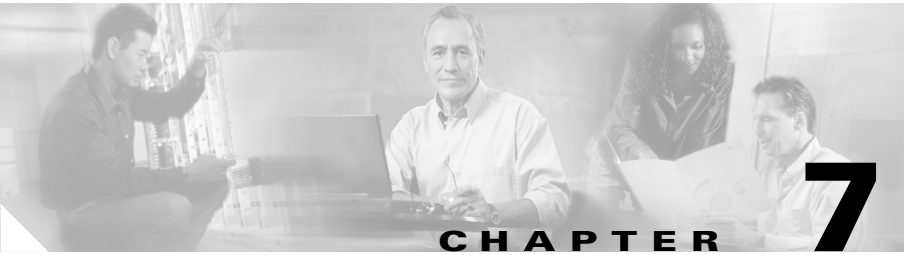

Working with Gateways and Ports

You can use BAT to add or delete Cisco VG200: Cisco IP Telephony Voice Gateways with ports and to add, update, and delete FXS ports on Cisco Catalyst 6000 24 Port FSX Analog Interface Modules. You must add the Cisco Catalyst 6000 to Cisco CallManager database before adding FXS ports. A provided Gateway Directory Number template allows you to specify directory number configuration for POTS port types on Cisco VG200 gateways or Cisco Catalyst 6000 24 Port FSX Analog Interface Modules.

To add gateway models other than Cisco VG200, you must use Cisco CallManager Administration. You can choose **Configure > Gateways > Catalyst 6000 (FXS)** and then click **Add Gateways** link in the upper, right corner. This action takes you to the Add Gateways window in Cisco CallManager Administration.

Note Before using BAT to add Cisco VG200 gateways to the Cisco CallManager database, you must first configure the gateway by using the Cisco IOS software command line interface (CLI). For procedures and commands that are required to perform this configuration, refer to the configuration documentation that is supplied with the gateway.

Cisco VG200 Gateways and Ports

BAT allows you to bulk-add or bulk-delete Cisco VG200 gateways and ports.

Related Topics

- Adding Cisco VG200 Gateways and Ports, page 7-2
- Creating a Gateway Directory Number Template, page 7-32
- Deleting Cisco VG200 Gateways, page 7-17

Adding Cisco VG200 Gateways and Ports

You can use BAT to add Cisco VG200 gateways and their ports to the Cisco CallManager database in batches, rather than add each gateway and port individually.

To add Cisco VG200 gateways to Cisco CallManager, you must perform the following steps:

1. Configure the gateway by using Cisco IOS software command line interface. See documentation that was supplied with your gateway for configuration instructions.
2. Create a Cisco VG200 gateway template to define common values for a set of gateways and ports.
3. Create a CSV file to define individual values for each gateway and port that you want to add.
4. Use BAT to insert gateways and ports in the Cisco CallManager database.

Related Topics

- Creating a Cisco VG200 Gateway Template, page 7-3
- Creating CSV Files for Cisco VG200 FXS or FXO Gateways, page 7-7
- Adding Cisco VG200 Gateways to Cisco CallManager, page 7-15
- Deleting Cisco VG200 Gateways, page 7-17

Creating a Cisco VG200 Gateway Template

The BAT Cisco VG200 template and comma separated values (CSV) file work together in bulk transactions. You can create a template that has the common settings for all the gateways that are to be added in that batch, such as the module in slot, type of endpoint identifier, and so on. BAT stores these templates, so they are reusable for other batches. You can configure a template with some basic attributes and use it for batches later.

Note Before using BAT to add Cisco VG200 gateways to the Cisco CallManager database, you must first configure the gateway by using the Cisco IOS software command line interface (CLI). For procedures and commands that are required to perform this configuration, refer to the configuration documentation that is supplied with the gateway.

The CSV file stores the details for each individual port, such as directory number, description of port, and partition. See Creating CSV Files for Cisco VG200 FXS or FXO Gateways, page 7-7, for more details about CSV files. For POTS port types, you can also specify a Gateway Directory Number template as a part of Cisco VG200 gateway template.

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

Procedure

Step 1 Start BAT. (See Starting BAT, page 1-3.)

Step 2 Choose **Configure > Template > VG200 Gateway**.

The VG200 Gateway Template Configuration window displays.

Step 3 Enter values for the following fields:

- VG200 Gateway Template Name—Enter a name for this BAT template, up to 50 alphanumeric characters, hyphens, underscores, spaces, and/or addition symbols. This name identifies the unique Cisco VG200 gateway template that is used only in BAT.

- Cisco CallManager Group—Choose the Cisco CallManager Group to which this gateway should belong.

Step 4 In the Module in Slot 1 field in the Installed Voice Interface Cards area, choose the type of module that is installed in slot 1:

- NM-1V—Network Module-1Voice has one voice interface card (VIC) in Sub-Unit 0 for FXS or FXO.
- NM-2V—Network Module-2Voice has two VICs, one in Sub-Unit 0 and one in Sub-Unit 1 for either FXS or FXO.
- NM-HDV—Network Module-High Density Voice has one VIC in Sub-Unit 0 for either T1-CAS or T1-PRI, or E1-PRI.
- None—No network modules are installed.

Step 5 In the Product Specific Configuration area, enter values for the following fields:

- Global ISDN Switch Type—For this optional field, choose the ISDN switch type.
- Switchback Timing—Choose the timing mechanism that is used to switch back to a primary Cisco CallManager.
- Switchback Uptime-Delay—For this optional field, choose the delay, in minutes, that applies when delayed switchback is used. You must make an entry in this field if you chose "Delayed" in the Switchback Timing field.
- Switchback Schedule—This optional field designates the schedule, in hours and minutes, that applies when scheduled switchback is used. You must make an entry in this field if you chose "Scheduled" in the Switchback Timing field.

Step 6 Click **Insert**.

The Status indicates that the insert completed, and a new field displays on the pane.

Step 7 In the Sub-Unit field(s), choose the appropriate type for each sub-unit field:

- VIC-2FXS—Foreign Exchange Station (FXS) voice interface card
- VIC-2FXO—Foreign Exchange Office (FXO) voice interface card
- VWIC-1MFT-T1—Voice WAN interface card with one endpoint for T1-CAS or T1-PRI
- VWIC-2MFT-T1—Voice WAN interface card with two endpoints for T1-CAS or T1-PRI

- VWIC-1MFT-E1—Voice WAN interface card with one endpoint for E1-PRI
- VWIC-2MFT-E1—Voice WAN interface card with two endpoints for E1-PRI
- EM-4FX0-EM0—FXO voice interface card with four endpoints
- EM-4FX0-EM1—FXO voice interface card with four endpoints
- EM-8FXS-EM0—FXS voice interface card with eight endpoints
- EM-8FXS-EM1—FXS voice interface card with eight endpoints

Step 8 Click **Update**.

The Status indicates that the update completed, and the endpoint identifiers display on the pane.

Step 9 Click the link for the endpoint identifier. You can tell which endpoint identifiers need to be configured because a small question mark displays above the icon for the endpoint identifier.

The Cisco VG200 Endpoint Configuration window displays with settings for the endpoints.

Step 10 Complete the following step for the trunk type that you are configuring:

- If you are configuring FXS trunks, enter the trunk settings. See Field Descriptions for FXS Trunks on a Cisco VG200 Gateway, page 7-35, for more information.
- When you finish entering settings for FXS ports, skip to Step 18.
- If you are configuring FXO trunks, enter the trunk settings. See Field Descriptions for FXO Trunks on a Cisco VG200 Gateway, page 7-37, for more information.
- When you finish entering settings for FXO trunks, skip to Step 18.
- If you are configuring T1 trunks, skip to Step 11.
- If you are configuring E1 trunks, skip to Step 13.

Step 11 If you are configuring T1 trunks, choose either T1-CAS or T1-PRI signaling protocol.

Step 12 Complete the following step for the protocol that you are configuring:

- If you are configuring T1-CAS protocol, enter the protocol settings. See Field Descriptions for T1-CAS Trunks on a Cisco VG200 Gateway, page 7-39, for more information. When you finish entering settings, skip to Step 13.

- If you are configuring T1-PRI protocol, enter the protocol settings. See Field Descriptions for T1-PRI or E1-PRI Trunks on a Cisco VG200 Gateway, page 7-44, for more information.

  When you finish entering settings for the T1-PRI protocol, skip to Step 18.

- If you are configuring E1 trunks, enter the trunk settings. See Field Descriptions for T1-PRI or E1-PRI Trunks on a Cisco VG200 Gateway, page 7-44, for more information.

  When you finish entering settings for E1 trunks, skip to Step 18.

Step 13 To configure the ports for T1-CAS, click **Add a New Port**.

The Port Configuration popup window displays.

Step 14 Choose values for the following fields:

- Port Number—Choose All Ports or individual ports numbered 1 through 24.
- End Port Number—Choose All Ports or individual ports numbered 1 through 24.
- Enter the port settings. See Fields Descriptions for T1-CAS Ports, page 7-42, for more information.

Step 15 Click **Insert and Close**.

The popup window closes, and the ports display in the left column on the VG200 Gateway Template Configuration window.

Step 16 To configure more ports, repeat Step 14 and Step 15.

Step 17 Click **Back to VG200 Template Configuration**.

Step 18 In the column on the left, click the next endpoint in the list. You can tell which endpoints have not been configured because a small question mark symbol displays next to the endpoint identifier icon. When an endpoint identifier is configured, the icon displays along with the corresponding trunk type.

Repeat Step 7and Step 8 for any additional endpoint identifiers.

Related Topics

- Creating CSV Files for Cisco VG200 FXS or FXO Gateways, page 7-7
- Adding Cisco VG200 Gateways to Cisco CallManager, page 7-15
- Deleting Cisco VG200 Gateways, page 7-17

Updating the Endpoint Identifiers for Cisco VG200 Gateway

If you already created the Cisco VG200 gateway template, but did not add the endpoint identifiers, you can use the following steps to complete the template.

Procedure

Step 1 Start BAT. (See Starting BAT, page 1-3.)

Step 2 Choose **Configure > Template > VG200 Gateway**.

Step 3 In the list of VG200 Gateway Templates, click the BAT template to which you want to add endpoint identifier attributes.

Step 4 In the Installed Voice Interface Cards area, choose the appropriate voice interface card for the Sub-Unit(s).

Step 5 Click **Update**.

Step 6 Click the endpoint identifier that you want to configure. See Step 10 in the "Creating a Cisco VG200 Gateway Template" section on page 7-3 for complete instructions.

Step 7 Repeat Step 6 until all endpoint identifiers are configured.

Creating CSV Files for Cisco VG200 FXS or FXO Gateways

BAT includes a Microsoft Excel file (BAT.xlt) that provides data file templates with macros and error checking and exports the values into a CSV file for use when Cisco VG200 gateways are added in BAT. Each record on the CSV file contains information about a Cisco VG200 gateway and its ports. You can open this file by double-clicking BAT.xlt on the publisher database server in the C:\CiscoWebs\BAT\ExcelTemplate folder. When prompted, be sure to enable macros, or the BAT.xlt file will not export the data.

After you have created the Cisco VG200 gateway template in BAT and the CSV file as described in this section, you can insert the Cisco VG200 gateways into the Cisco CallManager database. See Adding Cisco VG200 Gateways to Cisco CallManager, page 7-15, for more information.

Procedure

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

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

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

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

Step 4 Click the **VG200 FXS FXO** tab.

Step 5 In each row, provide the following information:

- In the MGCP Domain Name field, enter a name that identifies the gateway, from 1 to 64 characters. Use the Domain Name System (DNS) host name if it is configured to resolve correctly; otherwise, use the host name as defined on the Cisco MGCP gateway. If you are using the host name as it is configured on the Cisco IOS gateway, the name that you enter here must match exactly. For example, if the host name is configured on the gateway to resolve to vg200-1 and the IP domain name is not configured, enter the host name in this field (in this case, vg200-1). If the host name is configured on the gateway as vg200-1 and the IP domain name is configured on the gateway as cisco.com, enter vg200-1.cisco.com in this field.
- In the Description field, enter a description for the gateway, up to 100 characters. Make the description something that will help you locate the gateway if you ever need to locate it in a list of gateways.
- In the Port 1 Description field, enter a description for port 1, up to 50 characters. Make the description something useful for identifying the port in a list of ports. This applies to the description field for port 2 through port 4.
- In the Port 1 Directory Number field, enter the directory number for this port, up to 24 numerals and special characters. This applies to the directory number field for port 2 through port 4.
- In the Port 1 Partition, enter the name of the route partition to which you want this port to belong, up to 50 characters. Make sure that the route partition is already configured in Cisco CallManager Administration. This applies to the partition field for port 2 through port 4.

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

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

VG200Gateways#timestamp.txt

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

Step 7 To be accessed by BAT, the CSV file must reside on the publisher database server; however, you normally would not have Microsoft Excel running on the publisher database server. This step assumes that you have saved the CSV file to the local machine (not the publisher database server). In that case, you must copy the file to publisher database server.

Using a floppy disk or a mapped network drive, copy the CSV file from C:\XLSDataFiles to the C:\BATFiles\VG200Gateways folder on the server that is running the publisher database for Cisco CallManager.

Step 8 For information on how to read the exported CSV file, click the link to **View Sample File** in the Insert Gateways window in BAT (**Configure > Gateways >VG200**).

Related Topics

- Adding Cisco VG200 Gateways to Cisco CallManager, page 7-15
- Deleting Cisco VG200 Gateways, page 7-17

Creating CSV Files for Cisco VG200 T1-CAS, T1-PRI, or E1-PRI Gateways

BAT includes a Microsoft Excel file (BAT.xlt) that provides data file templates with macros and error checking and exports the values into a CSV file for use when Cisco VG200 gateways are added in BAT. Each record on the CSV file contains information about a Cisco VG200 gateway and its ports. You can open this file by double-clicking BAT.xlt on the publisher database server in the C:\CiscoWebs\BAT\ExcelTemplate folder. When prompted, be sure to enable macros, or the data will not be exported.

After you have created the Cisco VG200 gateway template in BAT and the CSV file as described in this section, you can insert the Cisco VG200 gateways into the Cisco CallManager database. See Adding Cisco VG200 Gateways to Cisco CallManager, page 7-15, for more information.

Procedure

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

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

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

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

Step 4 Click the **VG200 T1-Pri T1-Cas E1-Pri** tab.

Step 5 Scroll to the end of the fields until you see the Number of Port Identifiers field. Enter the number of port identifiers that you want to add for each Cisco VG200 gateway. If you want only one port identifier, skip this step.

Step 6 In each row, provide the following information:

- In the MGCP Domain Name field, enter a name that identifies the gateway, from 1 to 64 characters. Use the Domain Name System (DNS) host name if it is configured to resolve correctly: otherwise, use the host name as defined on the Cisco MGCP gateway. If you are using the host name as it is configured on the Cisco IOS gateway, the name that you enter here must match exactly. For example, if the host name is configured on the gateway to resolve to vg200-1 and the IP domain name is not configured, enter the host name in this field (in this case, vg200-1). If the host name is configured on the gateway as vg200-1 and the IP domain name is configured on the gateway as cisco.com, enter vg200-1.cisco.com in this field.
- In the MGCP Description field, enter a description for the gateway, up to 100 characters. Make the description something that will help you locate the gateway if you ever need to locate it in a list of gateways.

- In the Port Identifier 1 field, enter the numerical representation, up to three numerals, for the port identifier. Make the first digit either 0 or 1 (signifying either endpoint identifier 0 or endpoint identifier 1), followed by the port number, 01 to 24. Acceptable values range from 001 through 024 or 101 through 124.

Note For T1-CAS only, the ports that you specify here must be the same ports that you specified in the VG200 template. In the CSV file, you can specify none, some, or all ports that were configured in the template, but do not configure any ports in the CSV file that were not also configured in the template. If so, an error will result when you attempt to insert the BAT VG200 template and the CSV file.

For example, if you configured ports 1,2,3, and 4 in the template, you could configure none of the ports, or ports 1, 2, 3, and 4, or only ports 1 and 2 in the CSV file, and the insertion would be accepted. If in the same example, you configured ports 5 and 6 in the CSV when they are not configured in the template, an error will result when you try to insert the template and CSV file in BAT.

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

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

VG200Gateways#timestamp.txt

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

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

Using a floppy disk or a mapped network drive, copy the CSV file from C:\XLSDataFiles to the C:\BATFiles\VG200Gateways folder on the server that is running the publisher database for Cisco CallManager.

Step 9 For information on how to read the exported CSV file, click the link to **View Sample File** in the Insert Gateways window in BAT (**Configure > Gateways >VG200**).

Creating a Text-Based CSV Text File

If you do not use the BAT.xlt file for data input when you add Cisco VG200 gateways, you must create the CSV file by using lines of ASCII text with values separated by commas. You do not need to follow the instructions in this section if you created the CSV file by using the BAT.xlt file.

Note If you use comma or double quotes as part of string in one of the fields, the entire text string must be enclosed with double quotes.

The sections, FXO or FXS Trunks, page 7-13, and T1-CAS, T1-PRI, or E1-PRI Trunks, page 7-14, provide descriptions and examples.

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

The comma separated values (CSV) file provides a common textual way of providing tabular information. You can create a data file using any file format, such as Microsoft Notepad, Microsoft Word, and so on. Save the CSV file to C:\BATFiles\VG200Gateways\ on the server that is running the publisher database for Cisco CallManager.

Use this procedure to create a CSV text file for Cisco VG200 gateways.

Procedure

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

Step 2 Using a separate line for each gateway, enter the values for each gateway and port that you want to add to Cisco CallManager. See Creating CSV Files for Cisco VG200 FXS or FXO Gateways, page 7-7, or Creating CSV Files for Cisco VG200 T1-CAS, T1-PRI, or E1-PRI Gateways, page 7-9, for detailed information about the formatting that you must use in the text-based CSV file.

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

Step 3 Save or copy the file to C:\BATFiles\VG200Gateways on the server that is running the publisher database for Cisco CallManager.

Note You cannot use Cisco VG200 gateway CSV files that were saved anywhere except C:\BATFiles\VG200Gateways on the server that is running the publisher database for Cisco CallManager for BAT inserts.

FXO or FXS Trunks

The following example format shows the required field length and string types followed by an example of a CSV file for a Cisco VG200 gateway.

MGCP Domain Name(Mandatory, 1 to 64 characters)**,Description**(Optional, up to 100 characters)**,Port 1 Description**(Optional, up to 50 characters)**,Port 1 Directory Number**(Optional, up to 24 numerals and special characters)**,Port 1 Partition**(Optional, up to 50 characters)**,Port 2 Description**(Optional, up to 50 characters)**,Port 2 Directory Number**(Optional, up to 24 numerals and special characters)**,Port 2 Partition**(Optional, up to 50 characters)**,Port 3 Description**(Optional, up to 50 characters)**,Port 3 Directory Number**(Optional, up to 24 numerals and special characters)**,Port 3 Partition**(Optional, up to 50 characters)**,Port 4 Description**(Optional, up to 50 characters)**,Port 4 Directory Number**(Optional, up to 24 numerals and special characters)**,Port 4 Partition**(Optional, up to 50 characters)

Example

```
MGCPTest,VG200 Lab Gateway,Port 1,97255572001,Partition1,
Port 2,97255572002,Partition2,Port 3,97255572003,Partition3,
Port 4,97255572004,Partition4
```

You must include comma separators even if a field is blank. Specify the directory number and route partition only if the port type in the Cisco VG200 gateway template is POTS.

Refer to the following examples and sample CSV records when creating CSV files.

Examples

If the Description for a Cisco VG200 gateway is blank

```
MGCPTest,,Port 1,97255572001,Partition1,Port 2,97255572002,Partition2,
Port 3,97255572003,Partition3,Port 4,97255572004,Partition4
```

If the Cisco VG200 gateway template has only Port 1 and Port 2 as POTS type

```
MGCPTest,VG200 Lab Gateway,Port 1,97255572001,Partition1,
Port 2,97255572002,Partition2,,,,,,
```

T1-CAS, T1-PRI, or E1-PRI Trunks

The following example format shows the required field length and string types followed by an example of a CSV file for a Cisco VG200 gateway:

MGCP Domain Name(Mandatory, 1 to 64 characters)**,MGCP Description**(Optional, up to 100 characters)**,Port Identifier 1**(Optional, up to 3 numerals)

Example

```
MGCPTest,VG200 Lab Gateway,001
```

You must include comma separators even if a field is blank.

Refer to the following examples and sample CSV records when creating CSV files.

Examples

If the Description for a Cisco VG200 gateway is blank

```
MGCPTest,,001
```

If you provide only the mandatory value

```
MGCPTest,
```

For port identifiers, the first digit is either 0 or 1 (signifying either Sub-Unit 0 or Sub-Unit 1), followed by the port number, 01 to 24. Acceptable values include 001 through 024 or 101 through 124. If the Cisco VG200 gateway template has three port identifiers

```
MGCPTest,VG200 Lab Gateway,001,002,003
```

Adding Cisco VG200 Gateways to Cisco CallManager

Use this procedure to add several Cisco VG200 gateways to Cisco CallManager.

Before You Begin

You must create a Cisco VG200 gateway template and CSV file before you add trunks to Cisco CallManager. If you want to insert directory number details, you need to configure the Gateway Directory Number template. See Creating a Gateway Directory Number Template, page 7-32, for more information.

Procedure

Step 1 Start BAT. (See Starting BAT, page 1-3.)

Step 2 Choose **Configure > Gateways > VG200**.

The Insert Gateways window displays.

Step 3 In the File Name field, choose the name of the CSV file that contains the Cisco VG200 gateways to be added.

Step 4 In the VG200 Gateway Template Name field, choose the name of the VG200 gateway template that you created for this type of bulk transaction.

Step 5 Click **Insert**.

A message displays that indicates the number of records that can be inserted per minute. Use this information to evaluate whether Cisco CallManager performance will be degraded if you perform the bulk transaction.

Step 6 Click **OK** to start the transaction or **Cancel** to cancel it.

Step 7 If you clicked **OK**, a Transaction Status window displays. When the transaction completes, the transaction window disappears, and the Insert Gateways window displays the Status of the insert.

If the Status of the insert is anything other than Insert Completed, view the log file for transaction details. If the Status is Insert Completed, the transaction was successful, and you do not need to view the log file unless you are interested in statistical information.

Step 8 Click **View Latest Log File**. BAT generates a log file that indicates the number of records that were added and the number of records that failed, including an error code.

Note After the trunks are added to Cisco CallManager, BAT generates a log file that indicates the number of records that were added and the number of records that failed, including an error code. For more information on log files, see Chapter 10, "Troubleshooting BAT and TAPS."

Related Topics

- Creating a Cisco VG200 Gateway Template, page 7-3
- Deleting Cisco VG200 Gateways, page 7-17
- Creating a Gateway Directory Number Template, page 7-32

Copying a Cisco VG200 BAT Template

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

Use this procedure to copy an existing BAT Cisco VG200 gateway template.

Procedure

Step 1 Start BAT. (See Starting BAT, page 1-3.)

Step 2 Choose **Configure >Template > VG200 Gateway**.

The VG200 Gateway Template Configuration window displays.

Step 3 In the VG200 Gateway Templates column on the left, click the template that you want to copy.

The chosen template details display in the VG200 Gateway Template Configuration window.

Step 4 Verify that this is the template that you want to copy and click **Copy**.

BAT creates a copy of the template. The copy duplicates all the values that were specified in the original template.

Step 5 In the VG200 Gateway Template Name field, enter a new template name.

Step 6 Update the fields as needed for the new template. See Field Descriptions, page 7-35, for more information.

Step 7 Click **Insert** to save the copied template.

The template that was added to BAT displays in the VG200 Gateway Templates column on the left.

Related Topic

- Creating a Cisco VG200 Gateway Template, page 7-3

Deleting Cisco VG200 Gateways

You can delete all Cisco VG200 gateway records from the Cisco CallManager database by using the following procedure.

Caution If you do not want to delete **all** Cisco VG200 gateways from the Cisco CallManager database, be sure to specify a query before clicking the Delete button.

Use this procedure to delete all Cisco VG200 gateways.

Procedure

Step 1 Start BAT. (See Starting BAT, page 1-3.)

Step 2 Choose **Configure > Gateways > VG200**.

Step 3 Click the **Delete VG200 Gateways** link.

The Delete Gateways window displays.

Step 4 From the drop-down list box, choose the field that you want to search, such as MGCP Domain Name or Description.

Step 5 From the drop-down list box, choose the search criteria, such as begins with, contains, is empty, and so on.

Step 6 In the search field, enter the value that you want to locate, such as the MGCP domain name or description.

Step 7 Click **Add to Query** to add the defined filter to the query.

Step 8 Click **AND** or **OR** to add multiple filters to the query.

Step 9 Click View Query Results to verify the records that are going to be deleted.

Step 10 Click **Delete** to delete the records.

Caution If you have not specified a query (as described in Step 4 through Step 7), clicking the **Delete** button deletes all Cisco VG200 gateways.

After the Cisco VG200 gateways are deleted from Cisco CallManager, BAT generates a log file that indicates the number of records that were deleted and the number of records that failed, including an error code. For more information on log files, see Chapter 10, "Troubleshooting BAT and TAPS."

Related Topics

- Creating a Cisco VG200 Gateway Template, page 7-3
- Creating CSV Files for Cisco VG200 FXS or FXO Gateways, page 7-7
- Updating the Endpoint Identifiers for Cisco VG200 Gateway, page 7-7

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 7-19
- Deleting All Ports for Cisco Catalyst 6000 24 Port FXS Analog Interface Module Gateway, page 7-30
- Creating a Gateway Directory Number Template, page 7-32

Adding or Updating Ports to Cisco Catalyst 6000 24 Port FXS Analog Interface Module Gateways

You can use BAT to add or update FXS ports of Cisco Catalyst 6000 analog interface modules to the Cisco CallManager database in batches, rather than add each port individually. You can even add or update ports for more than one gateway in one batch.

Note BAT does not add Cisco Catalyst 6000 24 Port FXS analog interface module gateways. You need to add gateways by using Cisco CallManager Administration and then use BAT to bulk-add or bulk-update ports for these gateways.

Use this procedure to add or update ports to Cisco CallManager:

Step 1 Create a Catalyst 6000 (FXS) Ports BAT template to define common values for a set of ports.

Step 2 (Optional) Create a Gateway Directory Number BAT template. Although this step is optional for adding ports, you must perform it for adding directory number details to ports.

Step 3 Create a comma separated values (CSV) file to define individual values for each port that you want to add.

Related Topics

- Creating a Cisco Catalyst 6000 (FXS) Ports Template, page 7-20
- Creating CSV Files for Cisco Catalyst 6000 (FXS) Ports, page 7-21
- Adding Cisco Catalyst 6000 (FXS) Ports to Cisco CallManager, page 7-26
- Updating Cisco Catalyst 6000 24 Port FXS Analog Interface Module Ports in Cisco CallManager, page 7-29
- Deleting All Ports for Cisco Catalyst 6000 24 Port FXS Analog Interface Module Gateway, page 7-30

Creating a Cisco Catalyst 6000 (FXS) Ports Template

The port template and comma separated values (CSV) files work together in bulk transactions. You can create a template that has the common analog details for all the ports in that batch, such as the port direction, port level, and so on. The system stores these templates, so they are reusable for other batches.

The CSV file stores the details for each individual port, such as its gateway MAC address, port number (which you add in this section), directory number for this port, and its partition. See Creating CSV Files for Cisco Catalyst 6000 (FXS) Ports, page 7-21, for more details about CSV files.

Use this procedure to create a Cisco Catalyst 6000 FXS ports template. You must complete all fields unless otherwise noted.

Procedure

Step 1 Start BAT. (See Starting BAT, page 1-3.)

Step 2 Choose **Configure > Template > Catalyst 6000 (FXS) Ports**.

The Catalyst 6000 (FXS) Ports Template Configuration window displays.

Enter the settings for the fields. See Field Descriptions for FXS Ports on a Cisco Catalyst 6000 24 Port Analog Interface Module, page 7-57, for more information.

Step 3 Click **Insert**.

The status shows that the insert completed.

Step 4 Create a CSV file. Go to Creating CSV Files for Cisco Catalyst 6000 (FXS) Ports, page 7-21, for more information.

Related Topics

- Creating CSV Files for Cisco Catalyst 6000 (FXS) Ports, page 7-21
- Adding Cisco Catalyst 6000 (FXS) Ports to Cisco CallManager, page 7-26
- Updating Cisco Catalyst 6000 24 Port FXS Analog Interface Module Ports in Cisco CallManager, page 7-29
- Deleting All Ports for Cisco Catalyst 6000 24 Port FXS Analog Interface Module Gateway, page 7-30
- Creating a Gateway Directory Number Template, page 7-32

Creating CSV Files for Cisco Catalyst 6000 (FXS) Ports

BAT includes a Microsoft Excel file (BAT.xlt) that provides data file templates with macros and error checking and exports the values into CSV files for Cisco Catalyst 6000 (FXS) ports. You can open this file by double-clicking BAT.xlt on the publisher database server in the C:\CiscoWebs\BAT\ExcelTemplate folder. When you are prompted, be sure to enable macros. See Using the Cisco Catalyst 6000 (FXS) Ports Tab in BAT.xlt, page 7-23, to learn how to use this spreadsheet.

The CSV file contains information about each port as a record. Each record specifies the gateway MAC address and port number on that gateway to which you want to add or update the port details.

The following example format shows the required field length and string types followed by an example of a CSV file for Catalyst 6000 (FXS) ports.

Note If values are set for Partition in the CSV file for some record, the value in the CSV file for that record overrides any value that may appear in the BAT template.

If you provide no values for Partition for any record on the CSV file, the system uses values from the BAT template for these fields.

MAC Address(Mandatory, 12 characters)**,Port Number**(Mandatory, 2 numerals)**,Directory Number**(Optional, up to 24 numerals and special characters),**Partition**(Optional, up to 50 characters)

Example

```
1231123245AB,23,9725557250,Partition1
```

You must include comma separators even if a field is blank. Do not specify a partition unless you have also specified a directory number.

If you specify a directory number in the CSV file, you must also create a Gateway Directory Number template. See Creating a Gateway Directory Number Template, page 7-32, for more information.

See the following examples and sample CSV records when creating CSV files.

Examples

If the directory number for a port is blank

```
1231123245AB,23,,
```

If you want to add only the mandatory values

```
1231123245AB,23,,
```

Note For the MAC address, enter MAC address values for an existing Cisco Catalyst 6000 (FXS) gateway. This MAC address comprises the last 12 characters in the Gateway Name. BAT does not add Cisco Catalyst 6000 (FXS) gateways. It simply adds or updates ports to an existing gateway.

Related Topics

- Adding Cisco Catalyst 6000 (FXS) Ports to Cisco CallManager, page 7-26

- Updating Cisco Catalyst 6000 24 Port FXS Analog Interface Module Ports in Cisco CallManager, page 7-29

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

Use this procedure to add ports to existing Cisco Catalyst 6000 24 Port FXS analog interface modules.

Note You can add ports for up to 500 Cisco Catalyst 6000 analog interface modules in any one transaction. Do not attempt to add ports for more than 500 modules in a given transaction.

Procedure

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

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

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

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

Step 4 Click the **Catalyst 6000 (FXS) Ports** tab.

Step 5 Complete all mandatory fields and any relevant, optional fields. Each column heading specifies the length of the field.

- In the MAC Address field, enter the 12-character MAC address.
- In the Port Number field, enter the port number that you want to add to the gateway.
- (Optional) In the Directory Number field, enter a directory number for this port, up to 24 numerals and special characters. You must enter a directory number if you have specified a partition.

- (Optional) In the Partition field, enter the route partition to which you want this port to belong, up to 50 characters. Do not specify a partition unless you have also specified a directory number.

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

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

The system saves the file to C:\XLSDataFiles\Catalyst6000_24PortsFXSGateway (or to your choice of another existing folder) as

Catalyst6000_24PortsFXSGateway#timestamp.txt

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

Step 7 To be accessed by BAT, the CSV file must reside on the publisher database server; however, you normally would not have Microsoft Excel running on the publisher database server. So, this step assumes that you have saved the CSV file to the local machine (not the publisher database server). In that case, you must copy the file to publisher database server.

Using a floppy disk or a mapped network drive, copy the CSV file from C:\XLSDataFiles\Catalyst6000_24PortsFXSGateway to the C:\BATFiles\Catalyst6000_24PortsFXSGateway folder on the server that is running the publisher database for Cisco CallManager.

Step 8 For information on how to read the exported CSV file, click the link to **View Sample File** in the Configure Ports window in BAT (**Configure > Gateways > Catalyst 6000 (FXS)**).

Tip If you specified directory numbers in the CSV file, you must create a Gateway Directory Number template prior to attempting to insert the Gateway Template and this CSV file in BAT. See "Creating a Gateway Directory Number Template" section on page 7-32, for more information.

Creating a Text-Based CSV Text File

If you do not use the BAT.xlt file for data input when you add ports to Cisco Catalyst 6000 FXS analog interface modules, you must create the CSV file by using lines of ASCII text with values separated by commas. You do not need to follow the instructions in this section if you created the CSV file by using the BAT.xlt file.

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

The comma separated values (CSV) file provides a common textual way of providing tabular information. You can create a data file by using any file format, such as Microsoft Notepad, Microsoft Word, and so on. Save the CSV file to C:\BATFiles\Catalyst6000_24PortsFXSGateway on the server that is running the Publisher database for Cisco CallManager.

Use this procedure to create a CSV text file for Cisco Catalyst 6000 FXS ports.

Procedure

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

Step 2 Using a separate line for each port, enter the values for each port that you want to add to Cisco CallManager. See Creating CSV Files for Cisco Catalyst 6000 (FXS) Ports, page 7-21, for detailed information about the formatting that you must use in the text-based CSV file.

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

Step 3 Save or copy the file to C:\BATFiles\Catalyst6000_24PortsFXSGateway on the server that is running the publisher database for Cisco CallManager.

Note You cannot use CSV files for FXS ports on Cisco Catalyst 6000 modules that are saved anywhere except C:\BATFiles\Catalyst6000_24PortsFXSGateway on the server that is running the publisher database for Cisco CallManager for BAT inserts.

Adding Cisco Catalyst 6000 (FXS) Ports to Cisco CallManager

Follow this procedure to add several ports on Cisco Catalyst 6000 24 Port FXS analog interface modules to Cisco CallManager.

Note BAT can add ports for up to 500 Cisco Catalyst 6000 analog interface modules in any one transaction. Do not attempt to add ports for more than 500 modules in a given transaction.

Before You Begin

You must create a Cisco Catalyst 6000 Ports template and CSV file before you add ports to Cisco CallManager. If you want to add or update Directory Number details, you need to create a Gateway Directory Number template. See Creating a Gateway Directory Number Template, page 7-32, for more information.

Note You must create a Gateway Directory Number template if you specified directory numbers in the CSV file.

Procedure

Step 1 Start BAT. (See Starting BAT, page 1-3.)

Step 2 Choose **Configure > Gateways > Catalyst 6000 (FXS)**.

The Configure Ports window displays.

Step 3 In the File Name field, choose the CSV file for Cisco Catalyst 6000 ports that you created for this type of bulk transaction.

Step 4 In the Catalyst 6000 (FXS) Ports Template field, choose the BAT template that you created for adding Cisco Catalyst 6000 FXS ports.

Step 5 Treat this field as optional if you are adding ports but treat the field as mandatory if you are adding any records that have directory number details on the CSV file.

In the Gateway Directory Number Template Name, choose the BAT template that you created for adding directory numbers to Cisco Catalyst 6000 FXS ports.

Note If you have not specified directory number details on the CSV file, BAT inserts only analog details for that port, but no number will be configured for the port.

Step 6 Click **Insert**.

A message displays to indicate the time that it will take to perform the transaction. Performance on the gateways will be impacted, including the termination of all calls on the affected gateways.

After the ports are added to Cisco CallManager, BAT generates a log file that indicates the number of records that were added and the number of records that failed, including an error code. You can click **View Latest Log File** link to open the log file for this transaction. BAT adds ports only for existing Cisco Catalyst 6000 (FXS) gateways. If a port with this specified port number and gateway already exists, BAT rejects that record. See Chapter 10, "Troubleshooting BAT and TAPS," for more information about errors.

Related Topics

- Creating CSV Files for Cisco Catalyst 6000 (FXS) Ports, page 7-21
- Updating Cisco Catalyst 6000 24 Port FXS Analog Interface Module Ports in Cisco CallManager, page 7-29
- Creating a Gateway Directory Number Template, page 7-32
- Copying a Cisco Catalyst 6000 FXS Ports BAT Template, page 7-28
- Deleting All Ports for Cisco Catalyst 6000 24 Port FXS Analog Interface Module Gateway, page 7-30

Copying a Cisco Catalyst 6000 FXS Ports BAT Template

You can copy the properties of a Cisco Catalyst 6000 FXS ports template into a new Cisco Catalyst 6000 FXS ports template. This function proves useful when you have similar bulk-add transactions, and only a few details need to change. Use this procedure to insert the Catalyst 6000FXS port.

Procedure

Step 1 Start BAT. (See Starting BAT, page 1-3.)

Step 2 Choose **Configure >Template > Catalyst 6000 (FXS) Ports**.

The Catalyst 6000 (FXS) Ports Template Configuration window displays.

Step 3 In the Catalyst 6000 (FXS) Ports Templates column on the left, click the template that you want to copy.

The details for the selected template display in the Catalyst 6000 (FXS) Ports Template Configuration window.

Step 4 Verify that this is the template that you want to copy and click **Copy**.

BAT creates a copy of the template. The copy duplicates all the values that were specified in the original template.

Step 5 In the Catalyst 6000 (FXS) Ports Template Name field, enter a new template name.

Step 6 Update the fields as needed for the new template. See Field Descriptions for FXS Ports on a Cisco Catalyst 6000 24 Port Analog Interface Module, page 7-57, for more information.

Step 7 Click **Insert**.

The template that is added to BAT displays in the Catalyst 6000 (FXS) Ports Templates column on the left.

Related Topics

- Creating CSV Files for Cisco Catalyst 6000 (FXS) Ports, page 7-21
- Creating a Gateway Directory Number Template, page 7-32

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

Use this procedure to update ports for Cisco Catalyst 6000 24 Port FXS analog interface modules to Cisco CallManager.

Before You Begin

You must create a Cisco Catalyst 6000 (FXS) Ports BAT template and CSV file before you modify ports in Cisco CallManager. If you want to modify Directory Number details, you need to configure a Gateway Directory Number BAT template. See Creating a Gateway Directory Number Template, page 7-32, for more information.

Procedure

Step 1 Start BAT. (See Starting BAT, page 1-3.)

Step 2 Choose **Configure > Gateways > Catalyst 6000 (FXS)**.

The Configure Ports window displays.

Step 3 In the File Name field, choose the CSV file for Cisco Catalyst 6000 ports that you created for this type of bulk transaction.

Step 4 In the Catalyst 6000 (FXS) Ports Template field, choose the BAT template that you created for updating Cisco Catalyst 6000 FXS ports.

Step 5 (Although this field is optional if you are updating ports, you must fill it in if you are updating any records that have directory number details on the CSV file.) In the Gateway Directory Number Template Name, choose the BAT template that you created for updating directory numbers to Cisco Catalyst 6000 FXS ports.

Note If you have not specified directory number details on the CSV file, BAT inserts only analog details for that port, but no directory number will be configured for the port.

Step 6 Click **Update**.

A message displays to indicate the time that it will take to perform the transaction. Be aware that performance on the gateways will be impacted, including dropped calls if any are active on the affected gateways.

After the ports are updated in Cisco CallManager, BAT generates a log file that indicates the number of records that were updated and the number of records that failed, including an error code.

Note If you click Insert instead of Update, the ports that you want to update do not get updated.

Step 7 The results of the Update display. You can click **View Latest Log File** link to open the log file for this transaction. BAT updates ports only for existing Cisco Catalyst 6000 (FXS) gateways. If a port with this specified port number and gateway already exists, BAT rejects that record. See Chapter 10, "Troubleshooting BAT and TAPS," for more information about errors.

Related Topics

- Creating CSV Files for Cisco Catalyst 6000 (FXS) Ports, page 7-21
- Adding Cisco Catalyst 6000 (FXS) Ports to Cisco CallManager, page 7-26
- Creating a Gateway Directory Number Template, page 7-32

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

Use this procedure to delete all ports of a Cisco Catalyst 6000 24 Port FXS analog interface module.

Procedure

Step 1 Start BAT. (See Starting BAT, page 1-3.)

Step 2 Choose **Configure > Gateways > Catalyst 6000 (FXS)**.

The Configure Ports window displays.

Step 3 Click the **Delete All Ports** link in the upper, right side of the window.

The Delete Ports window displays.

Step 4 Choose the name of the Cisco Catalyst 6000 Gateway(s) for which you want to delete all ports and click the arrow buttons to move the gateways between the **Available Gateways** and **Selected Gateways** lists. When you click Delete All Ports, BAT deletes all the ports for only gateways shown in the Selected Gateways list box.

Step 5 Click **Delete All Ports**.

A message displays that indicates the time that it will take to perform the transaction.

BAT generates a log file that indicates the number of gateways for which the Delete All operation was successful and the number of gateways for which it failed, including an error code.

Step 6 The results of the Delete operation display. You can click **View Latest Log File** link to open the log file for this transaction. See Chapter 10, "Troubleshooting BAT and TAPS," for more information about errors.

Related Topics

- Adding Cisco Catalyst 6000 (FXS) Ports to Cisco CallManager, page 7-26
- Creating CSV Files for Cisco Catalyst 6000 (FXS) Ports, page 7-21
- Updating Cisco Catalyst 6000 24 Port FXS Analog Interface Module Ports in Cisco CallManager, page 7-29

Gateway Directory Number

You use the Gateway Directory Number template when directory numbers are added to FXS ports on Cisco VG200 gateways or Cisco Catalyst 6000 analog interface modules. If you specified directory numbers in the CSV file for either of these devices, you must create a Gateway Directory Number template to use when you insert the gateways or ports in BAT.

Creating a Gateway Directory Number Template

You need to create a Gateway Directory Number template if you want to assign directory numbers to POTS ports. If you are working with POTS ports on Cisco VG200 gateways, or with Cisco Catalyst 6000 (FXS) 24 Port analog interface modules, and you specified directory numbers in the CSV file for either of these devices, you must create a Gateway Directory Number template.

The BAT templates and comma separated values (CSV) files work together in bulk transactions. You can create a template that has common directory number details such as partition, calling search space, and so on, for POTS port types. The system stores these templates, so they are reusable for other batches.

The CSV file stores the details for each individual port, such as the gateway MAC address, Port Number (which you are adding in this section), Directory Number for this Port, and its Partition. See Creating CSV Files for Cisco VG200 FXS or FXO Gateways, page 7-7, or Creating CSV Files for Cisco Catalyst 6000 (FXS) Ports, page 7-21, for more details about CSV files.

Use this procedure to create a Gateway Directory Number template. Treat all fields as optional unless otherwise noted.

Procedure

Step 1 Start BAT. (See Starting BAT, page 1-3.)

Step 2 Choose **Configure > Template > Gateway Directory Number**.

The Gateway Directory Number Template Configuration window displays.

Step 3 In the Gateway Directory Number Template Name field, enter a unique name for this template, up to 50 alphanumeric characters.

Step 4 Enter settings for the fields. See Field Descriptions for Gateway Directory Number Template, page 7-59, for more information.

Step 5 Click **Insert**.

The new template is added.

Step 6 Create a CSV file. See Creating CSV Files for Cisco VG200 FXS or FXO Gateways, page 7-7, or Creating CSV Files for Cisco Catalyst 6000 (FXS) Ports, page 7-21, for more information.

Related Topics

- Creating a Cisco VG200 Gateway Template, page 7-3
- Creating a Cisco Catalyst 6000 (FXS) Ports Template, page 7-20
- Creating CSV Files for Cisco VG200 FXS or FXO Gateways, page 7-7
- Creating CSV Files for Cisco Catalyst 6000 (FXS) Ports, page 7-21
- Adding Cisco VG200 Gateways to Cisco CallManager, page 7-15
- Adding Cisco Catalyst 6000 (FXS) Ports to Cisco CallManager, page 7-26
- Copying a Gateway Directory Number BAT Template, page 7-33

Copying a Gateway Directory Number BAT Template

You can copy the properties of a Gateway Directory Number template into a new Gateway Directory Number template. This function proves useful when you have similar bulk-add transactions, and you need to change only a few details.

Use this procedure to copy an existing BAT Gateway Directory Number template.

Procedure

Step 1 Start BAT. (See Starting BAT, page 1-3.)

Step 2 Choose **Configure > Template > Gateway Directory Number**.

The Gateway Directory Number Template Configuration window displays.

Step 3 In the Gateway Directory Number Templates column on the left, click the template that you want to copy.

The chosen template details displays in the Gateway Directory Number Template Configuration window.

Step 4 Verify that this is the template that you want to copy and click **Copy**.

BAT creates a copy of the template. The copy duplicates all the values that were specified in the original template.

Step 5 In the Gateway Directory Number Template Name field, enter a new template name.

Step 6 Update the fields as needed for the new template. See Field Descriptions for Gateway Directory Number Template, page 7-59, for more information.

Step 7 Click **Insert**.

The template that was added to BAT displays in the Gateway Directory Number Templates column on the left.

Related Topic

- Creating a Gateway Directory Number Template, page 7-32

Deleting Templates

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

Procedure

Step 1 Start BAT. (See Starting BAT, page 1-3.)

Step 2 Choose **Configure > Template >** ***the type of template you want to delete, such as Phone or VG200 Gateway***.

The Template Configuration window displays.

Step 3 In the Templates column on the left, click the template that you want to delete.

The chosen template details display in the Template Configuration window.

Step 4 Verify that this is the template that you want to delete and click **Delete**.

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

Step 5 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 that are used in the various BAT templates.

Related Topics

- Field Descriptions for FXS Trunks on a Cisco VG200 Gateway, page 7-35
- Field Descriptions for FXO Trunks on a Cisco VG200 Gateway, page 7-37
- Field Descriptions for T1-CAS Trunks on a Cisco VG200 Gateway, page 7-39
- Fields Descriptions for T1-CAS Ports, page 7-42
- Field Descriptions for T1-PRI or E1-PRI Trunks on a Cisco VG200 Gateway, page 7-44
- Field Descriptions for FXS Ports on a Cisco Catalyst 6000 24 Port Analog Interface Module, page 7-57

Field Descriptions for FXS Trunks on a Cisco VG200 Gateway

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

Unless otherwise noted, assume that fields are mandatory.

Table 7-1 Field Descriptions for FXS Trunks on Cisco VG200 Gateways

Field	Description
Gateway Information	
Device Pool	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. 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 7-1 Field Descriptions for FXS Trunks on Cisco VG200 Gateways (continued)

Field	Description
Calling Search Space	For this optional field, choose the calling search space to which this group of gateways/ports should belong. A calling search space specifies the collection of route partitions that are searched to determine how a dialed number should be routed.
Media Resource Group List	For this optional field, choose the media resource group list (MRGL) to which this group of gateways/ports should belong. An MRGL specifies a list of prioritized media resource groups. An application can choose required media resources from among the available ones according to the priority order defined in the MRGL.
Network Hold Audio Source	For this optional field, choose the music on hold audio source that is to be played when the system places a call on hold (such as when user transfers a call or initiates a conference or call park).
User Hold Audio Source	For this optional field, choose the music on hold audio source that is to be played when the user places a call on hold (presses the Hold button or soft key).
Location	For this optional field, choose the location to which this group of gateways/ports should belong. A location indicates the remote location that is accessed by using restricted bandwidth connections.

Table 7-1 Field Descriptions for FXS Trunks on Cisco VG200 Gateways (continued)

Field	Description
Network Locale	For this optional field, choose the network locale that you want to associate with this gateway. The Network Locale comprises a set of tones and cadences that Cisco gateways and phones use when communicating with the PSTN and other networks in a specific geographical area. **Note** Network Locale only applies when Cisco IP Phones 7940 and 7960 are used.
Gateway Directory Number Template Name	Use this optional field unless you have specified directory numbers for FXS ports. 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. Choose the Gateway Directory Number template to be used for these ports.
Port Information	
Prefix DN	For this optional field, specify the prefix digits that are appended to the digits received on incoming calls.
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 that are 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 you are adding or updating values for FXO trunks on a Cisco VG200 gateway.

Unless otherwise noted, assume that fields are mandatory.

Table 7-2 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	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. A device pool defines sets of common characteristics for devices, such as region, date/time group, Cisco CallManager group, and calling search space for auto-registration.
Calling Search Space	For this optional field, choose the calling search space to which this group of gateways/ports should belong. A calling search space specifies the collection of route partitions that are searched to determine how a dialed number should be routed.
Media Resource Group List	For this optional field, choose the media resource group list (MRGL) to which this group of gateways/ports should belong. An MRGL specifies a list of prioritized media resource groups. An application can select required media resources from among the available ones according to the priority order that is defined in the MRGL.
Network Hold Audio Source	For this optional field, choose the music on hold audio source that is to be played when the system places a call on hold (such as when user transfers a call or initiates a conference or call park).
User Hold Audio Source	For this optional field, choose the music on hold audio source that is to be played when the user places a call on hold (presses the Hold button or soft key).

Table 7-2 Field Descriptions for FXO Trunks on Cisco VG200 Gateways (continued)

Field	Description
Location	For this optional field, choose the location to which this group of gateways/ports should belong. A location indicates the remote location that is accessed by using restricted bandwidth connections.
Port Information	
Port Direction	Specify the direction of calls that are passing through this port: • Inbound—Use for incoming calls only. • Outbound—Use for outgoing calls. • Both Ways—Use for inbound and outbound calls. This choice represents the default value.
Attendant DN	For this optional field, enter the directory number to which you want incoming calls routed; for example, zero for an attendant.
Product Specific Configuration for Loop Start or Ground Start trunks The gateway manufacturer defines the model-specific fields under Product Specific Configuration. Because the fields are dynamically configured, they can change without notice. To view field descriptions and help for product-specific configuration items, click the **i** information icon to the right of the **Product Specific Configuration** heading to display help in a popup window. In some cases, the displayed information may not be enough to help you understand the field. If you need more information, refer to the documentation for the specific gateway that you are configuring.	

Field Descriptions for T1-CAS Trunks on a Cisco VG200 Gateway

Use the following field descriptions when you are adding or updating values for the T1-CAS signaling protocol on a Cisco VG200 gateway.

Unless otherwise noted, assume that fields are mandatory.

Table 7-3 Field Descriptions for T1-CAS Trunks on Cisco VG200 Gateways

Field	Description
Device Pool	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. A device pool defines sets of common characteristics for devices, such as region, date/time group, Cisco CallManager group, and calling search space for auto-registration.
Calling Search Space	For this optional field, choose the calling search space to which this group of gateways/ports should belong. A calling search space specifies the collection of route partitions that are searched to determine how a dialed number should be routed.
Media Resource Group List	For this optional field, choose the media resource group list (MRGL) to which this group of gateways/ports should belong. An MRGL specifies a list of prioritized media resource groups. An application can chose required media resources from among the available ones according to the priority order that is defined in the MRGL.
Network Hold Audio Source	For this optional field, choose the music on hold audio source that is to be played when the system places a call on hold (such as when user transfers a call or initiates a conference or call park).
User Hold Audio Source	For this optional field, choose the music on hold audio source that is to be played when the user places a call on hold (presses the Hold button or soft key).

Table 7-3 Field Descriptions for T1-CAS Trunks on Cisco VG200 Gateways (continued)

Field	Description
Location	For this optional field, choose the location to which this group of gateways/ports should belong. A location indicates the remote location that is accessed by using restricted bandwidth connections.
Network Locale	For this optional field, choose the network locale that you want to associate with this gateway. The Network Locale comprises a set of tones and cadences that Cisco gateways and phones use when communicating with the PSTN and other networks in a specific geographical area. **Note** Network Locale only applies when Cisco IP Phones 7940 and 7960 are used.
Load Information	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. Leave this field blank to use the default load.
Port Selection Order	Choose the order in which ports are chosen. If you are not sure which port order to use, choose TOP_DOWN: • TOP_DOWN—Chooses ports in descending order, from first port (port 1) to the last port. • BOTTOM_UP—Chooses ports in ascending order, from the last port to the first port (port 1).
Product Specific Configuration The gateway manufacturer defines the model-specific fields under Product Specific Configuration. Because the fields are dynamically configured, they can change without notice. To view field descriptions and help for product-specific configuration items, click the **i** information icon to the right of the **Product Specific Configuration** heading to display help in a popup window. In some cases, the displayed information may not be enough to help you understand the field. If you need more information, refer to the documentation for the specific gateway that you are configuring.	

Fields Descriptions for T1-CAS Ports

Use the following field descriptions when you are adding or updating values for ports for the T1-CAS signaling protocol on a Cisco VG200 gateway.

Unless otherwise noted, assume that fields are mandatory.

Table 7-4 Field Descriptions for T1-CAS Ports

Field	Description
Port Direction	Choose the direction of calls that are passing through this port: • Inbound—Use for incoming calls only. • Outbound—Use for outgoing calls. • Both Ways—Use for inbound and outbound calls. This choice represents the default value.
Calling Party Selection	Because any outbound call on a gateway can send directory number information, choose which directory number to send: • Originator—Send the directory number of the calling device. This choice represents the default value. • First Redirect Number—Send the directory number of the redirecting device. • Last Redirect Number—Send the directory number of the last device that redirected the call.
Digit Sending	Choose one of the following digit sending types for out-dialing: • DTMF—Dual-tone multifrequency as normal touchtone dialing, this choice represents the default value. • MF—Multifrequency

Table 7-4 Field Descriptions for T1-CAS Ports (continued)

Field	Description
Caller ID Type	Choose the type of caller ID that displays to the called party: • ANI—Automatic number identification displays the number of the calling party and provides the default value. • DNIS—Dialed number identification service displays the number that the caller dialed.
Caller ID DN	For this optional field, enter the pattern that you want to use for caller ID, from 0 to 24 digits. For example, in North America • 555XXXX = Variable caller ID, where X equals an extension number. The CO appends the number with the area code if you do not specify it. • 5555000 = Fixed caller ID, for when you want the Corporate number to be sent instead of the exact extension from which the call is placed. The CO appends the number with the area code if you do not specify it.
Prefix DN	For this optional field, enter the prefix digits that are appended to the called party number on incoming calls. The Cisco CallManager adds prefix digits after first truncating the number in accordance with the Num Digits setting.
Num Digits	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.

Table 7-4 Field Descriptions for T1-CAS Ports (continued)

Field	Description
Expected Digits	Enter the number of digits expected on the inbound side of the trunk. Use zero if you are unsure. The default is 4.

Product Specific Configuration

The gateway manufacturer defines the model-specific fields under Product Specific Configuration. Because the fields are dynamically configured, they can change without notice. To view field descriptions and help for product-specific configuration items, click the **i** information icon to the right of the **Product Specific Configuration** heading to display help in a popup window. In some cases, the displayed information may not be enough to help you understand the field. If you need more information, refer to the documentation for the specific gateway that you are configuring.

Field Descriptions for T1-PRI or E1-PRI Trunks on a Cisco VG200 Gateway

Use the following field descriptions when you are adding or updating values for T1-PRI or E1-PRI trunks on a Cisco VG200 gateway.

Unless otherwise noted, assume that fields are mandatory.

Table 7-5 Field Descriptions for T1-PRI or E1-PRI Trunks on Cisco VG200 Gateways

Field	Description
Device Pool	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. A device pool defines sets of common characteristics for devices, such as region, date/time group, Cisco CallManager group, and calling search space for auto-registration.
Calling Search Space	For this optional field, choose the calling search space to which this group of gateways/ports should belong. A calling search space specifies the collection of route partitions that are searched to determine how a dialed number should be routed.
Media Resource Group List	For this optional field, choose the media resource group list (MRGL) to which this group of gateways/ports should belong. An MRGL specifies a list of prioritized media resource groups. An application can choose required media resources from among the available ones according to the priority order that is defined in the MRGL.
Network Hold Audio Source	For this optional field, choose the music on hold audio source that is to be played when the system places a call on hold (such as when user transfers a call or initiates a conference or call park).
User Hold Audio Source	For this optional field, choose the music on hold audio source that is to be played when the user places a call on hold (presses the Hold button or soft key).

Table 7-5 Field Descriptions for T1-PRI or E1-PRI Trunks on Cisco VG200 Gateways (continued)

Field	Description
Network Locale	For this optional field, choose the network locale that you want to associate with this gateway. The Network Locale comprises a set of tones and cadences that Cisco gateways and phones use when communicating with the PSTN and other networks in a specific geographical area. **Note** Network Locale only applies when Cisco IP Phones 7940 and 7960 are used.
Location	For this optional field, choose the location to which this group of gateways/ports should belong. A location indicates the remote location that is accessed by using restricted bandwidth connections.
Load Information	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. Leave this field blank to use the default load.
Channel Selection Order	Choose the order in which channels or ports are enabled from first (lowest number port) to last (highest number port), or from last to first. Valid entries include TOP_DOWN (last to first) or BOTTOM_UP (first to last). If you are not sure which port order to use, choose TOP_DOWN. The default specifies BOTTOM_UP.
Protocol Side	Choose the appropriate protocol side. This setting specifies whether the gateway connects to a Central Office/Network device or to a User device. Make sure that the two ends of the PRI connection use opposite settings. For example, if you connect to a PBX and the PBX uses User as its protocol side, choose Network for this device. Typically, use User for Central Office (CO) connections.

Table 7-5 Field Descriptions for T1-PRI or E1-PRI Trunks on Cisco VG200 Gateways (continued)

Field	Description
Caller ID DN	For this optional field, enter the pattern that you want to use for caller ID, from 0 to 24 digits. For example, in North America • 555XXXX = Variable caller ID, where X equals an extension number. The CO appends the number with the area code if you do not specify it. • 5555000 = Fixed caller ID, for when you want the Corporate number to be sent instead of the exact extension from which the call is placed. The CO appends the number with the area code if you do not specify it.
Calling Party Selection	Any outbound call on a gateway can send directory number information. Choose which directory number is sent: • Originator—Send the directory number of the calling device. This specifies the default value. • First Redirect Number—Send the directory number of the redirecting device. • Last Redirect Number—Send the directory number of the last device that redirected the call.

Table 7-5 Field Descriptions for T1-PRI or E1-PRI Trunks on Cisco VG200 Gateways (continued)

Field	Description
Channel IE Type	Choose one of the following values to specify whether channel selection is presented as a channel map or a slot map: • Number—B-channel usage always presents a channel map format. • Slotmap—B-channel usage always presents a slotmap format. • Use Number When 1B—Channel usage presents a channel map for one B-channel but presents a slotmap if more than one B-channel exists. This represents the default value.
Interface Identifier Present	This field applies to DMS-100 protocol only. Check the check box to indicate that an Interface Identifier is present. By default, the box remains unchecked.
Interface Identifier Value	This field applies to DMS-100 protocol only. Enter the value that you obtained from the PBX provider. Valid values range from 0 to 255.
Display IE Delivery	For this optional field, check the check box to enable delivery of the display information element (IE) in SETUP and CONNECT messages for the calling and called party name delivery service. By default, the box remains unchecked.
Redirecting Number IE Delivery—Outbound	For this optional field, check the check box to include the Redirecting Number IE in the SETUP message to indicate the first redirecting number and the redirecting reason of the call when a call is forwarded. By default, the box remains unchecked. This setting applies to the SETUP message only on all protocols for digital access gateways.

Table 7-5 Field Descriptions for T1-PRI or E1-PRI Trunks on Cisco VG200 Gateways (continued)

Field	Description
Redirecting Number IE Delivery—Inbound	For this optional field, check the check box to include the Redirecting Number IE in the SETUP message to indicate the first redirecting number and the redirecting reason of the call when a call is forwarded. By default, the box remains unchecked. This setting applies to the SETUP message only on all protocols for digital access gateways.
Delay for First Restart	For this optional field, enter the rate, in 1/8-second increments, at which the spans are brought in service. The delay occurs when many PRI spans are enabled on a system and the Inhibit Restarts at PRI Initialization check box is unchecked. The default value specifies 32. For example, set the first five cards to 0 and set the next five cards to 16. (Wait 2 seconds before bringing them in service.)
Delay Between Restarts	For this optional field, enter the time, in 1/8-second increments, between restarts. The delay occurs when a PRI RESTART is sent if the Inhibit Restarts check box is unchecked. The default value specifies 4.
Num Digits	Choose the number of significant digits to collect, from 0 to 32. Cisco CallManager counts significant digits from the right (last digit) of the number called. The default value specifies 23. Use this field if you check the Sig Digits check box. Use this field for processing incoming calls and to indicate the number of digits, starting from the last digit of the called number, that are used to route calls that are coming into the PRI span. See Prefix DN and Sig Digits.

Table 7-5 Field Descriptions for T1-PRI or E1-PRI Trunks on Cisco VG200 Gateways (continued)

Field	Description
Sig Digits	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. Enable or disable this check box depending on whether you want to collect significant digits: • If you do not check the check box, Cisco CallManager does not truncate the inbound number. • If you check the check box, you also need to choose the number of significant digits to collect. By default, the box remains checked.
Prefix DN	For this optional field, enter the prefix digits that are appended to the digits that this trunk receives on incoming calls. Cisco CallManager adds prefix digits after first truncating the number in accordance with the Num Digits setting.
Presentation Bit	Choose whether you want the central office to transmit or block caller ID: • Allowed—As the default value, the Central Office will send caller ID. • Restricted—The Central Office will not send caller ID.

Table 7-5 Field Descriptions for T1-PRI or E1-PRI Trunks on Cisco VG200 Gateways (continued)

Field	Description
Called Party IE Number Type Unknown	Choose the format for the type of number in called party directory numbers. Cisco CallManager sets the called directory number (DN) type. Cisco recommends that you do not change the default value unless you have extensive experience with dialing plans, such as NANP or the European dialing plan. You may need to change the default in Europe because Cisco CallManager does not recognize European national dialing patterns. You can also change this setting when you are connecting to PBXs that use routing as a non-national type number. Choose one of the following options: • CallManager—For the default setting, the Cisco CallManager sets the directory number type. This represents the default value. • International—Use when you are dialing outside the dialing plan for your country. • National—Use when you are dialing within the dialing plan for your country. • Unknown—This option specifies that the dialing plan is unknown.

Table 7-5 Field Descriptions for T1-PRI or E1-PRI Trunks on Cisco VG200 Gateways (continued)

Field	Description
Calling Party Number Type IE Unknown	Choose the format for the type of number in calling party directory numbers. Cisco CallManager sets the calling directory number (DN) type. Cisco recommends that you do not change the default value unless you have advanced experience with dialing plans, such as NANP or the European dialing plan. You may need to change the default in Europe because Cisco CallManager does not recognize European national dialing patterns. You can also change this setting when you are connecting to PBXs that are using routing as a non-national type number. Choose one of the following options: • CallManager—The Cisco CallManager sets the directory number type. This represents the default value. • International—Use when you are dialing outside the dialing plan for your country. • National—Use when you are dialing within the dialing plan for your country. • Unknown—The dialing plan is unknown.

Table 7-5 Field Descriptions for T1-PRI or E1-PRI Trunks on Cisco VG200 Gateways (continued)

Field	Description
Called Numbering Plan	Choose the format for the numbering plan in called party directory numbers. Cisco CallManager sets the called DN numbering plan. Cisco recommends that you do not change the default value unless you have extensive experience with dialing plans, such as NANP or the European dialing plan. You may need to change the default in Europe because Cisco CallManager does not recognize European national dialing patterns. You can also change this setting when you are connecting to PBXs that are using routing as a non-national type number. Choose one of the following options: • CallManager—For the default setting, the Cisco CallManager sets the Numbering Plan in the directory number. • ISDN—Use when you are dialing outside the dialing plan for your country. • National Standard—Use when you are dialing within the dialing plan for your country. • Private—Use when you are dialing within a private network. • Unknown—The dialing plan is unknown.

Table 7-5 Field Descriptions for T1-PRI or E1-PRI Trunks on Cisco VG200 Gateways (continued)

Field	Description
Calling Numbering Plan	Choose the format for the numbering plan in calling party directory numbers. Cisco CallManager sets the calling DN numbering plan. Cisco recommends that you do not change the default value unless you have extensive experience with dialing plans, such as NANP or the European dialing plan. You may need to change the default in Europe because Cisco CallManager does not recognize European national dialing patterns. You can also change this setting when you are connecting to PBXs that are using routing as a non-national type number. Choose one of the following options: • CallManager—For the default setting, the Cisco CallManager sets the Numbering Plan in the directory number. This represents the default value. • ISDN—Use when you are dialing outside the dialing plan for your country. • National Standard—Use when you are dialing within the dialing plan for your country. • Private—Use when you are dialing within a private network. • Unknown—This action specifies that the dialing plan is unknown.

Table 7-5 Field Descriptions for T1-PRI or E1-PRI Trunks on Cisco VG200 Gateways (continued)

Field	Description
PRI Protocol Type	Choose the communications protocol for the span: For E1 PRI spans, you have two options: • PRI AUSTRALIAN—Australian ISDN • PRI EURO—European ISDN T1 PRI spans have several options, depending on the carrier or switch: • 4E —AT&T InterExchange carrier • 5E8 Custom—Cisco IP Phone • 5E9 and NI2—AT&T family local exchange switch or carrier • DMS—MCI family local exchange switch or carrier • ETSI SC—European local exchange carrier on T1; also, Japanese local exchange. • QSIG—Inter-PBX signaling protocol Determine the switch to which you are connecting and the preferred protocol, as follows: • Nortel Meridian—5E8 Custom • Lucent Definity—4ESS or 5E8 • Madge (Teleos) box—5E8 Teleos • Intecom PBX—5E8 Intecom Alternatively, choose the protocol based on the carrier: • MCI—DMS-250 • Sprint—DMS-250 or DMS-100 • AT&T—4ESS

Table 7-5 Field Descriptions for T1-PRI or E1-PRI Trunks on Cisco VG200 Gateways (continued)

Field	Description
Inhibit Restarts at PRI Initialization	For this optional field, a RESTART message confirms the status of the ports on a PRI span. If RESTARTs are not sent, Cisco CallManager assumes that the ports are in service. By default, the box remains checked. When the D-Channel successfully connects with another PRI trunk D-Channel, it sends restarts when this box is unchecked.
Enable Status Poll	For this optional field, check the check box to view the B-channel status in the debug window. By default, the box remains unchecked.
Number of Digits to Strip	Choose the number of digits to strip on outbound calls, from 0 to 32. The default value is 0. For example, 8889725551234 is dialed; the number of digits to strip is 3. In this example, Cisco CallManager strips 888 from the outbound number.

Table 7-5 Field Descriptions for T1-PRI or E1-PRI Trunks on Cisco VG200 Gateways (continued)

Field	Description
Setup of Non-ISDN Progress Indicator IE Enable	For this optional field, you may need to specify a value in this field to force ringback on some PBXs. The default specifies unchecked. Check this check box only if users are not receiving ringback tones on outbound calls. When this setting is enabled, Cisco CallManager sends Q.931 setup messages out digital (that is, non-H.323) gateways with the Progress Indicator field set to non-ISDN. This message notifies the destination device that the Cisco CallManager gateway is non-ISDN and that the destination device should play in-band ringback. This problem usually associates with Cisco CallManagers that connect to PBXs through digital gateways.

Product Specific Configuration

The gateway manufacturer defines the model-specific fields under Product Specific Configuration. Because the fields are dynamically configured, they can change without notice. To view field descriptions and help for product-specific configuration items, click the **i** information icon to the right of the **Product Specific Configuration** heading to display help in a popup window. In some cases, the displayed information may not be enough to help you understand the field. If you need more information, refer to the documentation for the specific gateway that you are configuring.

Field Descriptions for FXS Ports on a Cisco Catalyst 6000 24 Port Analog Interface Module

Use the following field descriptions when you are adding or updating values for FXS ports on a Cisco Catalyst 6000 analog interface module.

Unless otherwise noted, assume that all fields are mandatory.

Table 7-6 Field Descriptions for FXS Ports on Cisco Catalyst 6000 Modules

Field	Description
Catalyst 6000 (FXS) Ports Template Name	Enter a name for the template, up to 50 alphanumeric characters.
Port Direction	Choose the direction of calls that pass through this port: • Inbound—Use for incoming calls only. • Outbound—Use for outgoing calls. • Both Ways—For this default value, use for inbound and outbound calls.
Prefix DN	For this optional field, enter the prefix digits to be appended to the digits that are received on incoming calls.
Num Digits	Enter the number of digits to collect, from 0 to 32. Cisco CallManager counts significant digits from the right (last digit) of the number called.
Expected Digits	Enter the number of digits that are expected on the inbound side of the trunk. Use zero if you are unsure.
SMDI Port Number	Enter the SMDI port number. Use the same number as the actual port number on the voice-mail system to which the analog access port connects.
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.
Auto Signal Adjustment from IP Network	Choose the gain or loss that you want applied to the transmitted audio signal.

Table 7-6 Field Descriptions for FXS Ports on Cisco Catalyst 6000 Modules (continued)

Field	Description
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 specifies 5000 ms.
Offhook Validation Timer	Enter the time that must pass before Cisco CallManager recognizes a valid off-hook indication. Default specifies 100 ms.
Onhook Validation Timer	Enter the time that must pass before Cisco CallManager recognizes a valid on-hook indication. Default specifies 250 ms.
HookFlash Timer	Enter the time that must pass after on-hook is recognized before going back off hook and have it recognized as hook-flash and not disconnect. Default specifies 1000 ms.

Field Descriptions for Gateway Directory Number Template

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

Treat all fields as optional.

Table 7-7 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 check box to default the voice message box field for a directory number to the same value as the directory number. This means that the call will only ring the directory number and not roll to voice mail.

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

Field	Description
AAR Group	Choose the AAR group to which this directory number will be added.
Calling Search Space	Choose the calling search space to which this group of directory numbers should belong. A calling search space specifies the collection of route partitions that are searched to determine how a dialed number should be routed.
User Hold Audio Source	Choose the music on hold audio source that is to be played when the user places a call on hold (presses the Hold button or soft key).
Network Hold Audio Source	Choose the music on hold audio source that is to be played when the system places a call on hold (such as when user transfers a call or initiates a conference or call park).
In the Call Forward and Pickup Settings area, complete the following fields. If you enter a value for any of these fields, you can also choose the Calling Search Space for that field.	
Forward All	Enter the directory number to which all calls are sent. If there is a value in this field, all calls destined for the gateway directory number automatically forward to the specified directory number.
Forward Busy	Enter the directory number to which all calls are sent if the gateway directory number is busy.
Forward No Answer	Enter the directory number to which calls are sent if the gateway directory number does not answer.
Call Pickup Group	Choose the number that can be dialed to answer calls to this directory number (in the specified partition).

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

Field	Description
Line Settings for This Device	
External Phone Number Mask	Enter the phone number (mask) that is used to send Caller ID information when a call is placed from this directory number.
Activate Auto-Answer Message Waiting Indicator Policy	Use this field to indicate how the Message Waiting Indicator behaves for the device. You can have the MWI always come on, never come on, or use the system policy, as defined in Cisco CallManager Administration.