy MAC address option is used.

**Explanation** Errors occur in the records for the dummy MAC addresses.

**Recommended Action** To map this symptom to the records that actually had the problem, you can see another generated file with the name *<Modified + DataFileName>#<TimeStamp>.dat* that shows the actual record with dummy MAC address. Access this file in the ...\\BAT\LogFiles folder.

**Symptom** Selected template does not contain DN details for directory number.

**Explanation** The Cisco VG200 template for FXS ports must specify a Gateway Directory Number template when directory numbers have been specified in the CSV file.

**Recommended Action** Specify a Gateway Directory Number template for FXS endpoint identifier(s).

**Symptom** Port identifier contains invalid endpoint prefix.

**Explanation** The port identifier value contains an invalid endpoint prefix or has not been configured in the BAT template. You must configure port identifier(s) in the BAT template before it can be specified in the CSV file. In the CSV file, the first digit of the endpoint prefix can be 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 (for sub-unit 0) or 101 through 124 (for sub-unit 1).

**Recommended Action** Correct the port identifier value in the CSV file or check the BAT template to be sure that ports have been configured.

**Symptom** Port identifier contains invalid port number.

**Explanation** The last two digits of the port identifier represent the port number. Port number must be between 01 and 24.

**Recommended Action** Correct the port number in the CSV file.

**Symptom** Port number not configured in the template.

**Explanation** Port number has been specified in the CSV file, 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** Port data in record number  $n$  does not match the corresponding sample file/number of lines and speed dials in chosen phone template.

**Explanation** The value in the specified record does not match the number of lines or speed dials in the corresponding BAT phone template.

**Recommended Action** Check the BAT phone template to determine where the mismatch between the CVS file and BAT template occurred and then correct the problem by adding or removing line details or speed dials in the CSV file or by configuring additional lines or speed dials in the BAT phone template.

**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** Same directory number cannot be assigned twice to a device in the same partition.

**Explanation** On any one phone, two lines cannot share the same directory number and partition.

**Recommended Action** In the CSV file, correct the record, so the same directory number and partition combination is specified for only one line.

**Symptom** Could not create user object. Check whether DC Directory is running.

**Explanation** DC Directory is not running, or it returned an error.

**Recommended Action** Choose **Start > Programs > Administrative Tools > Services** and check whether the service “DC Directory Server” is running. If it is not, start the service and return to BAT to proceed with the bulk transaction.

## Troubleshooting TAPS on the Cisco CRA Server

You may receive the following messages while running TAPS on the Cisco CRA server.

**Symptom** When the Cisco CRA server starts, the JTAPI subsystem shows partial service or out of service

**Explanation** Message occurs because of configuration problems in the Cisco CallManager.

**Recommended Action** Perform one or all of the following steps until the problem has been corrected:

- Verify that Cisco CallManager is started.
- Make sure that JTAPI is installed on the Cisco CRA server.
- Make sure that the Route Points and CTI ports are properly configured on the Cisco CallManager.

- Verify that the Enable CTI Application Use check box is checked for the JTAPI user; you can verify this in the user page in Cisco CallManager Administration.
- Verify that the directory numbers of the CTI ports are consecutive.
- Verify that the ports and the route point are associated to the user in the Cisco CallManager user configuration.

If JTAPI is still out of service after performing the preceding steps, open Cisco CallManager Administration and delete the CTI route point and CTI ports and users associated with Applications and TAPS. Then, reinstall Application and TAPS and use Cisco CallManager Administration to add the CTI route points, ports, and users again.

**Symptom** The following error message displays: Installed Cisco TAPS service could not be started. For troubleshooting refer to BAT online help. Aborting TAPS setup.

**Explanation** This error might occur while upgrading TAPS because TAPS upgrade does not ask for the latest password.

**Recommended Action** The administrator should check whether Cisco TAPS service can be started manually. If not, change the service log on and password using Administrative Tools > Services > Cisco TAPS. Then try reinstalling TAPS. If this does not help, uninstall, then reinstall TAPS.





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## A

### adding

- Catalyst 6000 FXS ports [7-19](#)
  - Catalyst 6000 FXS ports to Cisco CallManager [7-26](#)
  - IP services to phone template [3-6](#)
  - lines to existing phones [3-31](#)
  - lines to phone template [3-5](#)
  - manager assistant [6-11](#)
  - phones [3-24](#)
  - phone template [3-3](#)
  - speed dial settings to phone template [3-6](#)
  - user device profiles [5-1, 5-13](#)
  - users [4-1](#)
  - users to Cisco CallManager [4-8](#)
  - VG200 FXS or FXO gateways to Cisco CallManager [7-15](#)
  - VG200 gateways and ports [7-2](#)
  - VG200 T1-CAS, T1-PRI, or E1-PRI gateways to Cisco CallManager [7-15](#)
- auto-registration [9-1](#)

---

## B

### BAT

- browser requirements [1-3](#)
- default location of log files [8-14, 10-1](#)
- error messages [10-2](#)
- installation overview [2-1](#)
- installing [2-3](#)
- log files [10-1](#)
- logging on [1-4](#)
- online help [1-4](#)
- overview [1-1](#)
- specifications [1-2](#)
- starting [1-3](#)
- stopping [1-5](#)
- troubleshooting [10-1, 10-2](#)
- uninstalling [2-8](#)
- upgrading [2-2](#)
- using [1-3](#)
- version [1-4](#)
- viewing log files [10-2](#)

### BAT.xlt

- create CSV for CTI ports [3-9](#)
- create CSV for CTI ports-users [3-9](#)
- create CSV for H.323 clients [3-9](#)

- create CSV for H.323 clients-user [3-9](#)
- create CSV for manager assistant associations [6-5](#)
- create CSV for phones [3-9](#)
- create CSV for phones-users [3-9](#)
- create CSV for users [4-3, 4-13](#)
- create CSV for VGC phones [3-9](#)
- create CSV for VGC phones-users [3-9](#)
- create CSV for VGC virtual phones [3-9](#)
- create CSV for VGC virtual phones-users [3-9](#)
- creating Catalyst 6000 FXS ports [7-23](#)
- file location [2-3](#)
- browser requirements [1-3](#)

---

## C

### Cisco CallManager

- adding Catalyst 6000 FXS ports [7-26](#)
- adding CTI ports [3-24](#)
- adding H.323 clients [3-24](#)
- adding phones [3-24, 3-26](#)
- adding phones and users [3-26](#)
- adding users [4-8](#)
- adding VG200 FXS or FXO gateways [7-15](#)
- adding VG200 T1-CAS, T1-PRI, or E1-PRI gateways [7-15](#)
- adding VGC phones [3-24](#)
- auto-registration must be enabled for TAPS [9-1](#)

- Cisco Catalyst 6000 FXS ports
  - adding or updating ports [7-19](#)
  - adding ports [7-19](#)
  - adding to Cisco CallManager [7-26](#)
  - creating BAT template [7-20](#)
  - creating CSV file [7-21](#)
  - deleting ports [7-30](#)
  - deleting template [7-34](#)
  - field descriptions [7-57](#)
  - limit of 500 [7-23](#)
  - overview [7-1, 7-19](#)
  - updating [7-29](#)

### Cisco CRA

- required for TAPS [9-2](#)
- troubleshooting TAPS [10-6](#)
- uninstalling TAPS [2-9](#)
- uploading TAPS [2-7](#)

### Cisco IP IVR

- required for TAPS [9-2](#)

### Cisco VG200

- adding gateways and ports [7-2](#)
- adding to Cisco CallManager (FXS or FXO) [7-15](#)
- adding to Cisco CallManager (T1-CAS, T1-PRI, or E1-PRI) [7-15](#)
- configure using CLI prior to adding gateways in BAT [7-1](#)
- copying a template [7-16](#)
- creating a template [7-3](#)
- creating CSV file for FXS or FXO [7-7](#)

- creating CSV file for T1-CAS, T1-PRI, or E1-PRI [7-9](#)
- delete only selected gateways [7-17](#)
- deleting BAT template [7-34](#)
- deleting gateways [7-17](#)
- field descriptions for E1-PRI [7-44](#)
- field descriptions for FXO [7-37](#)
- field descriptions for FXS [7-35](#)
- field descriptions for T1-CAS [7-39](#)
- field descriptions for T1-PRI [7-44](#)
- overview [7-1](#)
- updating endpoint identifiers [7-7](#)
- Cisco VGC phones
  - adding VGC phones-users to Cisco CallManager [3-26](#)
  - adding VGC phone-users to Cisco CallManager [3-26](#)
  - creating CSV file [3-7](#)
  - updating phone records [3-32](#)
- Cisco VGC virtual phones
  - adding VGC virtual phones-users to Cisco CallManager [3-26](#)
  - adding VGC virtual phone-users to Cisco CallManager [3-26](#)
  - creating CSV file [3-7](#)
- CLI [7-1](#)
- Client Matter Codes
  - BAT considerations [7-3](#)
  - BAT settings for inserting CSV file (table) [7-16](#)
  - configuration checklist (table) [7-2](#)
  - creating a CSV file (BAT.xlt) [7-4](#)
  - creating custom CSV file (text-based) [7-5](#)
  - CSV file settings (table) [7-12](#)
  - deleting code settings (BAT) [7-8](#)
  - inserting CSV file in BAT [7-14](#)
  - updating existing CSV file [7-7](#)
- command line interface [7-1](#)
- configuring
  - user device profiles [5-1](#)
- copying
  - Catalyst 6000 FXS ports template [7-28](#)
  - gateway directory number template [7-33](#)
  - phone template [3-29](#)
  - VG200 template [7-16](#)
- create dummy MAC address [3-15](#), [3-25](#), [3-27](#)
- creating
  - Catalyst 6000 FXS ports template [7-20](#)
  - CSV file for Catalyst 6000 FXS ports [7-21](#)
  - CSV file for user device profile [5-4](#)
  - CSV file for VG200 FXS or FXO [7-7](#)
  - CSV file for VG200 T1-CAS, T1-PRI, or E1-PRI [7-9](#)
  - phone template [3-3](#)
  - template for gateway directory number [7-32](#)
  - user device profiles template [5-2](#)
  - VG200 template [7-3](#)
- CSV
  - Catalyst 6000 FXS ports [7-21](#)
  - creating a BAT.xlt for manager assistant associations [6-5](#)

- creating a BAT.xlt for users [4-3, 4-13](#)
- creating a text-based file for Catalyst 6000 FXS ports [7-25](#)
- creating a text-based file for manager assistant associations [6-8](#)
- creating a text-based file for phones, phones-users combination, IP telephony devices and IP telephony devices-users combination [3-16](#)
- creating a text-based file for update users [4-15](#)
- creating a text-based file for user device profiles [5-7](#)
- creating a text-based file for users [4-5](#)
- creating a text-based file for VG200 gateways and ports [7-12](#)
- creating custom manager assistant files [6-7](#)
- creating for user device profile [5-4](#)
- CTI ports [3-7](#)
- H.323 clients [3-7](#)
- manager assistant associations [6-4](#)
- no blank lines [3-11, 5-5](#)
- phone [3-7](#)
- required location for saving files [4-6, 4-16, 5-8, 6-9](#)
- retaining stored values [4-17](#)
- text file for phones [3-16, 7-12, 7-25](#)
- tips for creating text-based CSV for Manager-Assistant Association [6-10](#)
- tips for creating text-based CSV for user device profiles [5-9](#)
- tips for creating text-based CSV for user device profiles with two lines [5-10](#)
- tips for creating text-based CSV for users [4-7, 4-16](#)
- tips for creating text-based file for CTI Ports or CTI Ports-users [3-17](#)
- tips for creating text-based file for H.323 clients or H.323 clients-users, [3-17](#)
- tips for creating text-based file for phones, phones-users, IP telephony devices, or IP telephony devices-users [3-17](#)
- tips for creating text-based file for VGC phones or VGC phones-users [3-17](#)
- tips for creating text-based file for VGC virtual phones or VGC virtual phones-users, [3-17](#)
- using BAT.xlt for Catalyst 6000 FXS ports [7-23](#)
- using BAT.xlt for phones [3-9](#)
- using BAT.xlt for phone-user combination [3-9](#)
- using BAT.xlt for telephony devices [3-9](#)
- using BAT.xlt for telephony devices-user combination [3-9](#)
- using BAT.xlt for update users [4-12](#)
- using BAT.xlt for users [4-2](#)
- VG200 for FXS or FXO [7-7](#)
- VG200 for T1-CAS, T1-PRI, or E1-PRI [7-9](#)
- VGC phones [3-7](#)
- VGC virtual phones [3-7](#)
- CTI ports
  - adding CTI ports-users combination to Cisco CallManager [3-26](#)
  - associating new port to existing user [3-7](#)
  - creating CSV file [3-7](#)

- deleting [3-39](#)
- directory number must match number of lines in template [3-8](#)
- enable authentication proxy rights [3-28](#)
- enable CTI application use [3-24](#), [3-28](#)
- using BAT.xlt to create CSV [3-9](#)
- using BAT.xlt to create CSV for CTI ports-users combination [3-9](#)
- using dummy MAC address option [3-25](#), [3-27](#)

custom file

- deleting phones [3-39](#)
- updating phones [3-32](#)

---

## D

deleting

- assistants [6-18](#)
- Catalyst 6000 FXS ports [7-30](#)
- Catalyst 6000 FXS ports template [7-34](#)
- CTI ports [3-39](#)
- gateway directory number template [7-34](#)
- H.323 clients [3-39](#)
- IP telephony devices [3-39](#)
- manager assistant [6-15](#)
- managers [6-17](#)
- phones [3-39](#)
- phones using custom files [3-39](#)
- selected VG200 gateways [7-17](#)
- user device profiles [5-17](#)
- users [4-20](#)

- VG200 gateways [7-17](#)
- VG200 template [7-34](#)

directory number

- creating gateway template [7-32](#)
- securing from TAPS [9-7](#)

downloading

- phone configuration using TAPS [9-11](#)

dummy MAC address [3-15](#), [3-25](#), [3-27](#), [3-37](#)

---

## E

E1-PRI

- adding VG200 gateways to Cisco CallManager [7-15](#)
- creating the CSV file for VG200 gateways [7-9](#)
- field descriptions for VG200 [7-44](#)

enable authentication proxy rights

- adding users [4-9](#)
- for CTI ports and users [3-28](#)
- for phones and users [3-28](#)

enable CTI application use

- adding users [4-9](#)
- CTI ports [3-24](#)
- CTI ports and users [3-28](#)
- phones [3-24](#)
- phones and users [3-28](#)

endpoint identifiers, updating [7-7](#)

error messages, BAT [10-2](#)

## Exported Fields

- All Phone Details [8-6](#)

- All User Device Profile Details [8-12](#)

- Default Phone [8-5](#)

## exporting

- phone records [8-4](#)

- user device profile records [8-11](#)

- user records [8-8](#)

Export to BAT Format button does not work in  
BAT.xlt file [10-3](#)

---

**F**

## field descriptions

- adding or updating lines [3-51](#)

- adding or updating lines to UDP  
template [5-18](#)

- Catalyst 6000 FXS ports [7-57](#)

- gateway directory number template [7-59](#)

- ground start [7-37](#)

- loop start [7-37](#)

- phone template [3-42](#), [3-57](#)

- VG200 - E1-PRI [7-44](#)

- VG200 - FXO [7-37](#)

- VG200 - FXS [7-35](#)

- VG200 - T1-CAS [7-39](#)

- VG200 - T1-PRI [7-44](#)

## Forced Authorization Codes

- BAT considerations [7-3](#)

- BAT settings for inserting CSV file  
(table) [7-16](#)

- configuration checklist (table) [7-2](#)

- creating a CSV file (BAT.xlt) [7-4](#)

- creating custom CSV file (text-based) [7-5](#)

- CSV file settings (table) [7-12](#)

- deleting code settings (BAT) [7-8](#)

- inserting CSV file in BAT [7-14](#)

- updating existing CSV file [7-7](#)

## FXO

- adding VG200 gateways to Cisco  
CallManager [7-15](#)

- field descriptions [7-37](#)

## FXS

- adding Catalyst 6000 ports to Cisco  
CallManager [7-26](#)

- adding or updating ports for Catalyst 6000  
ports [7-19](#)

- adding VG200 gateways to Cisco  
CallManager [7-15](#)

- creating BAT template for Catalyst 6000  
ports [7-20](#)

- creating CSV file for Catalyst 6000  
ports [7-21](#), [7-23](#)

- creating CSV file for VG200 gateways [7-7](#)

- creating the CSV file for VG200  
gateways [7-7](#)

- deleting Catalyst 6000 ports [7-30](#)

- field descriptions for Catalyst 6000  
ports [7-57](#)

field descriptions for VG200 [7-35](#)  
 updating Catalyst 6000 ports [7-29](#)

---

## G

### gateway

Cisco Catalyst 6000 FXS ports [7-1](#)  
 Cisco VG200 overview [7-1](#)

### gateway directory number

copying template [7-33](#)  
 deleting template [7-34](#)  
 field descriptions for template [7-59](#)  
 template [7-32](#)

### gateway directory number template

required if you specified directory numbers [7-32](#)

### ground start, field descriptions [7-37](#)

---

## H

### H.323 clients

adding H.323 Client-users to Cisco CallManager [3-26](#)  
 creating CSV file [3-7](#)  
 deleting [3-39](#)

### halting TAPS [9-7](#)

### help [1-4](#)

---

### installing

BAT/TAPS [2-3](#)  
 BAT/TAPS prerequisites [2-3](#)  
 completing TAPS installation [2-7](#)  
 no backward template migration [2-2](#)  
 no template migration when upgrading from release 3.0(3) [2-2](#)  
 overview [2-1](#)  
 TAPS [2-5](#)  
 TAPS after BAT has already been installed [2-5](#)  
 TAPS prerequisites [2-5](#)  
 template migration during upgrade [2-2](#)

### instructions, TAPS for end-users [9-11](#)

### IPMA

adding manager assistant [6-11](#)  
 BAT.xlt [6-5](#)  
 creating CSV file [6-4](#)  
 creating custom manager assistant files [6-7](#)  
 creating text-based CSV file [6-8](#)  
 deleting assistants [6-18](#)  
 deleting manager assistant [6-15](#)  
 deleting managers [6-17](#)  
 manager and assistant line configurations [6-12](#)  
 setting up phones and Lines [6-1](#)

- 
- ## L
- lines
    - adding or updating [3-5](#)
    - field descriptions for adding or updating [3-51](#)
    - field descriptions for adding or updating to UDP template [5-18](#)
    - maximum number [3-5](#)
    - updating [3-35, 5-15, 5-16](#)
  - log files
    - BAT [10-1](#)
    - explanation of file naming convention [8-14, 10-2](#)
    - export log files [8-14](#)
    - viewing [10-2](#)
  - logging on to BAT [1-4](#)
  - loop start,field descriptions [7-37](#)
- 
- ## M
- MAC address
    - dummy MAC address [3-37](#)
    - generate a list of phones with dummy [3-37](#)
  - module in slot [7-4](#)
- 
- ## N
- NM-1V [7-4](#)
  - NM-2V [7-4](#)
  - NM-HDV [7-4](#)
- 
- ## O
- overview
    - adding or updating FXS ports for Catalyst 6000 modules [7-19](#)
    - adding VG200 gateways and ports [7-2](#)
    - BAT [1-1](#)
    - Catalyst 6000 FXS ports [7-19](#)
    - creating CSV files for FXS ports on Catalyst 6000 modules [7-21](#)
    - gateway directory number [7-31](#)
    - TAPS [9-1, 9-2](#)
    - working with gateways and ports [7-1](#)
- 
- ## P
- phone
    - adding a template [3-3](#)
    - adding lines to existing phones [3-31](#)
    - adding or updating IP services [3-6](#)
    - adding or updating lines [3-5](#)
    - adding or updating speed dial settings [3-6](#)
    - adding phones-users combination to Cisco CallManager [3-26](#)
    - adding to Cisco CallManager [3-24, 3-26](#)
    - BAT reaction if line information fails during insert [3-29](#)
    - copying a template [3-29](#)
    - creating CSV file [3-7](#)
    - CSV text file [3-16, 7-12, 7-25](#)
    - deleting [3-39](#)

- deleting templates [3-41](#)
- enable authentication proxy rights [3-28](#)
- enable CTI application use [3-24, 3-28](#)
- exporting records [8-4](#)
- field descriptions for phone template [3-42, 3-57](#)
- generate a list of phones with dummy MAC addresses [3-37](#)
- updating [3-32](#)
- updating lines [3-35, 5-15, 5-16](#)
- using BAT.xlt to create CSV for phone [3-9](#)
- using dummy MAC address option [3-15, 3-25, 3-27](#)

ports adding VG200 [7-2](#)

prerequisites

- BAT/TAPS [2-3](#)
- TAPS [2-5](#)

---

## Q

query

- updating lines [3-35, 5-15, 5-16](#)
- updating phones [3-32](#)

---

## R

- removing user device profiles [5-17](#)
- repository manager [2-7](#)
- reset devices after update [3-34](#)
- restart devices after update [3-34](#)

---

## S

- secure TAPS [9-7](#)
- securing directory numbers from TAPS [9-7](#)
- services, adding or updating [3-6](#)
- specifications [1-2](#)
- speed dial settings, adding or updating [3-6](#)
- starting
  - BAT [1-3](#)
  - TAPS [9-6](#)
- stopping
  - BAT [1-5](#)
  - TAPS [9-7](#)
- sub-unit [7-4](#)

---

## T

### T1-CAS

- adding VG200 gateways to Cisco CallManager [7-15](#)
- creating the CSV file for VG200 gateways [7-9](#)
- field descriptions for VG200 [7-39](#)

### T1-PRI

- adding VG200 gateways to Cisco CallManager [7-15](#)
- creating the CSV file for VG200 gateways [7-9](#)
- field descriptions for VG200 [7-44](#)

## TAPS

- auto-registration must be enabled [9-1](#)
- Cisco CRA required [9-2](#)
- Cisco IP IVR required [9-2](#)
- completing installation [2-7](#)
- completing uninstallation [2-9](#)
- configuring [9-3](#)
- halting [9-7](#)
- installing [2-3, 2-5](#)
- installing once BAT is already installed [2-5](#)
- instructions for end-users [9-11](#)
- overview [9-1, 9-2](#)
- securing directory numbers [9-7](#)
- starting [9-6](#)
- stopping [9-7](#)
- taps.aef [2-7](#)
- troubleshooting [10-1, 10-6](#)
- troubleshooting on the Cisco CRA server [10-6](#)
- uninstalling [2-8](#)
- uploading to Cisco CRA Administration server [2-7](#)
- version [1-5](#)
- taps.aef [2-7](#)
- template
  - adding or updating IP services [3-6](#)
  - adding or updating lines [3-5](#)
  - adding or updating speed dial settings [3-6](#)
  - BAT.xlt file location [2-3](#)
  - copying Catalyst 6000 FXS ports [7-28](#)
  - copying gateway directory number [7-33](#)
  - copying phone [3-29](#)
  - copying VG200 [7-16](#)
  - creating Catalyst 6000 FXS ports [7-20](#)
  - creating VG200 [7-3](#)
  - deleting Catalyst 6000 FXS ports [7-34](#)
  - deleting gateway directory number [7-34](#)
  - deleting phone [3-41](#)
  - deleting VG200 [7-34](#)
  - field descriptions for adding or updating lines [3-51](#)
  - field descriptions for adding or updating lines to UDP template [5-18](#)
  - field descriptions for Catalyst 6000 ports [7-57](#)
  - field descriptions for gateway directory number [7-59](#)
  - field descriptions for phone [3-42, 3-57](#)
  - field descriptions for VG200 - E1-PRI or T1-PRI [7-44](#)
  - field descriptions for VG200 - FXO [7-37](#)
  - field descriptions for VG200 - FXS [7-35](#)
  - field descriptions for VG200 - T1-CAS [7-39](#)
  - gateway directory number [7-32](#)
  - gateway directory number is required if you specified directory numbers [7-32](#)
  - migration during upgrade [2-2](#)
  - no backward migration [2-2](#)
  - overview of gateway directory number [7-31](#)
  - phone [3-3](#)
  - user device profiles [5-2](#)

## troubleshooting

- BAT [10-2](#)
- BAT and TAPS [10-1](#)
- couldn't create user object. Check if DC Directory is running [10-6](#)
- data files (CSV) format do not match phone template/sample file [10-3](#)
- errors occur when using the dummy MAC address option [10-4](#)
- Export to BAT Format button does not work in BAT.xlt file [10-3](#)
- MAC address values are not allowed in the file if dummy MAC address values are desired [10-5](#)
- port data in record number n does not match the corresponding sample file/number of lines and speed dials in phone template chosen [10-5](#)
- port identifier contains invalid endpoint prefix [10-4](#)
- port identifier contains invalid port number [10-4](#)
- port number not configured in the template [10-5](#)
- same directory number cannot be assigned twice to a device in the same partition [10-6](#)
- selected template does not contain DN details for directory number [10-4](#)
- TAPS [10-6](#)
- TAPS on the Cisco CRA server [10-6](#)
- the page cannot be displayed [10-3](#)
- when the Cisco CRA server starts, the JTAPI subsystem shows partial service or out of service [10-6](#)

## U

## uninstalling

- BAT/TAPS [2-8](#)
- removing TAPS from Cisco CRA Administration server [2-9](#)

## update users

- creating CSV file [4-12](#)
- creating text-based CSV file [4-15](#)

## updating

- Catalyst 6000 FXS ports [7-19, 7-29](#)
- endpoint identifiers [7-7](#)
- lines [3-35, 5-15, 5-16](#)
- lines for phone template [3-5](#)
- phone configuration using TAPS [9-11](#)
- phones [3-32](#)
- services to phone template [3-6](#)
- speed dial settings to phone template [3-6](#)
- users [4-12](#)
- VGC phones [3-32](#)

upgrading BAT [2-2](#)uploading TAPS to the Cisco CRA Administration server [2-7](#)

## user

- exporting records [8-8](#)
- using BAT.xlt for phone-user combination [3-9](#)

## user device profiles

- adding [5-1, 5-13](#)
- configuring [5-1](#)

- creating a template [5-2](#)
- creating text-based CSV file [5-7](#)
- CSV file [5-4](#)
- deleting [5-17](#)
- exporting records [8-11](#)
- inserting [5-13](#)
- removing [5-17](#)
- users
  - adding [4-1](#)
  - adding to Cisco CallManager [4-8](#)
  - BAT.xlt [4-3](#), [4-13](#)
  - creating CSV file [4-2](#)
  - creating text-based CSV file [4-5](#)
  - deleting [4-20](#)
  - updating [4-12](#)
  - using BAT.xlt for phone-user combination [3-9](#)
- VVIC-2MFT-E1 [7-5](#)
- VVIC-2MFT-T1 [7-4](#)

---

## V

- validate
  - phone records [3-22](#)
  - user device profiles [5-12](#)
- version [1-4](#), [1-5](#)
- VIC-2FXO [7-4](#)
- VIC-2FXS [7-4](#)
- Viewing log files [10-2](#)
- VVIC-1MFT-E1 [7-5](#)
- VVIC-1MFT-T1 [7-4](#)