



Bulk Administration Tool User Guide

Release 4.3(1)

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Bulk Administration Tool User Guide

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- Purpose **vii**
- Audience **vii**
- Organization **viii**
- Related Documentation **viii**
- Conventions **ix**
- Obtaining Documentation **x**
 - World Wide Web **x**
 - Documentation CD-ROM **xi**
 - Ordering Documentation **xi**
 - Documentation Feedback **xii**
- Obtaining Technical Assistance **xii**
 - Cisco.com **xii**
 - Technical Assistance Center **xiii**
 - Contacting TAC by Using the Cisco TAC Website **xiii**
 - Contacting TAC by Telephone **xiv**

CHAPTER 1

Overview 1-1

- BAT Specifications **1-3**
- Using BAT **1-4**
 - Starting BAT **1-4**
 - Logging On to BAT **1-5**
 - Obtaining Online Help **1-5**
 - Finding the BAT Version **1-5**
 - Finding the TAPS Version **1-6**
 - Stopping BAT **1-6**

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, CTI Ports, and User Combinations 3-1

- Adding Phones or CTI Ports 3-2
 - Creating a BAT Phone Template 3-3
 - Adding or Updating Lines to a BAT Phone Template 3-4
 - Adding or Updating Services to a BAT Phone Template 3-5
 - Adding or Updating Speed Dials to a BAT Phone Template 3-6
 - Creating CSV Files for Phones, Phones and Users, CTI Ports, and CTI Ports and Users 3-7
 - Understanding the BAT.xlt File 3-8
 - Creating a CSV File for Phones, Phones/Users, CTI Ports-Users, or CTI Ports Using BAT.xlt 3-9
 - Creating a Text-Based CSV Text File 3-13
 - Adding Phones or CTI Ports to Cisco CallManager 3-18
 - Adding Phones and Users or CTI Ports and Users to Cisco CallManager 3-20
- Copying a BAT Phone Template 3-23
- Updating Phone Records 3-25
- Updating Lines 3-27
- Viewing a List of Phones with Dummy MAC Addresses 3-29
- Viewing a List of Devices 3-30
- Deleting Phones 3-31
- Deleting Templates 3-32

Field Descriptions 3-34

Field Descriptions for Adding a BAT Phone Template 3-34

Field Descriptions for Adding a Line to a BAT Phone Template 3-41

Field Descriptions for Updating Lines 3-45

Field Descriptions for Update Phones 3-47

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 4-10

Creating the CSV File for Updating Users 4-11

Creating a CSV File for Updating Users Using BAT.xlt 4-12

Creating a Text-Based CSV File for Updating Users 4-14

Updating Users to Cisco CallManager 4-17

Deleting Users 4-18

Deleting Users from Cisco CallManager 4-19

CHAPTER 5**Working with User Device Profiles 5-1****Configuring User Device Profiles 5-2**

Creating a Template for Inserting User Device Profiles 5-2

Creating a CSV File for User Device Profiles 5-4

Creating a Text-Based CSV File for User Device Profile 5-7

Inserting User Device Profiles 5-10

Deleting User Device Profiles 5-11

Field Descriptions for Adding a Line to a UDP Template 5-13

Working With Gateways and Ports 6-1

- Cisco VG200 Gateways and Ports **6-2**
 - Adding Cisco VG200 Gateways and Ports **6-2**
 - Creating a Cisco VG200 Gateway Template **6-3**
 - Updating the Endpoint Identifiers for Cisco VG200 Gateway **6-7**
 - Creating CSV Files for Cisco VG200 FXS or FXO Gateways **6-8**
 - Creating CSV Files for Cisco VG200 T1-CAS, T1-PRI, or E1-PRI Gateways **6-10**
 - Creating a Text-Based CSV Text File **6-13**
 - FXO or FXS Trunks **6-14**
 - T1-CAS, T1-PRI, or E1-PRI Trunks **6-16**
 - Adding Cisco VG200 Gateways to Cisco CallManager **6-17**
 - Copying a Cisco VG200 BAT Template **6-19**
 - Deleting Cisco VG200 Gateways **6-20**
- Cisco Catalyst 6000 24 Port FXS Analog Interface Module Ports **6-21**
 - Adding or Updating Ports to Cisco Catalyst 6000 24 Port FXS Analog Interface Module Gateways **6-22**
 - Creating a Cisco Catalyst 6000 (FXS) Ports Template **6-23**
 - Creating CSV Files for Cisco Catalyst 6000 (FXS) ports **6-24**
 - Using the Cisco Catalyst 6000 (FXS) Ports tab in BAT.xlt **6-26**
 - Creating a Text-Based CSV Text File **6-28**
 - Adding Cisco Catalyst 6000 (FXS) Ports to Cisco CallManager **6-29**
 - Copying a Cisco Catalyst 6000 FXS Ports BAT Template **6-31**
 - Updating Cisco Catalyst 6000 24 Port FXS Analog Interface Module Ports in Cisco CallManager **6-32**
 - Deleting All Ports for Cisco Catalyst 6000 24 Port FXS Analog Interface Module Gateway **6-35**
- Gateway Directory Number **6-36**
 - Creating a Gateway Directory Number Template **6-36**
 - Copying a Gateway Directory Number BAT Template **6-37**

Deleting Templates [6-38](#)

Field Descriptions [6-39](#)

Field Descriptions for FXS Trunks on a Cisco VG200 Gateway [6-40](#)

Field Descriptions for FXO Trunks on a Cisco VG200 Gateway [6-42](#)

Field Descriptions for T1-CAS Trunks on a Cisco VG200 Gateway [6-45](#)

Fields Descriptions for T1-CAS Ports [6-48](#)

Field Descriptions for T1-PRI or E1-PRI Trunks on a Cisco VG200 Gateway [6-51](#)

Field Descriptions for FXS Ports on a Cisco Catalyst 6000 24 Port Analog Interface Module [6-64](#)

Field Descriptions for Gateway Directory Number Template [6-66](#)

CHAPTER 7

Working With TAPS [7-1](#)

Configuring TAPS [7-3](#)

Allowing TAPS to Update Any Cisco IP Phone Added Using Auto-Registration [7-4](#)

Restricting TAPS to Update Only Cisco IP Phones Added Using the Dummy MAC Address Option in BAT [7-5](#)

Starting TAPS [7-6](#)

Stopping TAPS [7-7](#)

Securing TAPS [7-7](#)

Restricting Directory Numbers [7-8](#)

Lifting the Restriction on a Directory Number [7-9](#)

Resetting Directory Numbers [7-10](#)

Viewing a List of Restricted Directory Numbers [7-11](#)

TAPS for End Users [7-12](#)

CHAPTER 8

Troubleshooting BAT and TAPS [8-13](#)

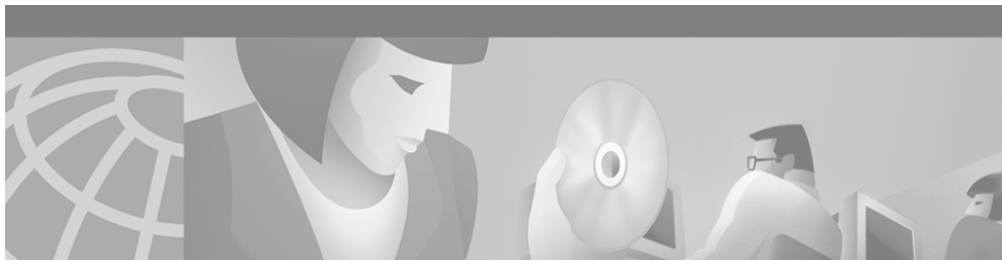
BAT Log Files [8-13](#)

Viewing BAT Log Files [8-14](#)

Troubleshooting BAT [8-15](#)

Troubleshooting TAPS on the Cisco CRA Server [8-19](#)

INDEX



Preface

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

The preface covers these topics:

- [Purpose, page vii](#)
- [Audience, page vii](#)
- [Organization, page viii](#)
- [Related Documentation, page viii](#)
- [Conventions, page ix](#)
- [Obtaining Documentation, page x](#)
- [Obtaining Technical Assistance, page xii](#)

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

This guide is organized as follows:

Table 1 This table shows you the 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 TAPS.
Chapter 3, “ Working with Phones, CTI Ports, and User Combinations ”	Describes how to add phones, phones and users, 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 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 Gateways and Ports ”	Describes how to add, update, or delete Cisco VG200 gateways and ports, how to add or delete 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 7, “ Working With TAPS ”	Describes how to use and configure TAPS.
Chapter 8, “ Troubleshooting BAT and TAPS ”	Describes some common scenarios for bulk transaction log files and provides an explanation and resolution for various error messages 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*
- Release Notes for Cisco CallManager Release 3.2(1) or later

- *Installing Cisco CallManager Release 3.2*
- *Serviceability Administration Guide*
- *Hardware Configuration Guide for the Cisco VG200*
- *Software Configuration Guide for the Cisco VG 200*
- *Cisco IP Phone Administration Guide for Cisco CallManager*

Conventions

This document uses the following conventions:

Convention	Description
boldface font	Commands and keywords are in boldface .
<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.
boldface screen font	Information you must enter is in boldface screen font .

Notes use the following conventions:



Note

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



Timesaver

Timesavers use the following conventions:

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

Tips use the following conventions:



Tip

Means *the information contains useful tips.*

Cautions use the following conventions:



Caution

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

Warnings use the following conventions:



Warning

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

Obtaining Documentation

The following sections provide sources for obtaining documentation from Cisco Systems.

World Wide Web

You can access the most current Cisco documentation on the World Wide Web at the following sites:

- <http://www.cisco.com>
- <http://www-china.cisco.com>
- <http://www-europe.cisco.com>

Documentation CD-ROM

Cisco documentation and additional literature are available in a CD-ROM package, which ships with your product. The Documentation CD-ROM is updated monthly and may be more current than printed documentation. The CD-ROM package is available as a single unit or as an annual subscription.

Ordering Documentation

Cisco documentation is available in the following ways:

- Registered Cisco Direct Customers can order Cisco Product documentation from the Networking Products MarketPlace:
http://www.cisco.com/cgi-bin/order/order_root.pl
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We appreciate your comments.

Obtaining Technical Assistance

Cisco provides Cisco.com as a starting point for all technical assistance. Customers and partners can obtain documentation, troubleshooting tips, and sample configurations from online tools. For Cisco.com registered users, additional troubleshooting tools are available from the TAC website.

Cisco.com

Cisco.com is the foundation of a suite of interactive, networked services that provides immediate, open access to Cisco information and resources at anytime, from anywhere in the world. This highly integrated Internet application is a powerful, easy-to-use tool for doing business with Cisco.

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Customers and partners can self-register on Cisco.com to obtain additional personalized information and services. Registered users can order products, check on the status of an order, access technical support, and view benefits specific to their relationships with Cisco.

To access Cisco.com, go to the following website:

<http://www.cisco.com>

Technical Assistance Center

The Cisco TAC website is available to all customers who need technical assistance with a Cisco product or technology that is under warranty or covered by a maintenance contract.

Contacting TAC by Using the Cisco TAC Website

If you have a priority level 3 (P3) or priority level 4 (P4) problem, contact TAC by going to the TAC website:

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

P3 and P4 level problems are defined as follows:

- P3—Your network performance is degraded. Network functionality is noticeably impaired, but most business operations continue.
- P4—You need information or assistance on Cisco product capabilities, product installation, or basic product configuration.

In each of the above cases, use the Cisco TAC website to quickly find answers to your questions.

To register for Cisco.com, go to the following website:

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

If you cannot resolve your technical issue by using the TAC online resources, Cisco.com registered users can open a case online by using the TAC Case Open tool at the following website:

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

Contacting TAC by Telephone

If you have a priority level 1 (P1) or priority level 2 (P2) problem, contact TAC by telephone and immediately open a case. To obtain a directory of toll-free numbers for your country, go to the following website:

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

P1 and P2 level problems are defined as follows:

- P1—Your production network is down, causing a critical impact to business operations if service is not restored quickly. No workaround is available.
- P2—Your production network is severely degraded, affecting significant aspects of your business operations. No workaround is available.



Overview

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, Cisco VG200 gateways and ports, and ports on a Cisco Catalyst 6000 FXS analog interface module to the Cisco CallManager database. 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.

BAT Release 4.3(1) allows you to associate users and devices to different languages in accordance with the multilingual support of Cisco CallManager Release 3.2(1).

While BAT is particularly helpful when adding a batch of new devices or users, you can also use it to update or delete existing devices. For example, you have recently upgraded to Cisco CallManager Release 3.1(1) and plan to utilize the extension mobility feature to all users in your enterprise. Extension mobility lets a user download their phone profile to any Cisco IP Phone model 7960 or 7940 in the same cluster. So, in a group of traveling sales people, you may allocate one office to ten salespeople. Each time one of the sales people returns to the office, he or she can log into the phone and download his or her device profile. This enables a Cisco IP Phone 7960 or 7940 to temporarily become that user's standard phone, providing all the same services and features that the user had previously configured. The user's subscribed services are available, and he or she can press the messages button to be connected to voice mail, and use his or her speed dials.

You can use BAT to update all Cisco IP Phone models 7960 and 7940 in your enterprise, so they are enabled for extension mobility. You can make this update quickly and with minimal effort.

1. Run a query in BAT to locate all Cisco IP Phone models 7960 and 7940. (**Configure > Phones > click the link to Update Phones**).
2. Set the Extension Mobility parameter to 1=On, click the Restart Devices check box, and click Run.

This process enables extension mobility for all devices that can support it. The extension mobility feature, which only works on Cisco IP Phone models 7960 and 7940, requires configuration on the Cisco Customer Response Application, configuration in Cisco CallManager, and a logon XML service. For more information about extension mobility requirements and configuration, as well as about Cisco IP phone services, refer to the *Cisco CallManager Administration System Guide*.

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 7-12](#) for more information.

Related Topics

- [BAT Specifications, page 1-3](#)
- [Using BAT, page 1-4](#)
- [Starting BAT, page 1-4](#)
- [Stopping BAT, page 1-6](#)

BAT Specifications

The following specifications apply to BAT Release 4.3(1):

- BAT Release 4.3(1) is compatible with Cisco CallManager Release 3.2(1).
- You must install BAT on the same server as the Publisher database for Cisco CallManager.
- The BAT application, along with the Tool for Auto-Registered Phones Support (TAPS) application, uses approximately 27 MB of disk space for the applications and the online documentation.
- 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 1-4](#)
- [Starting BAT, page 1-4](#)
- [Finding the BAT Version, page 1-5](#)

Using BAT

BAT, a web-based application, requires Internet Explorer 4.01 Service Pack 2 or later or Netscape 4.5 or later, with the exception of Netscape 6.0, which is not supported. Cisco CallManager Administration provided 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.

Related Topics

- [Starting BAT, page 1-4](#)
- [Finding the BAT Version, page 1-5](#)

Starting BAT

Start BAT from Cisco CallManager Administration (**Application** > **BAT**), the Start menu (**Start** > **Program** > **Cisco CallManager 3.2** > **Bulk Admin Tool** > **BAT 4.3**), 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 click **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 the Publisher database server.

Related Topics

- [Using BAT, page 1-4](#)
- [Stopping BAT, page 1-6](#)

Obtaining Online Help

To access BAT online, click 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 on 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 Topics

- [Finding the BAT Version, page 1-5](#)

Finding the BAT Version

You can find the current version of BAT by clicking **Help > About Bulk Administration Tool** and clicking the **Details** button.

Related Topic

- [Obtaining Online Help, page 1-5](#)

Finding the TAPS Version

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

Related Topic

- [Obtaining Online Help, page 1-5](#)

Stopping BAT

BAT provides a tool to stop BAT transactions if they are in progress. This capability can be useful when you have started a BAT transaction but are noticing 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 the wrong transaction has been started or if you need to make additional changes before running the transaction.

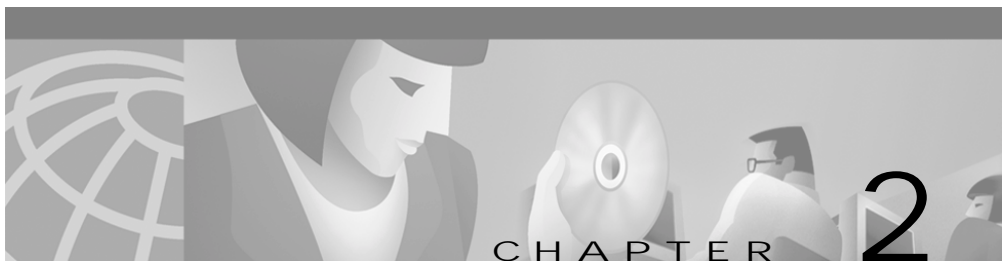
You can access the Stop BAT feature only from the Publisher database server. Stop BAT does not halt the BAT process immediately because it can take some time to stop the transaction.

To stop BAT, choose **Start > Programs > Cisco CallManager 3.2 > Bulk Admin Tool > Stop BAT**.

View the log file for details about how many records that were processed passed or failed. See [Chapter 7, “Troubleshooting BAT and TAPS”](#), for information on log files.

Related Topic

- [Starting BAT, page 1-4](#)



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 during BAT installation. The second part requires installation on the Cisco Customer Response Applications (CRA) server.

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 once the installation is complete.

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



Note

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

**Note**

BAT does not support backward template migration: If you have installed BAT Release 4.3(1) or BAT Release 4.2(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 4.2(1), 4.1(1), or 4.0(1).

Related Topics

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

Upgrading BAT

You can upgrade to BAT Release 4.3(1) from any previous BAT release, but only upgrades from BAT Release 4.2(1), 4.1(1), or 4.0(1) provide template migration. BAT automatically migrates existing BAT templates. Although default values are automatically provided, product-specific configuration for phones and gateways remain 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, will be left blank. Fields in which you had 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 4.3(1).

**Note**

If you are currently using BAT Release 3.0(3), you can upgrade to Release 4.3(1), but the upgrade provides no template migration.

Installing BAT/TAPS

**Note**

TAPS represents an optional component of BAT. Use the following steps whether or not you plan to install TAPS.

The BAT installation process includes BAT Excel template files that are located in the following default location: C:\CiscoWebs\BAT\ExcelTemplate. Because you are unlikely to have Microsoft Excel installed on the Publisher database server, copy and paste these templates to where you have Microsoft Excel installed, and use the templates from that location.

Before You Begin

The following prerequisites apply to the BAT/TAPS installation for BAT Release 4.3(1):

- Make sure BAT/TAPS is installed on the server running the Publisher database for Cisco CallManager.
- If you plan to install TAPS, you must also have purchased and configured a Cisco Customer Response Applications (CRA) server.

Perform the following steps to install BAT (and TAPS, if desired).

Procedure

-
- Step 1** Log on with administrator privileges to the system running the Publisher database for Cisco CallManager.
- Step 2** Choose **Applications > Install Plugins**.
The Install Plugins window displays.
- Step 3** Find 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 **Yes** to reinstall BAT or to upgrade from a previous version.



Note You can upgrade to BAT Release 4.3(1) from Release 4.2(1), Release 4.0(1), or 4.1(1), 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 Choose Destination Folder 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.
- Step 7** The configuration and target location information displays. Confirm that this information is correct and then click **Next**.
Setup begins copying files.
- Step 8** 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 7, “Working With TAPS”](#), for more information.
Click **Yes** to install TAPS or **No** to skip TAPS installation. If you clicked **No**, skip to [Step 10](#).
- Step 9** The Tool for Auto-Registered Phones Support Setup window displays. Click **Next**.
If this is a fresh install, the password window displays. If this is an upgrade, no password prompt appears, so skip to [Step 11](#).
- Step 10** Enter the administrator password for the Publisher server and click **Next**.
Setup begins copying files.
- Step 11** 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 12 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. See Step 2 in the [“Installing TAPS” section on page 2-5](#) for instructions.

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 running the Publisher database for Cisco CallManager. The second part installs on the Cisco Customer Response Applications (CRA) server. See [Installing BAT/TAPS, page 2-3](#), for more information about the BAT installation process.

Before You Begin

The following prerequisites apply to the TAPS installation for BAT Release 4.3(1):

- Make sure 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.

Perform the following steps to complete the TAPS installation.

Procedure

- Step 1** Perform the steps in [Installing BAT/TAPS, page 2-3](#), and choose **Yes** to install TAPS (**Step 8**).
- The system copies all TAPS files onto the server running the Publisher database.
- Step 2** Log on with administrator privileges to the system 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, page 2-7](#), for instructions.
-

Uploading TAPS to the Cisco CRA Server

TAPS requires uploading a file to the Cisco CRA server. Perform the following steps.

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 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 once 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 template files 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 running the Publisher database for Cisco CallManager, you must complete the uninstallation of TAPS on the Cisco CRA server.

Perform the following steps to uninstall BAT.

Procedure

- Step 1** On the server running the Publisher database for Cisco CallManager, choose **Start > Programs > Cisco CallManager 3.2 > 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** BAT and the first part of TAPS have been uninstalled. To completely remove TAPS, you must also perform the steps in the [“Completing TAPS Uninstallation” section on page 2-9](#).
-

Related Topics

- [Installing BAT/TAPS, page 2-3](#)
- [Chapter 7, “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 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 Topics

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



Working with Phones, CTI Ports, and User Combinations

BAT allows you to bulk-add, bulk-update, or bulk-delete large numbers of phones, CTI ports, and user combinations such as phones and users or CTI ports and users.

Related Topics

- [Adding Phones or CTI Ports, page 3-2](#)
- [Creating a BAT Phone Template, page 3-3](#)
- [Creating CSV Files for Phones, Phones and Users, CTI Ports, and CTI Ports and Users, page 3-7](#)
- [Adding Phones or CTI Ports to Cisco CallManager, page 3-18](#)
- [Adding Phones and Users or CTI Ports and Users to Cisco CallManager, page 3-20](#)
- [Viewing a List of Phones with Dummy MAC Addresses, page 3-29](#)
- [Updating Phone Records, page 3-25](#)
- [Deleting Phones, page 3-31](#)
- [Deleting Templates, page 3-32](#)
- [Field Descriptions, page 3-34](#)

Adding Phones or CTI Ports

You can use BAT to add Cisco IP phones 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 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.

To add phones to the Cisco CallManager database in bulk, you must perform these steps:

1. Create a BAT phone template to define common values for a set of phones. You can specify services, speed dials, and lines.
2. Create a comma separated values (CSV) file to define individual values for each phone that you want to add. We recommend that you create the CSV file using the Excel file, **BAT.xlt**.
3. Insert the BAT template and CSV file to add the phones or phone/user combination to the Cisco CallManager database.
4. Plug in the phones and apply power.
5. (Optional) Update the phones using TAPS if you created dummy MAC addresses in the CSV file. You must make sure auto-registration is enabled in Cisco CallManager to use this feature.

Related Topics

- [Chapter 7, “Working With TAPS”](#)
- [Creating a BAT Phone Template, page 3-3](#)
- [Creating CSV Files for Phones, Phones and Users, CTI Ports, and CTI Ports and Users, page 3-7](#)
- [Adding Phones or CTI Ports to Cisco CallManager, page 3-18](#)
- [Adding Phones and Users or CTI Ports and Users to Cisco CallManager, page 3-20](#)

Creating a BAT Phone Template

The BAT phone template and CSV file work together in bulk transactions. Based on the type of phone that you want to add in a batch, you can create a template that has features that are common to all the phones 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, Phones and Users, CTI Ports, and CTI Ports and Users”](#) 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 adding a phone in Cisco CallManager Administration. However, you must use the BAT phone template when performing bulk operations in BAT.

Prerequisite

Prior to creating the template, make sure phone settings such as device pool, location, calling search space, and button template have already been configured in Cisco CallManager Administration. You cannot create new settings in BAT.

To create the phone template, perform the following steps. 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, page 3-4](#).

Procedure

-
- Step 1** Start BAT. (See [Starting BAT, page 1-4](#).)
 - 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, page 3-34](#), for more information.

- Step 4** To create the BAT phone template, click **Insert**.
- Step 5** Click **Insert**.
- Step 6** Once the status indicates the insert 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 3-4.
-

Related Topics

- [Adding or Updating Lines to a BAT Phone Template, page 3-4](#)
- [Adding or Updating Services to a BAT Phone Template, page 3-5](#)
- [Adding or Updating Speed Dials to a BAT Phone Template, page 3-6](#)
- [Creating CSV Files for Phones, Phones and Users, CTI Ports, and CTI Ports and Users, page 3-7](#)
- [Copying a BAT Phone Template, page 3-23](#)

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 1-4](#).)
- 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 you chose when creating the BAT phone template.

- Step 5** Enter or choose the appropriate values for the line settings described in [Field Descriptions for Adding a Line to a BAT Phone Template, page 3-41](#). Remember that all phones in this batch will use the settings that you choose for this line. All fields are 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 Services to a BAT Phone Template](#)” section on [page 3-5](#).
-

Adding or Updating 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.

-
- Step 1** Start BAT. (See [Starting BAT, page 1-4](#).)
- 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. Only for Cisco IP Phone models 7960 and 7940 provide services.
- 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 selected.

- 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 Steps 5 through 8 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 designate speed dials for the phones if the Phone Button Template has provided speed-dial buttons.

- Step 1** Start BAT. (See [Starting BAT, page 1-4](#).)
- 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 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, Phones and Users, CTI Ports, and CTI Ports and Users

The CSV file for phones or CTI ports contains information about each phone or port as a record. Make sure all phones in a CSV file are the same model and have the same number of configured lines. For CTI ports, enter device names instead of MAC addresses. You can also enable CTI application usage while 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 7960s to an existing user, you need to write two records in the CSV file, one for each Cisco IP Phone 7960 but each with the same user ID.

The CSV file contains duplicates of some of the values from the BAT template. Values in the CSV file override any values 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 call 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 select 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 entered in the CSV file must equal the number of lines configured in the phone template, or an error will result.

You can create a CSV file two ways. You can use the Microsoft Excel template called **BAT.xlt** or create the CSV using a sample text file. Cisco recommends 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, and 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 CSV Files for Phones, Phones and Users, CTI Ports, and CTI Ports and Users, page 3-7](#) (recommended method)
- [Creating a Text-Based CSV Text File, page 3-13](#)

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 marked **Phones-Users**. Each tab specifies the field name, whether it is a required or optional field, and the maximum number of characters 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, Phones/Users, CTI Ports-Users, or CTI Ports Using BAT.xlt

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

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 to the number of directory numbers.



Note The number of lines that you specify here must match the number of lines 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.

- Step 6** If you are creating a Phones or 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. This check box does not display on the CTI Port and CTI Port-Users tabs.



Note The number of speed dials that you specify here cannot exceed the number of speed dials 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 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.

In each row, provide the following information. Because these instructions apply to four different tabs, complete only the fields for the tab that you are adding. You can determine which fields apply because each field is prefaced with the name of the tab in the BAT.xlt file (such as Phones or CTI-Users), “All” to indicate a field common to all tabs under discussion, “All Phone Types” to indicate those fields that display on both the Phones and the Phones-User tabs, or “All CTI Types” for those fields that display on both the CTI Port and CTI Port-Users tabs.

- (Phones-Users, CTI Port-Users) In the First Name field, enter the first name up to 50 characters, of the user to whom this phone will be issued.
- (Phones-Users, CTI Port-Users) In the Last Name field, enter the last name up to 50 characters, of the user to whom this phone will be issued.
- (Phones-Users, CTI Port-Users) In the User ID field, enter the user ID for the user to whom this phone will be issued.
- (Phones-Users, CTI Port-Users) In the Password field, enter the password that the user needs to access the Cisco IP Phone User Options web page.

Although 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.

- (Phones-Users, CTI Port-Users) In the Manager field, enter manager's user ID for the user to whom this phone will be issued.
- (Phones-Users, CTI Port-Users) In the Department field, enter the department number for the user to whom this phone will be issued.
- (Phones-Users, CTI Port-Users) In the PIN field, enter the personal identification number (PIN) to be used for extension mobility.

Although 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.

- (Phones-Users, CTI Port-Users) In the 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 is used in connection with the extension mobility feature.
- (Phones-Users, CTI Port-Users) 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.

Enter your preferred language first, followed by the country.

- (All CTI Types) In the Device Name field, enter a unique identifier for the CTI port. You can check the Create Dummy MAC Addresses check box to automatically generate unique device identifiers.
- (All Phone Types, CTI Port) In the MAC Address field, enter the MAC address.
- (All) In the Description field, enter a description of the phone, such as the MAC address preceded with "SEP," or something more descriptive like "Conference Room A" or "John Smith" if the phone is going to be placed in a conference room or given to a specific user.

- (All) In the Location field, 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 accessed using restricted bandwidth connections.
- (All) In the Directory Number field, enter the directory number for the phone.
- (All) In the Display field, 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).
- (All) In the Forward Busy Destination field, enter the directory number to which calls should be forwarded when the phone is busy. To use the value provided in the BAT phone template, leave this field blank.
- (All) In the Forward No Answer Destination field, enter the directory number to which calls should be forwarded when the phone is not answered. To use the value provided in the BAT phone template, leave this field blank.
- (All) In the Call Pickup Group field, enter the number that can be dialed to answer calls to this directory number. To use the value provided in the BAT phone template, leave this field blank.
- (All) In the User ID field, enter the user ID for the user to whom this phone will be issued.
- (All Phone Types) In the Speed Dial field, enter the complete number, including access or long-distance codes, that you want users to be able to dial by pressing the speed-dial button.
- (All Phone Types) In the Speed Dial Label field, enter a description of the speed-dial number; for example, “555-1234,” “Security,” or “Cafeteria.”

Step 8 (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 7, “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.

- Step 9** 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

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.

- Step 10** 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\ to the appropriate C:\BATFiles\ folder on the server running the Publisher database for Cisco CallManager. For phones or CTI ports, you would copy the CSV file to C:\BATFiles\Phones; for phones and users combination, or CTI ports 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.

- Step 11** 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 adding phones, phones and users, CTI ports, or CTI ports and users, you must create the CSV file 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 using the BAT.xlt file.



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 its respective folder, such as for phones this folder would be C:\BATFiles\Phones\, on the server running the Publisher database for Cisco CallManager.

Procedure

To create a CSV text file for phones, phones/users combination, CTI ports, or CTI ports/users combination, perform the following steps:

-
- 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 phone, enter the values for each phone, CTI port, or user combination that you want to add to Cisco CallManager. See [Tips for Creating a Text-Based CSV File, page 3-14](#), 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 3** 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 running the Publisher database for Cisco CallManager.



Note You cannot use CSV files saved anywhere except in the proper folder under C:\BATFiles\ on the server 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 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 configured in the BAT template.

Phones only:

MAC Address(Mandatory, 12 characters),**Description** (Optional, up to 50 characters),**Location** (Optional, up to 50 characters),**Directory Number** (Optional, up to 50 numerals),**Display** (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,John Smith,
9725557100,9725557100,9725557121/TollByPass,johns,557200,Cafeteria
```

Phones and Users combination:

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 50 numerals),**Display** (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,abc123de,karend,0012055,9989,johns,English United
States,1231123245AB,SEP1231123245AB,Dallas,9725557154,John Smith,97255
57100,9725557100,9725557121/TollByPass,557200,Cafeteria
```

CTI ports:

Device Name(Mandatory, up to 15 characters),**Description** (Optional, up to 50 characters),**Location** (Optional, up to 50 characters),**Directory Number** (Optional, up to 50 numerals),**Display** (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,John Smith,
9725557100,9725557100,9725557121/TollByPass
```

CTI ports and users combination:

First Name(Mandatory, 1 to 50 characters),**Last Name**(Mandatory, 1 to 50 characters),**User ID**(Mandatory, 1 to 30 characters),**Password**(Optional, 4 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),**Description** (Optional, up to 50 characters),**Location** (Optional, up to 50 characters),**Directory Number** (Optional, up to 50 numerals),**Display** (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,abc123de,karend,0012055,9989,johns,TAPS port 1,
CTI TAPS port 1,Dallas,9725557154,John Smith,9725557100,
9725557100,9725557121/TollByPass
```

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.

Refer to the following examples and sample CSV records when creating CSV files. The examples apply for phones CSV files, but the same principles apply to all CSV file formats.

**Tip**

You must specify PIN and Password values, either on the CSV file or when you add the users to Cisco CallManager. If you want to apply individual PINs or passwords for each user, specify the PIN and password information in the CSV file. If you want to use a default PIN and password that can be used by all users, do not specify PIN or password values in the CSV and instead provide this information when you use BAT to add the users to Cisco CallManager.

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

If the description for a phone is blank

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

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

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

If two active lines are required

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

Adding Phones or CTI Ports to Cisco CallManager

Follow this procedure to bulk-add phones or CTI ports to Cisco CallManager.

Before You Begin

- You must create a CSV file before you attempt to add phones or CTI ports to Cisco CallManager.
- If you are adding phones, you must create a BAT phone template before you attempt to add phones to Cisco CallManager.

Procedure

- Step 1** Start BAT. (See [Starting BAT, page 1-4](#).)
- 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** 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 selected 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 7, “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 is 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 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.

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

Step 7 Click **Insert**.

A message displays advising 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 8 Click **OK** to insert the phones 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, you can click **View Latest Log File** to see a log file indicating the number of records added and the number of records failed, including an error code. For more information on log files, see [Chapter 8, “Troubleshooting BAT and TAPS”](#).

Adding Phones and Users or CTI Ports and Users to Cisco CallManager

Follow this procedure to bulk-add phones and users or CTI ports and users to Cisco CallManager.

Before You Begin

- You must create a Phones-Users or CTI Port-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, you must create a BAT phone template before you attempt to add phones and users to Cisco CallManager.

Procedure

- Step 1** Start BAT. (See [Starting BAT, page 1-4.](#))
- 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 selected 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 7, “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 is 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 added in this transaction to be able to log on to a phone on behalf of someone else. Users with 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 logging on to the Cisco IP Phone User Options web page. You should only specify a value here when you want to specify the default password for access to the Cisco IP Phone User Options web page 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 logging 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 specified in the CSV file take precedence over any values that you enter here.
 - **Confirm PIN**—Reenter the PIN.
 - **User Locale**—Select 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 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 advising 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 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, you can click **View Latest Log File** to see a log file indicating the number of records added and the number of records failed, including an error code. For more information on log files, see [Chapter 8, “Troubleshooting BAT and TAPS”](#).

Related Topics

- [Creating CSV Files for Phones, Phones and Users, CTI Ports, and CTI Ports and Users, page 3-7](#)
- [Updating Phone Records, page 3-25](#)

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 7960. You cannot change device type in the copy of the template.

Procedure

To copy an existing BAT phone template, perform the following steps:

-
- Step 1** Start BAT. (See [Starting BAT, page 1-4.](#))
- Step 2** Choose **Configure >Template > Phones**.
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 selected 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 to create 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 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 3-4](#) for more information. You can also define services and speed-dial buttons.
-

Related Topics

- [Adding Phones or CTI Ports, page 3-2](#)
- [Adding or Updating Services to a BAT Phone Template, page 3-5](#)
- [Adding or Updating Speed Dials to a BAT Phone Template, page 3-6](#)

Updating Phone Records

You can bulk-update 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. Creating a query requires defining a filter. You can also create complex queries by clicking either the AND or the OR button.

**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, only one service can be subscribed to at a time.

Procedure

To create a query, perform the following steps:

-
- Step 1** Start BAT. (See [Starting BAT, page 1-4.](#))
 - Step 2** Choose **Configure > Phones** and click to **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 3** In the first drop-down list box, choose the field to query such as Model, Device Name, and so on.
 - Step 4** In the second drop-down list box, choose the search criteria such as begins with, contains, is empty, and so on.
 - Step 5** In the search field/list box, either choose or enter the value that you want to locate, such as a specific phone model.

- Step 6** Click **Add To Query** to add the defined filter to the query. Click **AND** or **OR** to add multiple filters and repeat [Step 2](#) through [Step 5](#) to further define your query.

**Note**

You cannot perform multiple queries when Directory Number is used in the first drop-down list box; i.e., **AND** or **OR** are not 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 7** 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 8** In the Parameter list box, choose a setting from the list box. Refer to [Table 3-4](#) for field descriptions of parameters that you might encounter. If you only want to reset or restart devices, leave this field blank and skip to [Step 11](#).
- Step 9** 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 11](#).
- Step 10** Click the arrow 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 7](#) through [10](#) to add more parameters.
- Step 11** Check the **Reset devices** check box to reset (power-cycle) the phones or check the **Restart devices** 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 Run, the records update with the specified parameters; however, no changes take effect until you reset or restart the devices.

Step 12 Click **Run** to apply the updates to the records.

Related Topics

- [Adding Phones or CTI Ports, page 3-2](#)
- [Updating Lines, page 3-27](#)
- [Deleting Phones, page 3-31](#)
- [Viewing a List of Phones with Dummy MAC Addresses, page 3-29](#)
- [Field Descriptions for Update Phones, page 3-47](#)

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.

Procedure

To update lines, perform the following steps:

- Step 1** Start BAT. (See [Starting BAT, page 1-4](#).)
- Step 2** Choose **Configure > Phones** 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.



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

- Step 3** 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 associated with the line.
- Step 4** In the second drop-down list box, choose the search criteria such as begins with, contains, is empty, and so on.
- Step 5** 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 6** 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 3](#) through [Step 6](#) to further define your query.
- If you make a mistake, click **Clear Query** to remove the query; then, return to [Step 3](#) and start over.
- Step 7** 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 8** In the Parameter list box, choose a setting from the list box.
- See [Table 3-3](#) for descriptions of the parameters.
- Step 9** In the Value field, enter the new value or choose a value from the list box.
- Step 10** Click the arrow 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 8 through 10 to add more parameters.

Step 11 Click **Run** to update the lines and restart the affected phones.

A message displays advising 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 cause any active calls to be dropped. You can cancel the transaction or click **OK** to continue.

Related Topics

- [Adding Phones or CTI Ports, page 3-2](#)
 - [Updating Phone Records, page 3-25](#)
 - [Deleting Phones, page 3-31](#)
 - [Field Descriptions for Updating Lines, page 3-45](#)
-

Viewing a List of Phones with Dummy MAC Addresses

You can use BAT to view a list of all phones using 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 using any of the search criteria provided below.

Procedure

Use the following steps to generate a list of phones using dummy MAC addresses.

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

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 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 using any search criteria. The following steps tell you how to search for devices.

Procedure

Use the following steps to generate a list of devices.

Step 1 Start BAT. (See [Starting BAT, page 1-4](#).)

Step 2 Choose **Configure > Phones** and then click **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 3 In the second drop-down list box, choose **begins with**, or your preferred search criterion.

Step 4 In the field, enter any necessary information, or leave it blank.

Step 5 Click **Add To Query**.

Step 6 Click **View Query Results**.

The window displays all phone records that were added to the Cisco CallManager database 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

You can bulk-delete phones from the Cisco CallManager database using the following procedure.

Procedure

- Step 1** Start BAT. (See [Starting BAT, page 1-4.](#))
- Step 2** Choose **Configure > Phones** and then click the **Delete Phones** link in the upper, right corner of the window.
The Delete Phones window displays.
- Step 3** In the first drop-down list box, choose the field to query such as Model, Device Name, and so on.
- Step 4** In the second drop-down list box, choose the search criteria such as begins with, contains, is empty, and so on.
- Step 5** In the search field/list box, either choose or enter the value that you want to locate, such as a specific phone model.
- Step 6** 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 3](#) 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; i.e., **AND** or **OR** are not 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 7 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 8 Click **Run** to delete the records.

A message displays advising 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 indicating the number of records deleted and the number of records failed, including an error code. For more information on log files, see [Chapter 8, “Troubleshooting BAT and TAPS”](#).

Related Topics

- [Adding Phones or CTI Ports, page 3-2](#)
- [Updating Phone Records, page 3-25](#)
- [Updating Lines, page 3-27](#)

Deleting Templates

You can delete BAT templates when you no longer require them.

Procedure

To delete a template, perform the following steps:

-
- Step 1** Start BAT. (See [Starting BAT, page 1-4.](#))
- 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 on the template that you want to delete.
- The selected 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 asking 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 is 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 3-1 describes the fields that you may encounter when 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. Configure these values in the system through Cisco CallManager Administration.

Table 3-1 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 used only in BAT; for example, BAT 7960.
Device Type	Choose CTI port or the type of Cisco IP phone. Note 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.

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

Field	Description
Calling Search Space	<p>For this optional field, choose the calling search space to which this group of phones/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 phones/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 defined in the MRGL.</p>
User Hold Audio Source	<p>For this optional field, choose the user hold audio source that this group of phones/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 phones/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 accessed using restricted bandwidth connections.</p>

Table 3-1 Field Descriptions for Adding a Phone Template (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> Note User Locale only applies when using Cisco IP Phones 7940 and 7960.</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> Note Network Locale only applies when using Cisco IP Phones 7940 and 7960.</p>
<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>Note Values appear in the Phone Button Template and Expansion Module fields. Configure these templates in the system through Cisco CallManager Administration.</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, and so on) that each button designates.</p>

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

Field	Description
Expansion Module 1	For this optional field (Cisco IP Phone 7960 only), choose the button template to be used for the first expansion module.
Expansion Module 2	For this optional field (Cisco IP Phone 7960 only), choose the button template to be used for the second expansion module.
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.	
Phone Load Name	This optional field does not apply for CTI ports. Be aware that any value entered in this field overrides the default value for the selected model and specifies the custom software for a Cisco IP phone. Enter the custom phone load, if applicable.
Expansion Module 1 Load Name	(Cisco IP Phone 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	This is an optional field. (Cisco IP Phone 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.
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 7960 or 7940. Skip these fields if you are configuring this template for any other phone model.	
Information	For this optional field, enter the help text URL for the information button for Cisco IP Phone models 7960 and 7940 only.
Directory	For this optional field that applies only to Cisco IP Phone models 7960 and 7940, enter the URL of the directory server.

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

Field	Description
Messages	For this is an optional field that applies only to Cisco IP Phone models 7960 and 7940, enter the voice mail access pilot number.
Services	For this optional field that 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 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 web page configured during installation.</p>
Proxy Server	<p>For this optional field, enter the host and port (for example, proxy.cisco.com:80) 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>

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

Field	Description
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 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>
Idle Timer	<p>For this optional field, enter the seconds that you want to elapse before the phone displays the URL 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>
<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.</p>	
Enable Extension Mobility Feature	<p>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. See the <i>Cisco CallManager Administration System Guide</i> for more information about extension mobility.</p>

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

Field	Description
Log Out Profile	<p>For this optional field, choose the profile a phone should load when a user logs out. You must configure log out profiles in Cisco CallManager Administration.</p> <p>Choosing <Use Current Device Settings> creates an autogenerated device profile as the default device profile.</p> <p>If you choose <Select a User Device Profile>, 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	<p>For this mandatory field (Cisco IP Phone models 7960 or 7940 only), check Enabled check box if you want the port to wait a few seconds prior to forwarding a call.</p>
PC Port	<p>Use this mandatory field to disable or enable the PC port on phones that have internal switches. The port is labeled "10/100 PC" on the back of the phone and is used to connect a PC or workstation to the phone so that they can share a single network connection.</p>

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

Field	Description
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.

Field Descriptions for Adding a Line to a BAT Phone Template

Table 3-2 describes the optional fields for adding line details on a BAT phone template.

All fields are optional.

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

Field	Description
Directory Number	
Partition	Choose a partition. A partition indicates the route partition to which the directory number belongs. Note The directory number can appear in more than one partition; however, make sure the directory number and Partition combination is unique.
Directory Number Settings	
Voice Mail Profile	Choose this parameter to make the pilot number the same as the directory number for this line. This action proves useful if you do not have a voice mail server configured for this phone.

Table 3-2 Field Descriptions for Adding a Line to a BAT Phone 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>Note Changes cause an update of the numbers listed in the Call Pickup Group field. The setting applies to all devices using this directory number.</p>
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).
Call Waiting	The choice that you make in this field applies to all devices 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	(Not used for CTI ports) The choice that you make in this field applies to all devices using this directory number and specifies whether this directory number uses Auto Answer with handset or Auto Answer with speakerphone.
Call Forward and Pickup Settings	
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>

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

Field	Description
Forward All Destination	<p>This field indicates the directory number to which all calls are forwarded.</p> <p>Note Setting applies to any dialable phone number, including an outside destination unless restricted, and to all devices using this directory number.</p>
Forward All Calling Search Space	<p>This is an optional field. This setting applies to all devices 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 select this box, the forward all destination field and forward all calling search space box are irrelevant.</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>Note This setting applies to any dialable phone number, including an outside destination unless restricted, and to all devices using this directory number.</p>
Forward Busy Calling Search Space	<p>This setting applies to all devices using this directory number and indicates the calling search space to use when forwarding to the specified destination.</p>
Voice Mail	<p>Check this box if you want calls to forward to the number you selected in the voice mail profile.</p> <p>If you select this box, the forward all destination field and forward all calling search space box are irrelevant.</p>

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

Field	Description
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>Note Setting applies to any dialable phone number, including an outside destination unless restricted, and to all devices using this directory number.</p>
Forward No Answer Calling Search Space	<p>This setting applies to all devices using this directory number and indicates the calling search space to use when forwarding to the specified destination. The setting appears only if 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/Partition1.</p>
Line Settings for this Phone	
External Phone Number Mask	<p>This setting indicates the phone number (or mask) 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 Lamp behaves for the device. You can have the MWI always light, never light, or use the system policy, as defined in Cisco CallManager Administration.</p>
Disable ring on this line	<p>This setting applies only to the current device and stops the phone from ringing to indicate incoming calls. CTI ports do not have this setting.</p>

Field Descriptions for Updating Lines

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

Table 3-3 *Field Descriptions for Updating Line Details*

Field	Description
Line Partition	<p>Choose a partition. A partition indicates the route partition to which the directory number belongs.</p> <p>Note The directory number can appear in more than one partition; however, make sure the directory number and Partition combination is unique.</p>
Calling Search Space Forward All	This optional field applies to all devices using this directory number and indicates the calling search space to use when forwarding to the specified destination.
Calling Search Space Forward Busy	This setting applies to all devices using this directory number and indicates the calling search space to use when forwarding to the specified destination.
Calling Search Space Forward No Answer	This setting applies to all devices using this directory number and indicates the calling search space to use when forwarding to the specified destination. The setting appears only if configured in the system.
Calling Search Space Forward on Failure	(CTI ports only) This setting applies to all devices using this directory number and indicates the calling search space to use when forwarding to the specified destination. The setting appears only if configured in the system.
Forward All Destination	<p>This field indicates the directory number to which all calls are forwarded.</p> <p>Note Setting applies to any dialable phone number, including an outside destination unless restricted, and to all devices using this directory number.</p>

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

Field	Description
Forward Busy Destination	<p>This field indicates the directory number to which a call is forwarded when the line is in use.</p> <p>Note This setting applies to any dialable phone number, including an outside destination unless restricted, and to all devices using this directory number.</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>Note Setting applies to any dialable phone number, including an outside destination unless restricted, and to all devices using this directory number.</p>
Forward on Failure Destination	<p>(CTI ports only) Enter the directory number to which a call should be forwarded when a phone or CTI application fails.</p>
User Hold Audio Source	<p>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).</p>
Network Hold Audio Source	<p>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).</p>
Auto Answer	<p>(Not used for CTI ports) Choose this parameter if you want all lines 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 has connected.</p>
Voice Mail Profile	<p>Choose this parameter to make the pilot number the same as the directory number for this line. This is useful if you do not have a voice mail server configured for this phone.</p>

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

Field	Description
Calling Search Space (Line)	<p>This field contains a collection of partitions that are searched for numbers that are called from this directory number.</p> <p>Note Changes cause an update of the numbers listed in the Call Pickup Group field. The setting applies to all devices using this directory number.</p>
Disable Ring	This setting applies only to the current device and stops the phone from ringing to indicate incoming calls. CTI ports do not have this setting.

Field Descriptions for Update Phones

Table 3-4 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. Configure these values in the system through Cisco CallManager Administration.

Table 3-4 Field Descriptions for Update Phones

Field	Description
Description	This optional field allows you to enter a description so that you can recognize the device.
Phone Load Name	This optional field does not apply for CTI ports. Be aware that any value 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.

Table 3-4 Field Descriptions for Update Phones (continued)

Field	Description
Device Pool	<p>Choose the device pool to which this group of phones/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 is an optional field, choose the calling search space to which this group of phones/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>
Location	<p>For this is an 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 using restricted bandwidth connections.</p>
Information	<p>For this optional field, enter the help text URL for the information button for Cisco IP Phone models 7960 and 7940 only.</p>
Directory	<p>This optional field applies only to Cisco IP Phone models 7960 and 7940. Enter the URL of the directory server.</p>
Messages	<p>This optional field applies only to Cisco IP Phone models 7960 and 7940. Enter the voice mail access pilot number.</p>
Services	<p>This optional field applies only to Cisco IP Phone models 7960 and 7940. Enter the URL for the services menu.</p>



Table 3-4 Field Descriptions for Update Phones (continued)

Field	Description
Authentication Server	<p>For this optional field, enter the URL that the phone uses to validate requests 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 web page configured during installation.</p>
Proxy Server	<p>For this optional field, enter the host and port (for example, proxy.cisco.com:80) 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 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 3-4 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 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 phones/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 phones/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 defined in the MRGL.</p>

Table 3-4 Field Descriptions for Update Phones (continued)

Field	Description
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. See the <i>Cisco CallManager Administration System Guide</i> for more information about extension mobility.</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></p> <p>Note User Locale only applies when using Cisco IP Phones 7940 and 7960.</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></p> <p>Note Network Locale only applies when using Cisco IP Phones 7940 and 7960.</p>
IP Services	<p>This optional field is only valid for Cisco IP Phone 7960 and 7940, choose from any of the services that have been configured from Cisco CallManager Administration.</p>

Field Descriptions



Working with Users

BAT allows you to add users to Cisco CallManager and associate users to phones or CTI ports, 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, CTI Ports, 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 4-11](#)
- [Updating Users to Cisco CallManager, page 4-17](#)
- [Deleting Users from Cisco CallManager, page 4-19](#)

Adding Users

You can use BAT to add users to the Cisco CallManager database/Lightweight Directory Access Protocol (LDAP) Directory 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 or CTI Ports, 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. We recommend that you create the CSV file 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 the CSV File for Users, page 4-2](#)
- [Updating Users to Cisco CallManager, page 4-17](#)
- [Updating Users to Cisco CallManager, page 4-17](#)
- [Deleting Users from Cisco CallManager, page 4-19](#)

Creating the CSV File for Users

To add users to Cisco CallManager, you must create a Comma Separated Value (CSV) file. You can create a CSV file two ways. You can use the Microsoft Excel template called **BAT.xlt** or create the CSV 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, 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, and 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 the CSV File for Users, page 4-2](#) (recommended method)
- [Creating a Text-Based CSV File for Users, page 4-5](#)

Creating a CSV File for Users Using BAT.xlt

Procedure

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.

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 **Users** tab at the bottom of the sheet 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 web page, from 4 to 20 characters.

Although it is considered optional in the CSV file, you must enter a password is required. 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 managers 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, a PIN is required. 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 select 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 MAC Address field, enter the MAC address for the phone to which you want this user associated, 12 characters. You should only specify the MAC address for a configured phone that already has been added to Cisco CallManager. Do not specify new phones, CTI ports, or phones added using BAT and still having 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 MAC Address2 field, enter the MAC address for any additional phone to which you want this user associated, 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

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\Phones folder on the server 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 using lines of ASCII text with values separated by commas.

If you created the CSV file using the BAT.xlt file, you can skip the follow instructions 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 using any file format, such as Microsoft Notepad, Microsoft Word, and so on. Save the CSV file to C:\BATFiles\Phones\ on the server running the Publisher database for Cisco CallManager.

Procedure

To create a CSV text file for users, perform the following steps:

-
- 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 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 you must use in the text-based CSV file.



Note 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 You cannot use CSV files for users saved anywhere but C:\BATFiles\Users\Insert Users on the server running the Publisher database for Cisco CallManager for BAT inserts.

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)**MAC Address1**(optional, 12 characters),**Directory Number**(Optional, 1 to 50 numerals),**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.

Example

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

You must specify delimiters even if a field is blank. Refer to the following examples and sample CSV records when creating CSV files.

Example

The manager is the user ID of an existing user in the Cisco IP Telephony Directory. If the manager for a user is blank

```
John,Smith, johns, abc123de, , 0012055, 9989, johns profile, English United
States, 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, 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, 9725557154, 0010EB001234, 0010EB432101
```

Adding Users to Cisco CallManager

Follow 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.

Procedure

-
- Step 1** Start BAT. (See [Starting BAT, page 1-4.](#))
 - 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** (Optional) If you want all users added in this transaction to be able to log on to a phone on behalf of someone else, check the **Enable Authentication Proxy Rights** checkbox. Users with 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 must perform further configuration in Application Administration on the Cisco CRA server.
- Step 5** To enable use of applications such as Cisco IP SoftPhone, check the **Enable CTI Application Use** check box.
- Step 6** (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 logging on to the Cisco IP Phone User Options web page. You should only specify a value here when you want to specify the default password for access to the Cisco IP Phone User Options web page 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 logging 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 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 7 Click **Insert**.

A message displays advising 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 8 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.

When the transaction completes, you can click **View Latest Log File** to see a log file indicating the number of records added and the number of records failed, including an error code. For more information on log files, see [Chapter 8, “Troubleshooting BAT and TAPS”](#).

Related Topics

- [Creating the CSV File for Users, page 4-2](#)
- [Updating Users to Cisco CallManager, page 4-17](#)
- [Deleting Users from Cisco CallManager, page 4-19](#)

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 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 4-11](#)
- [Updating Users to Cisco CallManager, page 4-17](#)
- [Adding Users to Cisco CallManager, page 4-8](#)
- [Deleting Users from Cisco CallManager, page 4-19](#)

Creating the CSV File for Updating Users

To update users to Cisco CallManager, you must create a Comma Separated Value (CSV) file. You can create a CSV file two ways. You can use the Microsoft Excel template called **BAT.xlt** or create the CSV using a program like Notepad or Microsoft Word, 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, and 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 4-12](#) (recommended method)
- [Creating a Text-Based CSV File for Updating Users, page 4-14](#)

Creating a CSV File for Updating Users Using BAT.xlt

Procedure

Follow 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.

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

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

Update_Users#timestamp.txt

Step 7 For BAT to access the CSV file 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 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 adding users, you must create the comma separated values (CSV) file using lines of ASCII text with values separated by commas.

If you created the CSV file using the BAT.xlt file, you can skip the follow instructions 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 using any file format, such as Microsoft Notepad, Microsoft Word, and so on. Save the CSV file to C:\BATFiles\Users\ on the server running the Publisher database for Cisco CallManager.

Procedure

To create a CSV text file for users, perform the following steps:

-
- 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 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.

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



Note You cannot use CSV files for update users saved anywhere but C:\BATFiles\Users\ on the server running the Publisher database for Cisco CallManager for BAT inserts.

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, up to 50 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 4-16](#).

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 creating CSV files.

Example

The manager is the user ID of an existing user in the Cisco IP Telephony Directory. 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 4-16](#) for information on keeping previously stored values.

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

Retaining Stored Values

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

-
- Step 1** Start BAT. (See [Starting BAT, page 1-4](#).)
- Step 2** Choose **Configure > Users**.
The Insert Users window displays.
- Step 3** In the right-hand 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 performing [“Updating Users to Cisco CallManager” section on page 4-17](#).
If you have not completed the [“Updating Users to Cisco CallManager” section on page 4-17](#), 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 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

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

Before You Begin

You must create a CSV file before attempting to update users.

Procedure

-
- Step 1** Start BAT. (See [Starting BAT, page 1-4.](#))
- 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 4-11](#) 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 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 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** If you want to set the User Device Profile as the Default Device Profile, check the **Set User Device Profile as Default Device Profile** checkbox.
- Step 7** If you want to enable CTI Application use for all users in the CSV file, check the **Enable CTI Application Use** checkbox.
- Step 8** 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 9** 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 10** Click **Update**.

#### Related Topics

- [Creating the CSV File for Updating Users, page 4-11](#)
- [Deleting Users from Cisco CallManager, page 4-19](#)
- [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 4-17](#)
- [Adding Users to Cisco CallManager, page 4-8](#)

# Deleting Users from Cisco CallManager

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

## Procedure

---

- Step 1** Start BAT. (See [Starting BAT, page 1-4.](#))
- 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 would like 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 select users from more than one department, enter multiple departments in this field. For example, to select 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 **Run** to delete the chosen users.
- A message displays advising 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.
- 

#### Related Topics

- [Adding Users to Cisco CallManager, page 4-8](#)
- [Updating Users to Cisco CallManager, page 4-17](#)



## 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, 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 5-2](#)
- [Creating a Template for Inserting User Device Profiles, page 5-2](#)
- [Inserting User Device Profiles, page 5-10](#)
- [Deleting User Device Profiles, page 5-11](#)

# Configuring User Device Profiles

The following sections show you how to create templates, create CSV files, insert UDPs, and delete UDPs.

## Creating a Template for Inserting User Device Profiles

This topic describes how to create a template to add user device profiles in bulk.

### Procedure

---

- Step 1** Start BAT. (See [Starting BAT, page 1-4.](#))
- 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 in length.
- Step 4** To specify the audio source 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 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. Consult 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 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 8** Click **Insert**.

**Step 9** A dialog box appears asking you to scroll down to insert lines. Click **OK** and scroll down.

**Step 10** Depending on how many lines you selected 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. For information on configuring directory numbers, see [Configuring Directory Numbers](#) topic.

**Step 11** Enter or choose the appropriate values for the line settings described in [“Field Descriptions for Adding a Line to a UDP Template”](#) section on page 5-13.

**Step 12** Click **Insert**.

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

**Related Topics**

- [Configuring User Device Profiles, page 5-2](#)
- [Creating a 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 5-10](#)
- [Deleting User Device Profiles, page 5-11](#)

## Creating a CSV File for User Device Profiles

Follow this procedure to create the 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** Click the **User Device Profiles** tab at the bottom of the spreadsheet to add user device profiles.
- 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 in 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 in 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.



---

**Note** 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 Forward Busy Destination1 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**

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 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 5-2](#)
- [Understanding the BAT.xlt File, page 3-8](#)
- [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 5-10](#)
- [Deleting User Device Profiles, page 5-11](#)

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

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

If you created the CSV file using the BAT.xlt file, you can skip the follow instructions 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 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 running the Publisher database for Cisco CallManager.

### Procedure

To create a CSV text file for users, perform the following steps:

- 
- Step 1** Open 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 5-8](#), 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

---

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

---

### Related Topics

- [Configuring User Device Profiles, page 5-2](#)
- [Creating a CSV File for User Device Profiles, page 5-4](#)
- [Understanding the BAT.xlt File, page 3-8](#)
- [Inserting User Device Profiles, page 5-10](#)
- [Deleting User Device Profiles, page 5-11](#)
- [Tips for Creating a Text-Based CSV File, page 5-8](#)
- [Tips for Creating a Text-Based CSV File with Two Lines and Two Speed Dials, page 5-9](#)

### 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),**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,9725557154,9725557154,9725557172,9725557196,9725557121/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,,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),**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),**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,9725557154,9725557154,9725557172,9725557196,9725557121/TollByPass,9725557154,9725557154,9725557172,9725557196,9725557121/TollByPass,1230000000,1234000000,Receptionist,Helpdesk
```

# Inserting User Device Profiles

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

## Before you begin...

- You must create a CSV file before you attempt to insert user device profiles to Cisco CallManager.
- 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 1-4](#).)
- 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** In the User Device Profile Template Name field, choose the BAT template that you created for this type of bulk transaction.
- Step 5** Click **Insert**.

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



---

**Note** You may want to insert the UDP during nonpeak hours because this 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 in order to insert the UDP.

- Step 6** To check the status of your insertion, read the status line, which is located above the Insert button. If the status indicates 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 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 5-2](#)
- [Creating a CSV File for User Device Profiles, page 5-4](#)
- [Understanding the BAT.xlt File, page 3-8](#)
- [Deleting User Device Profiles, page 5-11](#)
- [Tips for Creating a Text-Based CSV File, page 5-8](#)
- [Tips for Creating a Text-Based CSV File with Two Lines and Two Speed Dials, page 5-9](#)

## Deleting User Device Profiles

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

**Procedure**

- 
- Step 1** Start BAT. (See [Starting BAT, page 1-4.](#))
- 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 **Run** to delete the chosen user device profiles.

A message displays advising 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 5-2](#)
- [Creating a CSV File for User Device Profiles, page 5-4](#)
- [Understanding the BAT.xlt File, page 3-8](#)
- [Inserting User Device Profiles, page 5-10](#)
- [Tips for Creating a Text-Based CSV File, page 5-8](#)
- [Tips for Creating a Text-Based CSV File with Two Lines and Two Speed Dials, page 5-9](#)

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

Table 5-1 describes the optional fields for adding line details to UDP template.

All fields are optional.

**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>                                                                                                |
| 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 using this directory number.</p> |
| User Hold Audio Source    | <p>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).</p>                                                                                                                                               |
| Network Hold Audio Source | <p>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).</p>                                                                                                       |

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

| Field                                   | Description                                                                                                                                                                                                                                                             |
|-----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Call Waiting                            | The choice that you make in this field applies to all devices 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                             | (Not used for CTI ports) The choice that you make in this field applies to all devices 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> |                                                                                                                                                                                                                                                                         |
| 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 using this directory number.</p>                 |
| Forward All Calling Search Space        | This is an optional field. This setting applies to all devices using this directory number and indicates the calling search space to use when forwarding to the specified destination.                                                                                  |

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 select this box, the forward all destination field and forward all calling search space box are irrelevant.</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 using this directory number.</p>   |
| Forward Busy Calling Search Space      | <p>This setting applies to all devices using this directory number and indicates the calling search space to use when forwarding to the specified destination.</p>                                                                                                                 |
| Voice Mail                             | <p>Check this box if you want calls to forward to the number you selected in the voice mail profile.</p> <p>If you select this box, the forward all destination field and forward all calling search space box are irrelevant.</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 using this directory number.</p> |
| Forward No Answer Calling Search Space | <p>This setting applies to all devices using this directory number and indicates the calling search space to use when forwarding to the specified destination. The setting appears only if configured in the system.</p>                                                           |

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

| Field                        | Description                                                                                                                                                                                                                                     |
|------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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.                                                                                           |
| Line Settings for this Phone |                                                                                                                                                                                                                                                 |
| External Phone Number Mask   | This setting indicates the phone number (or mask) 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. |
| Message Waiting Lamp Policy  | This field indicates how the Message Waiting Lamp behaves for the device. You can have the MWI always light, never light, or use the system policy, as defined in Cisco CallManager Administration.                                             |
| Disable ring on this line    | This setting applies only to the current device and stops the phone from ringing to indicate incoming calls. CTI ports do not have this setting.                                                                                                |



## Working With Gateways and Ports

---

You can use BAT to add or delete Cisco VG200 gateways with ports and to add, update, and delete FXS ports on Cisco Catalyst 6000 analog interface modules. 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 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

---

Before using BAT to add Cisco VG200 gateways to the Cisco CallManager database, you must have first configured the gateway using the Cisco IOS software command line interface (CLI). For procedures and commands required to perform this configuration, refer to the configuration documentation 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 6-2](#)
- [Creating a Gateway Directory Number Template, page 6-36](#)
- [Deleting Cisco VG200 Gateways, page 6-20](#)

## 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 using Cisco IOS software command line interface. See documentation supplied with your gateway for configuration instructions.
2. Create a 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 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 6-3](#)
- [Creating CSV Files for Cisco VG200 FXS or FXO Gateways, page 6-8](#)
- [Adding Cisco VG200 Gateways to Cisco CallManager, page 6-17](#)
- [Deleting Cisco VG200 Gateways, page 6-20](#)

## Creating a Cisco VG200 Gateway Template

The BAT 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 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

---

Before using BAT to add Cisco VG200 gateways to the Cisco CallManager database, you must have first configured the gateway using the Cisco IOS software command line interface (CLI). For procedures and commands required to perform this configuration, refer to the configuration documentation 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 6-8](#), for more details about CSV files. For POTS port types, you can also specify a Gateway Directory Number template as a part of VG200 gateway template.

To create the Cisco VG200 template and then add endpoint identifiers, perform the following steps. If you have already created the template but did not add endpoint identifiers, skip to [Updating the Endpoint Identifiers for Cisco VG200 Gateway, page 6-7](#).

### Procedure

---

- Step 1 Start BAT. (See [Starting BAT, page 1-4](#).)
- 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 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 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 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

**Step 8** Click **Update**.

The Status indicates 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 6-40](#), for more information.

When you finish entering setting 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 6-42](#), 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 6-45](#), 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 6-51](#), 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 6-51](#), 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 6-48](#), 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 on 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 has been 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 6-8](#)
- [Adding Cisco VG200 Gateways to Cisco CallManager, page 6-17](#)
- [Deleting Cisco VG200 Gateways, page 6-20](#)

## 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 1-4.](#))
- 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 6-3 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 adding Cisco VG200 gateways 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.

Once 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 6-17](#), 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 should 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.
- In the Port 1 Directory Number field, enter the directory number for this port, up to 50 numerals.
- 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 the route partition is already configured in Cisco CallManager Administration.
- In the Port 2 Description field, enter a description for port 2, up to 50 characters. Make the description something useful for identifying the port in a list of ports.
- In the Port 2 Directory Number field, enter the directory number for this port, up to 50 numerals.
- In the Port 2 Partition, enter the name of the route partition to which you want this port to belong, up to 50 characters. Make sure the route partition is already configured in Cisco CallManager Administration.
- In the Port 3 Description field, enter a description for port 3, up to 50 characters. Make the description something useful for identifying the port in a list of ports.
- In the Port 3 Directory Number field, enter the directory number for this port, up to 50 numerals.
- In the Port 3 Partition, enter the name of the route partition to which you want this port to belong, up to 50 characters. Make sure the route partition is already configured in Cisco CallManager Administration.
- In the Port 4 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.
- In the Port 4 Directory Number field, enter the directory number for this port, up to 50 numerals.

- In the Port 4 Partition, enter the name of the route partition to which you want this port to belong, up to 50 characters. Make sure the route partition is already configured in Cisco CallManager Administration.
- 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 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 6-17](#)
- [Deleting Cisco VG200 Gateways, page 6-20](#)

## 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 adding Cisco VG200 gateways 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.

Once 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 6-17](#), 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 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 should ever need to locate it in a list of gateways.
- In the Port Identifier 1 field, enter a description for the port identifier, up to 3 numerals. 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 specified in the VG200 template. In the CSV file, you can specify none, some, or all of the 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 had not been 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 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**).

---

#### Related Topic

- [Adding Cisco VG200 Gateways to Cisco CallManager, page 6-17](#)

## Creating a Text-Based CSV Text File

If you do not use the BAT.xlt file for data input when adding VG200 gateways, you must create the CSV file 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 using the BAT.xlt file.

The sections, [FXO or FXS Trunks, page 6-14](#), and [T1-CAS, T1-PRI, or E1-PRI Trunks, page 6-16](#), 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 running the Publisher database for Cisco CallManager.

To create a CSV text file for VG200 gateways, perform the following steps.

### 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 6-8](#), or [Creating CSV Files for Cisco VG200 T1-CAS, T1-PRI, or E1-PRI Gateways, page 6-10](#), 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 running the Publisher database for Cisco CallManager.




---

**Note** You cannot use VG200 gateway CSV files that were saved anywhere except C:\BATFiles\VG200Gateways on the server 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 50 numerals),**Port 1 Partition**(Optional, up

to 50 characters),**Port 2 Description**(Optional, up to 50 characters),**Port 2 Directory Number**(Optional, up to 50 numerals),**Port 2 Partition**(Optional, up to 50 characters),**Port 3 Description**(Optional, up to 50 characters),**Port 3 Directory Number**(Optional, up to 50 numerals),**Port 3 Partition**(Optional, up to 50 characters),**Port 4 Description**(Optional, up to 50 characters),**Port 4 Directory Number**(Optional, up to 50 numerals),**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 are 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

Follow 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 6-36](#), for more information.

## Procedure

---

- Step 1** Start BAT. (See [Starting BAT, page 1-4](#).)
- 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 indicating 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 indicating the number of records added and the number of records failed, including an error code.

**Note**

---

After the trunks are added to Cisco CallManager, BAT generates a log file indicating the number of records added and the number of records failed, including an error code. For more information on log files, see [Chapter 8, “Troubleshooting BAT and TAPS”](#).

---

**Related Topics**

- [Creating a Cisco VG200 Gateway Template, page 6-3](#)
- [Deleting Cisco VG200 Gateways, page 6-20](#)
- [Creating a Gateway Directory Number Template, page 6-36](#)

## Copying a Cisco VG200 BAT Template

You can copy the properties of a VG200 gateway template into a new VG200 gateway template. This action proves useful when you have similar bulk-add transactions and only a few details that need to be changed.

To copy an existing BAT VG200 gateway template, perform the following steps.

### Procedure

---

- Step 1** Start BAT. (See [Starting BAT, page 1-4.](#))
- 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 selected 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 6-39](#), for more information.
- Step 7** Click **Insert** to save the copied template.  
The template added to BAT displays in the VG200 Gateway Templates column on the left.
- 

### Related Topic

- [Creating a Cisco VG200 Gateway Template, page 6-3](#)

## Deleting Cisco VG200 Gateways

You can delete all Cisco VG200 gateway records from the Cisco CallManager database 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 Run button.

---

To delete all Cisco VG200 gateways, perform the following procedure.

**Procedure**

- 
- Step 1** Start BAT. (See [Starting BAT, page 1-4.](#))
  - 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 **Run** to delete the records.

**Caution**

---

If you have not specified a query (as described in [Step 4](#) to [Step 7](#)), clicking the Run button deletes all Cisco VG200 gateways.

---

After the Cisco VG200 gateways are deleted from Cisco CallManager, BAT generates a log file indicating the number of records deleted and the number of records failed, including an error code. For more information on log files, see [Chapter 8, “Troubleshooting BAT and TAPS”](#).

---

#### Related Topics

- [Creating a Cisco VG200 Gateway Template, page 6-3](#)
- [Creating CSV Files for Cisco VG200 FXS or FXO Gateways, page 6-8](#)
- [Updating the Endpoint Identifiers for Cisco VG200 Gateway, page 6-7](#)

## 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 6-22](#)
- [Deleting All Ports for Cisco Catalyst 6000 24 Port FXS Analog Interface Module Gateway, page 6-35](#)
- [Creating a Gateway Directory Number Template, page 6-36](#)

## 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 using Cisco CallManager Administration and then use BAT to bulk-add or bulk-update ports for these gateways.

---

To add or update ports to Cisco CallManager, you must perform the following steps:

1. Create a Catalyst 6000 (FXS) Ports BAT template to define common values for a set of ports.
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.
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 6-23](#)
- [Creating CSV Files for Cisco Catalyst 6000 \(FXS\) ports, page 6-24](#)
- [Adding Cisco Catalyst 6000 \(FXS\) Ports to Cisco CallManager, page 6-29](#)
- [Updating Cisco Catalyst 6000 24 Port FXS Analog Interface Module Ports in Cisco CallManager, page 6-32](#)
- [Deleting All Ports for Cisco Catalyst 6000 24 Port FXS Analog Interface Module Gateway, page 6-35](#)

## 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 6-24](#), for more details about CSV files.

Perform the following steps 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 1-4](#).)
- 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 6-64](#), 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 6-24](#), for more information.
- 

### Related Topics

- [Creating CSV Files for Cisco Catalyst 6000 \(FXS\) ports, page 6-24](#)
- [Adding Cisco Catalyst 6000 \(FXS\) Ports to Cisco CallManager, page 6-29](#)
- [Updating Cisco Catalyst 6000 24 Port FXS Analog Interface Module Ports in Cisco CallManager, page 6-32](#)

- [Deleting All Ports for Cisco Catalyst 6000 24 Port FXS Analog Interface Module Gateway](#), page 6-35
- [Creating a Gateway Directory Number Template](#), page 6-36

## 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 prompted, be sure to enable macros. See [Using the Cisco Catalyst 6000 \(FXS\) Ports tab in BAT.xlt](#), page 6-26, 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.

**Example 6-1** *If Partition is Partition\_1 on a template, all records in a CSV file that have no value for Partition use Partition\_1.*

**MAC Address**(Mandatory, 12 characters),**Port Number**(Mandatory, 2 numerals),**Directory Number**(Optional, up to 50 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 6-36](#), 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 6-29](#)
- [Updating Cisco Catalyst 6000 24 Port FXS Analog Interface Module Ports in Cisco CallManager, page 6-32](#)

## Using the Cisco Catalyst 6000 (FXS) Ports tab in BAT.xlt

Perform the following steps 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 50 numerals. 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 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](#), page 6-36, for more information.

---

## Creating a Text-Based CSV Text File

If you do not use the BAT.xlt file for data input when adding ports to Cisco Catalyst 6000 FXS analog interface modules, you must create the CSV file 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 using the BAT.xlt file.



### 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\Catalyst6000\_24PortsFXSGateway on the server running the Publisher database for Cisco CallManager.

### Procedure

To create a CSV text file for Cisco Catalyst 6000 FXS ports, perform the following steps:

- 
- 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 6-24](#), for detailed information about the formatting 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 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 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 6-36](#), 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 1-4](#).)
- 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 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 indicating the time 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 indicating the number of records added and the number of records 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 8, “Troubleshooting BAT and TAPS”](#), for more information about errors.

---

#### Related Topics

- [Creating CSV Files for Cisco Catalyst 6000 \(FXS\) ports, page 6-24](#)
- [Updating Cisco Catalyst 6000 24 Port FXS Analog Interface Module Ports in Cisco CallManager, page 6-32](#)
- [Creating a Gateway Directory Number Template, page 6-36](#)
- [Copying a Cisco Catalyst 6000 FXS Ports BAT Template, page 6-31](#)
- [Deleting All Ports for Cisco Catalyst 6000 24 Port FXS Analog Interface Module Gateway, page 6-35](#)

## 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 be changed. Perform the following steps.

#### Procedure

---

- Step 1** Start BAT. (See [Starting BAT, page 1-4.](#))
- 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 selected template details 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 6-64](#), 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 6-24](#)
- [Creating a Gateway Directory Number Template, page 6-36](#)

## Updating Cisco Catalyst 6000 24 Port FXS Analog Interface Module Ports in Cisco CallManager

Perform the following steps 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 6-36](#), for more information.

### Procedure

- 
- Step 1** Start BAT. (See [Starting BAT, page 1-4](#).)
  - 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 indicating 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 indicating the number of records updated and the number of records failed, including an error code.



---

**Note** If you click Insert instead of Update, the ports that you want to update will not be 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 8, “Troubleshooting BAT and TAPS”](#), for more information about errors.

---

**Related Topics**

- [Creating CSV Files for Cisco Catalyst 6000 \(FXS\) ports, page 6-24](#)
- [Adding Cisco Catalyst 6000 \(FXS\) Ports to Cisco CallManager, page 6-29](#)
- [Creating a Gateway Directory Number Template, page 6-36](#)

## Deleting All Ports for Cisco Catalyst 6000 24 Port FXS Analog Interface Module Gateway

Perform the following steps to delete all ports of a Cisco Catalyst 6000 24 Port FXS analog interface module.

### Procedure

---

- Step 1** Start BAT. (See [Starting BAT, page 1-4.](#))
- 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 indicating the time that it will take to perform the transaction.  
BAT generates a log file indicating 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 8, “Troubleshooting BAT and TAPS”](#), for more information about errors.
- 

### Related Topics

- [Adding Cisco Catalyst 6000 \(FXS\) Ports to Cisco CallManager, page 6-29](#)
- [Creating CSV Files for Cisco Catalyst 6000 \(FXS\) ports, page 6-24](#)
- [Updating Cisco Catalyst 6000 24 Port FXS Analog Interface Module Ports in Cisco CallManager, page 6-32](#)

# Gateway Directory Number

You use the Gateway Directory Number template when adding directory numbers 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 6-8](#), or [Creating CSV Files for Cisco Catalyst 6000 \(FXS\) ports, page 6-24](#), for more details about CSV files.

Perform the following steps to create a Gateway Directory Number template. Treat all fields as optional unless otherwise noted.

### Procedure

- 
- Step 1** Start BAT. (See [Starting BAT, page 1-4](#).)
  - 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 [page 6-65](#), for more information.

**Step 5** Click **Insert**.

The new template is added.

**Step 6** Create a CSV file. Go to [Creating CSV Files for Cisco VG200 FXS or FXO Gateways, page 6-8](#), or [Creating CSV Files for Cisco Catalyst 6000 \(FXS\) ports, page 6-24](#), for more information.

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#### Related Topics

- [Creating a Cisco VG200 Gateway Template, page 6-3](#)
- [Creating a Cisco Catalyst 6000 \(FXS\) Ports Template, page 6-23](#)
- [Creating CSV Files for Cisco VG200 FXS or FXO Gateways, page 6-8](#)
- [Creating CSV Files for Cisco Catalyst 6000 \(FXS\) ports, page 6-24](#)
- [Adding Cisco VG200 Gateways to Cisco CallManager, page 6-17](#)
- [Adding Cisco Catalyst 6000 \(FXS\) Ports to Cisco CallManager, page 6-29](#)
- [Copying a Gateway Directory Number BAT Template, page 6-37](#)

## 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.

To copy an existing BAT Gateway Directory Number template, perform the following steps.

#### Procedure

---

**Step 1** Start BAT. (See [Starting BAT, page 1-4](#).)

**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 display 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 , [page 6-65](#), for more information.
- Step 7** Click **Insert**.  
The template added to BAT displays in the Gateway Directory Number Templates column on the left.
- 

#### Related Topic

- [Creating a Gateway Directory Number Template, page 6-36](#)

## Deleting Templates

You can delete BAT templates when you no longer require them.

To delete a template, perform the following steps.

#### Procedure

---

- Step 1** Start BAT. (See [Starting BAT, page 1-4](#).)
- 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 you want to delete and click **Delete**.

A message displays asking 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.

---

## Field Descriptions

This section provides descriptions of the fields used in the various BAT templates.

### Related Topics

- [Field Descriptions for FXS Trunks on a Cisco VG200 Gateway, page 6-40](#)
- [Field Descriptions for FXO Trunks on a Cisco VG200 Gateway, page 6-42](#)
- [Field Descriptions for T1-CAS Trunks on a Cisco VG200 Gateway, page 6-45](#)
- [Fields Descriptions for T1-CAS Ports, page 6-48](#)
- [Field Descriptions for T1-PRI or E1-PRI Trunks on a Cisco VG200 Gateway, page 6-51](#)
- [Field Descriptions for FXS Ports on a Cisco Catalyst 6000 24 Port Analog Interface Module, page 6-64](#)

## Field Descriptions for FXS Trunks on a Cisco VG200 Gateway


Use the following field descriptions when adding or updating values for FXS trunks on a Cisco VG200 gateway.

Fields are mandatory unless otherwise noted.

**Table 6-1** Field Descriptions for FXS Trunks on Cisco VG200 Gateways

| Field                     | Description                                                                                                                                                                                                                                                                                                                                                 |
|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Gateway Information       |                                                                                                                                                                                                                                                                                                                                                             |
| 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 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 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>                                                                                                                                                       |

Table 6-1 Field Descriptions for FXS Trunks on Cisco VG200 Gateways (continued)

| Field                                  | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| User Hold Audio Source                 | For this optional field, choose the music on hold audio source to be played when the user places a call on hold (presses the Hold button or soft key).                                                                                                                                                                                                                                                                                                              |
| 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 using restricted bandwidth connections.                                                                                                                                                                                                                                                                 |
| Network Locale                         | <p>For this optional field, choose the network locale that you want to associate with this gateway.</p> <p>The Network Locale is 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 using Cisco IP Phones 7940 and 7960.</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>                                                                                                                       |
| Port Information                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Prefix DN                              | For this optional field, specify the prefix digits that are appended to the digits received on incoming calls.                                                                                                                                                                                                                                                                                                                                                      |

**Table 6-1** Field Descriptions for FXS Trunks on Cisco VG200 Gateways (continued)

| Field           | Description                                                                                                                                          |
|-----------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| Num Digits      | 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. |
| Expected Digits | Specify the number of digits expected on the inbound side of the trunk. Use the default value (zero) if you are unsure.                              |

## Field Descriptions for FXO Trunks on a Cisco VG200 Gateway

Use the following field descriptions when adding or updating values for FXO trunks on a Cisco VG200 gateway.

Fields are mandatory unless otherwise noted.

**Table 6-2** Field Descriptions for FXO Trunks on Cisco VG200 Gateways

| Field                | Description                                                                                                                                                                                                                                                                                                                                                 |
|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Gateway Information  |                                                                                                                                                                                                                                                                                                                                                             |
| 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>                                                                                        |

Table 6-2 Field Descriptions for FXO Trunks on Cisco VG200 Gateways (continued)

| Field                     | Description                                                                                                                                                                                                                                                                                                                             |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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 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 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 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 using restricted bandwidth connections.</p>                                                                                                                       |
| Port Information          |                                                                                                                                                                                                                                                                                                                                         |
| Port Direction            | <p>Specify the direction of calls passing through this port.</p> <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>                                |

**Table 6-2** Field Descriptions for FXO Trunks on Cisco VG200 Gateways (continued)

| Field        | Description                                                                                                                      |
|--------------|----------------------------------------------------------------------------------------------------------------------------------|
| 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 adding or updating values for the T1-CAS signaling protocol on a Cisco VG200 gateway.

Fields are mandatory unless otherwise noted.

**Table 6-3** *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 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 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>                                                                                                                                                       |

Table 6-3 Field Descriptions for T1-CAS Trunks on Cisco VG200 Gateways (continued)

| Field                  | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| User Hold Audio Source | For this optional field, choose the music on hold audio source to be played when the user places a call on hold (presses the Hold button or soft key).                                                                                                                                                                                                                                                                                                              |
| 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 using restricted bandwidth connections.                                                                                                                                                                                                                                                                 |
| Network Locale         | <p>For this optional field, choose the network locale that you want to associate with this gateway.</p> <p>The Network Locale is 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 using Cisco IP Phones 7940 and 7960.</p> |
| Load Information       | <p>This is an optional field. Enter the appropriate load information for the custom software for gateway. The values you enter here override the default values for this gateway.</p> <p>Leave this field blank to use the default load.</p>                                                                                                                                                                                                                        |

**Table 6-3** Field Descriptions for T1-CAS Trunks on Cisco VG200 Gateways (continued)

| Field                | Description                                                                                                                                                                                                                                                                                                                                                       |
|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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 adding or updating values for ports for the T1-CAS signaling protocol on a Cisco VG200 gateway.

Treat fields as mandatory unless otherwise noted.

**Table 6-4** Field Descriptions for T1-CAS Ports

| Field                   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Port Direction          | Choose the direction of calls 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. Normal touchtone dialing. This choice represents the default value.</li> <li>• MF—Multifrequency</li> </ul>                                                                                                                                                                                                                        |

Table 6-4 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 6-4** 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 adding or updating values for T1-PRI or E1-PRI trunks on a Cisco VG200 gateway.

Fields are mandatory unless otherwise noted.

**Table 6-5** *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 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 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>                                                                                                                                                       |

Table 6-5 Field Descriptions for T1-PRI or E1-PRI Trunks on Cisco VG200 Gateways (continued)


| Field                   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| User Hold Audio Source  | For this optional field, choose 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 Locale          | <p>For this optional field, choose the network locale that you want to associate with this gateway.</p> <p>The Network Locale is 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 using Cisco IP Phones 7940 and 7960.</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 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 are 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>                                                                                                                                 |

Table 6-5 Field Descriptions for T1-PRI or E1-PRI Trunks on Cisco VG200 Gateways (continued)

| Field                    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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>                                                                                                                                                        |
| 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> |
| 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 6-5 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 is a channel map for one B-channel but is 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 checkbox 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 obtained from the PBX provider. Valid values range from 0 to 255.</p>                                                                                                                                                                                                                                                                                                                                                   |
| Display IE Delivery                     | <p>For this optional field, check the checkbox 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 checkbox 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 6-5** 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 checkbox 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 is 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 is 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 is 23.</p> <p>Use this field if you check the Sig Digits check box. Use for the processing of incoming calls and to indicate the number of digits, starting from the last digit of the called number, used to route calls coming into the PRI span. See Prefix DN and Sig Digits.</p> |

Table 6-5 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 checkbox depending on whether you want to collect significant digits:</p> <ul style="list-style-type: none"> <li>• If you do not check the checkbox, Cisco CallManager does not truncate the inbound number.</li> <li>• If you check the checkbox, 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. This is the default value.</li> <li>• Restricted—The Central Office will not send caller ID.</li> </ul>                                                                                                                                                                                                                                                                                                                                      |

**Table 6-5** 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 connecting to PBXs 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 directory number type. This is 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 6-5** 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 connecting to PBXs 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 is 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 6-5** 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 connecting to PBXs 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 6-5** 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 connecting to PBXs 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 is 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 6-5 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> </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 6-5** 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 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                     | For this optional field, check the checkbox to view the B-channel status in the debug window. By default, the box remains unchecked.                                                                                                                                                                                                                 |
| 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 6-5 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 checkbox 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 adding or updating values for FXS ports on a Cisco Catalyst 6000 analog interface module.

All fields are mandatory unless otherwise noted.

**Table 6-6** 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 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—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 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 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.                                                                                                                                   |
| Product Specific Configuration          |                                                                                                                                                                                                                                                                                |
| 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.                                                                                                                                                                                                    |

**Table 6-6** Field Descriptions for FXS Ports on Cisco Catalyst 6000 Modules (continued)

| Field                                  | Description                                                                                                                                                       |
|----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Auto Signal Adjustment from IP Network | Choose the gain or loss that you want applied to the transmitted audio signal.                                                                                    |
| Timers                                 |                                                                                                                                                                   |
| 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 is 5000 ms.                     |
| Offhook Validation Timer               | Enter the time that must pass before Cisco CallManager recognizes a valid off-hook indication. Default is 100 ms.                                                 |
| Onhook Validation Timer                | Enter the time that must pass before Cisco CallManager recognizes a valid on-hook indication. Default is 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 is 1000 ms. |

## Field Descriptions for Gateway Directory Number Template

Use the following field descriptions when adding or updating values for a Gateway Directory Number template.

Treat all fields as optional.

**Table 6-7** *Field Descriptions for Gateway Directory Number Template*

| Field                                                                                                                                                                                   | Description                                                                                                                                                                                                                             |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Partition                                                                                                                                                                               | Choose the partition to which the directory number will be added                                                                                                                                                                        |
| Directory Number Settings                                                                                                                                                               |                                                                                                                                                                                                                                         |
| Voice Message Profile                                                                                                                                                                   | Check this checkbox 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.                   |
| Calling Search Space                                                                                                                                                                    | Choose the calling search space to which this group of directory numbers should belong.<br><br>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 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 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 forwards to the specified directory number.                                |

**Table 6-7** *Field Descriptions for Gateway Directory Number Template (continued)*

| <b>Field</b>                                          | <b>Description</b>                                                                                                                                                                                  |
|-------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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).                                                                                         |
| Line Settings for this Device                         |                                                                                                                                                                                                     |
| External Phone Number Mask                            | Enter the phone number (mask) used to send Caller ID information when placing a call from this directory number.                                                                                    |
| Activate Auto-Answer Message Waiting Indicator Policy | This field indicates how the Message Waiting Lamp behaves for the device. You can have the MWI always light, never light, or use the system policy, as defined in Cisco CallManager Administration. |





## Working With TAPS

---

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 the phones with dummy MAC addresses have been bulk-added to Cisco CallManager Administration using BAT, you can plug the phones into the network. You or the phones 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 simply dialing the TAPS directory number (by you or the new hire) 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 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 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 7-3](#) 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 (**System > Cisco CallManager**), 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 7-7](#) for more information.

The TAPS application, which is installed on a Cisco CRA server, also requires components to be installed on the server running the Cisco CallManager Publisher database.

**Note**

---

TAPS requires the Cisco IP Interactive Voice Response (IP IVR) application that runs on the Cisco Customer Response Application (Cisco CRA) server. You must purchase an IP IVR for TAPS to work.

---

Do not use TAPS if you are specifying MAC address for each phone during the bulk-add.

**Related Topics**

- [Configuring TAPS, page 7-3](#)
- [Securing TAPS, page 7-7](#)
- [Starting TAPS, page 7-6](#)
- [Stopping TAPS, page 7-7](#)
- [TAPS for End Users, page 7-12](#)

# 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> and choosing **Software Center > Voice Software > Cisco CRA**. 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 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 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** 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 Added Using Auto-Registration, page 7-4](#)
- [Restricting TAPS to Update Only Cisco IP Phones Added Using the Dummy MAC Address Option in BAT, page 7-5](#)

## Allowing TAPS to Update Any Cisco IP Phone 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 via Cisco CallManager Administration or via BAT using a dummy MAC address. The default limits use of TAPS to only those phones 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 previously used by the old phone.

Use the following steps to configure TAPS, so the device profile of any phone on the system can be updated, not just phones added to BAT using the dummy MAC address option.

#### Procedure

- 
- Step 1** On the machine running BAT, choosing **Start > Programs > Cisco CallManager > 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 added to the Cisco CallManager database using auto-registration to be updated by TAPS. The Configure TAPS window automatically closes.

---

**Related Topic**

- [Restricting TAPS to Update Only Cisco IP Phones Added Using the Dummy MAC Address Option in BAT, page 7-5](#)

## Restricting TAPS to Update Only Cisco IP Phones Added Using the Dummy MAC Address Option in BAT

The default limits use of TAPS to only those phones added using the dummy MAC address option in BAT. Phones 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 Added Using Auto-Registration, page 7-4](#)), 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 running BAT, choose **Start > Programs > Cisco CallManager > 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 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 Added Using Auto-Registration, page 7-4](#)

## Starting TAPS

You must manually start the TAPS service. Perform the following steps to start TAPS.

#### Procedure

---

- Step 1** On the server 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 7-7](#)

## Stopping TAPS

Stop the TAPS service from the Services window on the Publisher server (where BAT is installed).

#### Procedure

---

**Step 1** On the server 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 7-6](#)

## 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 7-8](#)
- [Lifting the Restriction on a Directory Number, page 7-9](#)
- [Resetting Directory Numbers, page 7-10](#)
- [Viewing a List of Restricted Directory Numbers, page 7-11](#)

## Restricting Directory Numbers

Use the following steps to block TAPS from using directory numbers that you specify.

### Procedure

---

**Step 1** On the machine running BAT, choose **Start > Programs > Cisco CallManager > 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 Steps 2 through 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 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, you should click **Refresh List** to redisplay an updated list.

---

**Step 6** Click **Exit**.

---

#### Related Topics

- [Securing TAPS, page 7-7](#)
- [Lifting the Restriction on a Directory Number, page 7-9](#)
- [Resetting Directory Numbers, page 7-10](#)
- [Viewing a List of Restricted Directory Numbers, page 7-11](#)

## Lifting the Restriction on a Directory Number

Use the following steps to remove a directory number from the list of directory numbers that TAPS cannot access.

#### Procedure

---

**Step 1** On the machine running BAT, choose **Start > Programs > Cisco CallManager > 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 Steps 2 through 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 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, you should click **Refresh List** to redisplay an updated list.

---

**Step 6** Click **Exit**.

---

**Related Topics**

- [Securing TAPS, page 7-7](#)
- [Restricting Directory Numbers, page 7-8](#)
- [Resetting Directory Numbers, page 7-10](#)
- [Viewing a List of Restricted Directory Numbers, page 7-11](#)

## Resetting Directory Numbers

Use the following steps 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 running BAT, choose **Start > Programs > Cisco CallManager > 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 7-8](#).
- 

#### Related Topics

- [Securing TAPS, page 7-7](#)
- [Restricting Directory Numbers, page 7-8](#)
- [Lifting the Restriction on a Directory Number, page 7-9](#)
- [Viewing a List of Restricted Directory Numbers, page 7-11](#)

## Viewing a List of Restricted Directory Numbers

Use these steps to view a list of directory numbers that TAPS cannot access.

#### Procedure

---

- Step 1** On the machine running BAT, choose **Start > Programs > Cisco CallManager > 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 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 7-7](#)
- [Restricting Directory Numbers, page 7-8](#)
- [Lifting the Restriction on a Directory Number, page 7-9](#)
- [Resetting Directory Numbers, page 7-10](#)

# TAPS for End Users

Follow these steps 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 provided by your system administrator.
- Step 3** A voice prompts you to select 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 using BAT or TAPS, provides the error messages, and suggests actions to help you resolve the problems.

## Related Topics

- [BAT Log Files](#)
- [Troubleshooting BAT](#)
- [Troubleshooting TAPS on the Cisco CRA Server, page 8-19](#)

## BAT Log Files

BAT generates log files for each bulk transaction and stores them 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 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**



## Note

The log file names designate the operation performed and the time that the operation ended.

The timestamp format for the log file name is *mmddyyyyhhmmss*.

Table 7-1 shows examples of commands and log file names.

**Table 8-1 Log File Names**

| Command | Log File Name                                                                                | Example                    |
|---------|----------------------------------------------------------------------------------------------|----------------------------|
| Insert  | File1#TimeStamp.log (File1 stands for the name of the CSV file used for the insert command.) | File1#05022000133431       |
| Update  | UpdatePhone#TimeStamp.log                                                                    | UpdatePhone#05022000133431 |
| Delete  | DeletePhone#TimeStamp.log                                                                    | DeletePhone#05022000133431 |

# 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 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 specified on the CSV should exactly match the number of lines configured in the BAT phone template. Also, the number of speed dials 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** Null value for mandatory field *<field name>* is not allowed.

**Explanation** Error occurs for any mandatory field that has been left blank.

**Recommended Action** Specify a value for all mandatory fields.

**Symptom** Selected template does not contain DN details for directory number.

**Explanation** The 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** Partition details can be added only with corresponding directory number.

**Explanation** You cannot leave the directory number field blank when a partition has been specified.

**Recommended Action** Specify a directory number for each record with a partition specified or delete the partition details from those rows that do not have a directory number specified.

**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 mis-match between the CSV file and BAT template occurred, and then correct the problem by adding or removing line details or speed dials in the CSV file or 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 checkbox.

**Symptom** Directory number cannot be added without at least one MAC address.

**Explanation** You must provide a MAC address when a directory number has been specified.

**Recommended Action** In the CSV file, specify a MAC address for each device for which a directory number has been specified.

**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** Couldn't create user object. Check if 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 started.
- Make sure JTAPI is properly configured on the Cisco CRA server.
- Make sure the Route Points and CTI ports are properly configured on the Cisco CallManager.
- Verify 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.
- Make sure Cisco CallManager is running properly.

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** 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, uninstalls, then reinstall TAPS.

**Symptom** Preprocess exception

**Explanation** Cisco CRA server trace file shows “Preprocess exception” for TAPS.aef.

**Recommended Action** Perform the following steps to correct this problem.

#### Procedure

---

- Step 1** Open the file **TAPS.aef** that can be found at the following location: **C:\Program Files\wfaavid\**.
  - Step 2** Choose **Tools > Validate**.
  - Step 3** Save TAPS workflow.
  - Step 4** Close TAPS workflow.
  - Step 5** Delete TAPS.aef from the repository manager.
  - Step 6** Upload TAPS.aef from **C:\Program Files\wfaavid\**.
  - Step 7** Restart the Cisco CRA engine.
-

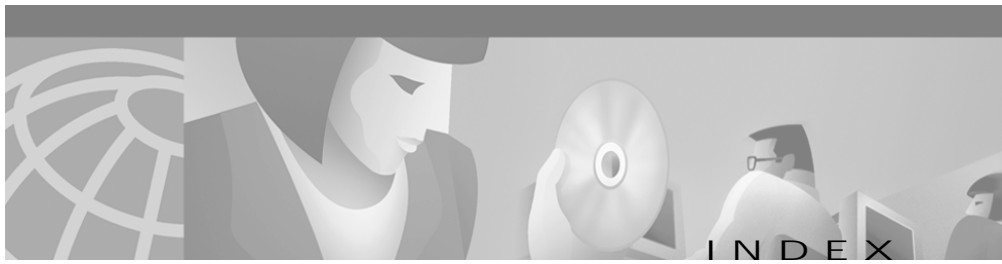
If you have problems after restarting Cisco CRA, check the CLASSPATH on the Cisco CRA server and append **C:\TAPS** to the Cisco CRA server.

**Symptom** Provider exception

**Explanation** Trace file of the Cisco CRA server shows this error.

**Recommended Action** Make sure the Cisco CallManager service is running on the Cisco CallManager server.





---

## A

### adding

- Catalyst 6000 FXS ports [6-22](#)
  - Catalyst 6000 FXS ports to Cisco CallManager [6-29](#)
  - CTI ports [3-2](#)
  - lines to phone template [3-4](#)
  - phones [3-2](#)
  - phone template [3-3](#)
  - services to phone template [3-5](#)
  - speed dial settings to phone template [3-6](#)
  - user device profiles [5-2, 5-10](#)
  - users [4-1](#)
  - users to Cisco CallManager [4-8](#)
  - VG200 FXS or FXO gateways to Cisco CallManager [6-17](#)
  - VG200 gateways and ports [6-2](#)
  - VG200 T1-CAS, T1-PRI, or E1-PRI gateways to Cisco CallManager [6-17](#)
- auto-registration [7-1](#)

---

## B

### BAT

- browser requirements [1-4](#)

default location of log files [8-13](#)

error messages [8-15](#)

installation overview [2-1](#)

installing [2-3](#)

log files [8-13](#)

logging on [1-5](#)

online help [1-5](#)

overview [1-1](#)

specifications [1-3](#)

starting [1-4](#)

stopping [1-6](#)

troubleshooting [8-13, 8-15](#)

uninstalling [2-8](#)

upgrading [2-2](#)

using [1-4](#)

version [1-5](#)

viewing log files [8-14](#)

### BAT.xlt

create CSV for CTI ports [3-8](#)

create CSV for CTI ports-users [3-8](#)

create CSV for phones [3-8](#)

create CSV for phones-users [3-8](#)

create CSV for users [4-3, 4-12](#)

creating Catalyst 6000 FXS ports [6-26](#)

file location [2-3](#)

browser requirements [1-4](#)

---

## C

### Cisco CallManager

- adding Catalyst 6000 FXS ports [6-29](#)
- adding CTI ports [3-18](#)
- adding phones [3-18, 3-20](#)
- adding phones and users [3-20](#)
- adding users [4-8](#)
- adding VG200 FXS or FXO gateways [6-17](#)
- adding VG200 T1-CAS, T1-PRI, or E1-PRI gateways [6-17](#)
- auto-registration must be enabled for TAPS [7-1](#)

### Cisco Catalyst 6000 FXS ports

- adding or updating ports [6-22](#)
- adding ports [6-22](#)
- adding to Cisco CallManager [6-29](#)
- creating BAT template [6-23](#)
- creating CSV file [6-24](#)
- deleting ports [6-35](#)
- deleting template [6-38](#)
- field descriptions [6-64](#)
- limit of 500 [6-26](#)
- overview [6-1, 6-21](#)
- updating [6-32](#)

### Cisco CRA

- required for TAPS [7-2](#)
- troubleshooting TAPS [8-19](#)

uninstalling TAPS [2-9](#)

uploading TAPS [2-7](#)

### Cisco IP IVR

required for TAPS [7-2](#)

### Cisco VG200

- adding gateways and ports [6-2](#)
- adding to Cisco CallManager (FXS or FXO) [6-17](#)
- adding to Cisco CallManager (T1-CAS, T1-PRI, or E1-PRI) [6-17](#)
- configure using CLI prior to adding gateways in BAT [6-1](#)
- copying a template [6-19](#)
- creating a template [6-3](#)
- creating CSV file for FXS or FXO [6-8](#)
- creating CSV file for T1-CAS, T1-PRI, or E1-PRI [6-10](#)
- delete only selected gateways [6-20](#)
- deleting BAT template [6-38](#)
- deleting gateways [6-20](#)
- field descriptions for E1-PRI [6-51](#)
- field descriptions for FXO [6-42](#)
- field descriptions for FXS [6-40](#)
- field descriptions for T1-CAS [6-45](#)
- field descriptions for T1-PRI [6-51](#)
- overview [6-1](#)
- updating endpoint identifiers [6-7](#)

### CLI [6-1](#)

- command line interface [6-1](#)
- configure TAPS [7-3](#)
- configuring

- user device profiles [5-2](#)
- configuring TAPS [7-3](#)
- copying
  - Catalyst 6000 FXS ports template [6-31](#)
  - gateway directory number template [6-37](#)
  - phone template [3-23](#)
  - VG200 template [6-19](#)
- create dummy MAC address [3-12](#), [3-19](#), [3-21](#)
- creating
  - Catalyst 6000 FXS ports template [6-23](#)
  - CSV file for Catalyst 6000 FXS ports [6-24](#)
  - CSV file for phones [3-7](#)
  - CSV file for user device profile [5-4](#)
  - CSV file for VG200 FXS or FXO [6-8](#)
  - CSV file for VG200 T1-CAS, T1-PRI, or E1-PRI [6-10](#)
  - phone template [3-3](#)
  - template for gateway directory number [6-36](#)
  - user device profiles template [5-2](#)
  - VG200 template [6-3](#)
- CSV
  - Catalyst 6000 FXS ports [6-24](#)
  - creating a BAT.xlt for users [4-3](#), [4-12](#)
  - creating a text-based file for Catalyst 6000 FXS ports [6-28](#)
  - creating a text-based file for phones, phones-users combination, CTI ports, or CTI ports-users combination [3-13](#)
  - creating a text-based file for update users [4-14](#)
  - 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 [6-13](#)
  - creating for user device profile [5-4](#)
  - CTI ports [3-7](#)
  - no blank lines [3-10](#), [5-5](#)
  - phone [3-7](#)
  - required location for saving files [4-6](#), [4-14](#), [5-7](#)
  - retaining stored values [4-16](#)
  - text file for phones [3-13](#), [6-13](#), [6-28](#)
  - tips for creating text-based CSV for user device profiles [5-8](#)
  - tips for creating text-based CSV for user device profiles with two lines [5-9](#)
  - tips for creating text-based CSV for users [4-7](#), [4-15](#)
  - tips for creating text-based file for phones, phones-users, CTI ports, or CTI ports-users [3-14](#)
  - using BAT.xlt for Catalyst 6000 FXS ports [6-26](#)
  - using BAT.xlt for phones [3-8](#), [3-9](#)
  - using BAT.xlt for phone-user combination [3-8](#), [3-9](#)
  - using BAT.xlt for update users [4-11](#)
  - using BAT.xlt for users [4-2](#)
  - VG200 for FXS or FXO [6-8](#)
  - VG200 for T1-CAS, T1-PRI, or E1-PRI [6-10](#)
- CTI ports
  - adding [3-2](#)

adding CTI ports-users combination to Cisco CallManager [3-20](#)

adding to Cisco CallManager [3-18](#)

associating new port to existing user [3-7](#)

creating CSV file [3-7](#)

directory number must match number of lines in template [3-8](#)

enable authentication proxy rights [3-21](#)

enable CTI application use [3-19, 3-21](#)

using BAT.xlt to create CSV [3-8, 3-9](#)

using BAT.xlt to create CSV for CTI ports-users combination [3-8, 3-9](#)

using dummy MAC address option [3-19, 3-21](#)

---

## D

### deleting

Catalyst 6000 FXS ports [6-35](#)

Catalyst 6000 FXS ports template [6-38](#)

gateway directory number template [6-38](#)

phones [3-31](#)

selected VG200 gateways [6-20](#)

user device profiles [5-11](#)

users [4-18](#)

VG200 gateways [6-20](#)

VG200 template [6-38](#)

### directory number

creating gateway template [6-36](#)

securing from TAPS [7-7](#)

### downloading

phone configuration using TAPS [7-12](#)

dummy MAC address [3-12, 3-19, 3-21](#)

generate a list of phones with [3-29](#)

MAC address [3-29](#)

---

## E

### E1-PRI

adding VG200 gateways to Cisco CallManager [6-17](#)

creating the CSV file for VG200 gateways [6-10](#)

field descriptions for VG200 [6-51](#)

enable authentication proxy rights

- adding users [4-9](#)
- for CTI ports and users [3-21](#)
- for phones and users [3-21](#)

enable CTI application use

- adding users [4-9](#)
- CTI ports [3-19](#)
- CTI ports and users [3-21](#)
- phones [3-19](#)
- phones and users [3-21](#)

endpoint identifiers, updating [6-7](#)

error messages, BAT [8-15](#)

Export to BAT Format button does not work in BAT.xlt file [8-15](#)

---

## F

### field descriptions

- adding or updating lines [3-41](#)
- adding or updating lines to UDP template [5-13](#)
- Catalyst 6000 FXS ports [6-64](#)
- gateway directory number template [6-66](#)
- ground start [6-42](#)
- loop start [6-42](#)
- phone template [3-34, 3-47](#)
- VG200 - E1-PRI [6-51](#)
- VG200 - FXO [6-42](#)
- VG200 - FXS [6-40](#)
- VG200 - T1-CAS [6-45](#)
- VG200 - T1-PRI [6-51](#)

## FXO

- adding VG200 gateways to Cisco CallManager [6-17](#)
- field descriptions [6-42](#)

## FXS

- adding Catalyst 6000 ports to Cisco CallManager [6-29](#)
- adding or updating ports for Catalyst 6000 ports [6-22](#)
- adding VG200 gateways to Cisco CallManager [6-17](#)
- creating BAT template for Catalyst 6000 ports [6-23](#)
- creating CSV file for Catalyst 6000 ports [6-24, 6-26](#)
- creating CSV file for VG200 gateways [6-8](#)

- creating the CSV file for VG200 gateways [6-8](#)
- deleting Catalyst 6000 ports [6-35](#)
- field descriptions for Catalyst 6000 ports [6-64](#)
- field descriptions for VG200 [6-40](#)
- updating Catalyst 6000 ports [6-32](#)

---

## G

### gateway

- Cisco Catalyst 6000 FXS ports [6-1](#)
- Cisco VG200 overview [6-1](#)

### gateway directory number

- copying template [6-37](#)
- deleting template [6-38](#)
- field descriptions for template [6-66](#)
- template [6-36](#)

### gateway directory number template

- required if you specified directory numbers [6-36](#)

### ground start, field descriptions [6-42](#)

---

## H

- halting TAPS [7-7](#)
- help [1-5](#)

---

## I

- inserting
  - user device profiles [5-10](#)
- 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 [7-12](#)

---

## L

- lines
  - adding or updating [3-4](#)
  - field descriptions for adding or updating [3-41](#)
  - field descriptions for adding or updating to UDP template [5-13](#)
  - maximum number [3-5](#)
  - updating [3-27](#)
- log files
  - BAT [8-13](#)

- explanation of file naming convention [8-14](#)
- viewing [8-14](#)
- logging on to BAT [1-5](#)
- loop start,field descriptions [6-42](#)

---

## M

- MAC address
  - dummy MAC address [3-29](#)
  - generate a list of phones with dummy [3-29](#)
- module in slot [6-4](#)

---

## N

- NM-1V [6-4](#)
- NM-2V [6-4](#)
- NM-HDV [6-4](#)

---

## O

- overview
  - adding or updating FXS ports for Catalyst 6000 modules [6-22](#)
  - adding VG200 gateways and ports [6-2](#)
  - BAT [1-1](#)
  - Catalyst 6000 FXS ports [6-21](#)
  - creating CSV files for FXS ports on Catalyst 6000 modules [6-24](#)
  - gateway directory number [6-36](#)
  - TAPS [7-1, 7-2](#)

working with gateways and ports [6-1](#)

---

## P

password, value is mandatory [3-17](#)

### phone

adding [3-2](#)

adding a template [3-3](#)

adding or updating lines [3-4](#)

adding or updating services [3-5](#)

adding or updating speed dial settings [3-6](#)

adding phones-users combination to Cisco CallManager [3-20](#)

adding to Cisco CallManager [3-18, 3-20](#)

BAT reaction if line information fails during insert [3-23](#)

copying a template [3-23](#)

creating CSV file [3-7](#)

CSV text file [3-13, 6-13, 6-28](#)

deleting [3-31](#)

deleting templates [3-32](#)

enable authentication proxy rights [3-21](#)

enable CTI application use [3-19, 3-21](#)

field descriptions for phone template [3-34, 3-47](#)

generate a list of phones with dummy MAC addresses [3-29](#)

updating [3-25](#)

updating lines [3-27](#)

using BAT.xlt to create CSV for phone [3-8, 3-9](#)

using dummy MAC address option [3-12, 3-19, 3-21](#)

PIN, value is mandatory [3-17](#)

### ports

adding CTI [3-2](#)

adding VG200 [6-2](#)

### prerequisites

BAT/TAPS [2-3](#)

TAPS [2-5](#)

---

## Q

### query

updating lines [3-27](#)

updating phones [3-25](#)

---

## R

### removing

user device profiles [5-11](#)

repository manager [2-7](#)

reset devices after update [3-26](#)

restart devices after update [3-26](#)

---

## S

secure TAPS [7-7](#)

securing directory numbers from TAPS [7-7](#)

services, adding or updating [3-5](#)

specifications [1-3](#)  
 speed dial settings, adding or updating [3-6](#)  
 starting  
     BAT [1-4](#)  
     TAPS [7-6](#)  
 stopping  
     BAT [1-6](#)  
     TAPS [7-7](#)  
 sub-unit [6-4](#)

---

**T**
**T1-CAS**

adding VG200 gateways to Cisco  
 CallManager [6-17](#)  
 creating the CSV file for VG200  
 gateways [6-10](#)  
 field descriptions for VG200 [6-45](#)

**T1-PRI**

adding VG200 gateways to Cisco  
 CallManager [6-17](#)  
 creating the CSV file for VG200  
 gateways [6-10](#)  
 field descriptions for VG200 [6-51](#)

**TAPS**

auto-registration must be enabled [7-1](#)  
 Cisco CRA required [7-2](#)  
 Cisco IP IVR required [7-2](#)  
 completing installation [2-7](#)  
 completing uninstallation [2-9](#)

configuring [7-3](#)  
 halting [7-7](#)  
 installing [2-3, 2-5](#)  
 installing once BAT is already installed [2-5](#)  
 instructions for end-users [7-12](#)  
 overview [7-1, 7-2](#)  
 securing directory numbers [7-7](#)  
 starting [7-6](#)  
 stopping [7-7](#)  
 taps.aef [2-7](#)  
 troubleshooting [8-13, 8-19](#)  
 troubleshooting on the Cisco CRA  
     server [8-19](#)  
 uninstalling [2-8](#)  
 uploading to Cisco CRA Administration  
     server [2-7](#)  
 version [1-6](#)  
 taps.aef [2-7](#)  
 template  
     adding or updating lines [3-4](#)  
     adding or updating services [3-5](#)  
     adding or updating speed dial settings [3-6](#)  
     BAT.xlt file location [2-3](#)  
     copying Catalyst 6000 FXS ports [6-31](#)  
     copying gateway directory number [6-37](#)  
     copying phone [3-23](#)  
     copying VG200 [6-19](#)  
     creating Catalyst 6000 FXS ports [6-23](#)  
     creating VG200 [6-3](#)  
     deleting Catalyst 6000 FXS ports [6-38](#)

- deleting gateway directory number [6-38](#)
- deleting phone [3-32](#)
- deleting VG200 [6-38](#)
- field descriptions for adding or updating lines [3-41](#)
- field descriptions for adding or updating lines to UDP template [5-13](#)
- field descriptions for Catalyst 6000 ports [6-64](#)
- field descriptions for gateway directory number [6-66](#)
- field descriptions for phone [3-34](#), [3-47](#)
- field descriptions for VG200 - E1-PRI or T1-PRI [6-51](#)
- field descriptions for VG200 - FXO [6-42](#)
- field descriptions for VG200 - FXS [6-40](#)
- field descriptions for VG200 - T1-CAS [6-45](#)
- gateway directory number [6-36](#)
- gateway directory number is required if you specified directory numbers [6-36](#)
- migration during upgrade [2-2](#)
- no backward migration [2-2](#)
- overview of gateway directory number [6-36](#)
- phone [3-3](#)
- user device profiles [5-2](#)
- troubleshooting
  - BAT [8-15](#)
  - BAT and TAPS [8-13](#)
  - couldn't create user object. Check if DC Directory is running [8-18](#)
  - data files (CSV) format do not match phone template/sample file [8-15](#)
  - directory number cannot be added without at least one MAC address [8-18](#)
  - errors occur when using the dummy MAC address option [8-16](#)
  - Export to BAT Format button does not work in BAT.xlt file [8-15](#)
  - MAC address values are not allowed in the file if dummy MAC address values are desired [8-18](#)
  - null value for mandatory field is not allowed [8-16](#)
  - partition details can be added only with corresponding directory number [8-16](#)
  - port data in record number n does not match the corresponding sample file/number of lines and speed dials in phone template chosen [8-17](#)
  - port identifier contains invalid endpoint prefix [8-17](#)
  - port identifier contains invalid port number [8-17](#)
  - port number not configured in the template [8-17](#)
  - preprocess exception [8-20](#)
  - provider exception [8-21](#)
  - same directory number cannot be assigned twice to a device in the same partition [8-18](#)
  - selected template does not contain DN details for directory number [8-16](#)
  - TAPS [8-19](#)
  - TAPS on the Cisco CRA server [8-19](#)
  - the page cannot be displayed [8-15](#)

when the Cisco CRA server starts, the JTAPI subsystem shows partial service or out of service [8-19](#)

---

## U

### uninstalling

BAT/TAPS [2-8](#)

removing TAPS from Cisco CRA Administration server [2-9](#)

### update users

creating CSV file [4-11](#)

creating text-based CSV file [4-14](#)

### updating

Catalyst 6000 FXS ports [6-22](#), [6-32](#)

endpoint identifiers [6-7](#)

lines [3-27](#)

lines for phone template [3-4](#)

phone configuration using TAPS [7-12](#)

phones [3-25](#)

services to phone template [3-5](#)

speed dial settings to phone template [3-6](#)

users [4-10](#)

### upgrading BAT [2-2](#)

uploading TAPS to the Cisco CRA Administration server [2-7](#)

### user

using BAT.xlt for phone-user combination [3-9](#)

### user device profile

CSV file [5-4](#)

### user device profiles

adding [5-2](#), [5-10](#)

configuring [5-2](#)

creating a template [5-2](#)

creating text-based CSV file [5-7](#)

deleting [5-11](#)

inserting [5-10](#)

removing [5-11](#)

### users

adding [4-1](#)

adding to Cisco CallManager [4-8](#)

BAT.xlt [4-3](#), [4-12](#)

creating CSV file [4-2](#)

creating text-based CSV file [4-5](#)

deleting [4-18](#)

updating [4-10](#)

using BAT.xlt for phone-user combination [3-8](#)

---

## V

version [1-5](#), [1-6](#)

VIC-2FXO [6-5](#)

VIC-2FXS [6-5](#)

Viewing log files [8-14](#)

VWIC-1MFT-E1 [6-5](#)

VWIC-1MFT-T1 [6-5](#)

VWIC-2MFT-E1 [6-5](#)

VWIC-2MFT-T1 [6-5](#)