Working with Gateways and Ports

You can use BAT to configure some Cisco gateways and ports in the Cisco CallManager database in batches, rather than to add each gateway and port individually. Use BAT to work with the following types of gateways:

- To add, update, or delete Cisco VG200 Voice Gateways with trunks and ports, see the "Working with Cisco VG200 Gateways and Ports" section on page 7-2.
- To add, update, and delete FXS ports on Cisco Catalyst 6000 24 Port FXS Analog Interface Modules, see the "Adding Cisco Catalyst 6000 FXS Analog Interface Module Ports" section on page 7-19.

Gateway Directory Numbers for FXS Ports

A Gateway Directory Number template allows you to specify directory number configuration for POTS port types on Cisco VG200 gateways or Cisco Catalyst 6000 FSX analog interface modules.

The following topics provide information and procedures for these tasks:

Working with Cisco VG200 Gateways and Ports

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

When using BAT to add the Cisco VG200 gateways to the Cisco CallManager database, you can configure the following types of trunks or ports:

- Foreign Exchange Station (FXS) ports for analog devices
- Foreign Exchange Office (FXO) for loopstart or groundstart trunks
- T1 Primary Rate Interface (PRI) trunks for ISDN services in North America
- E1 Primary Rate Interface (PRI) trunks for ISDN services in Europe
- T1 Channel Associated Signaling (CAS) protocol trunks

The following topics provide information and procedures for these tasks:

- Adding Cisco VG200 Gateways, page 7-2
- Deleting Cisco VG200 Gateways, page 7-17
- Generating Reports for Cisco VG200 Gateways, page 9-11

Adding Cisco VG200 Gateways

To add Cisco VG200 gateways to Cisco CallManager, you must access the Steps to Insert VG200 Gateways window by choosing **Configure > Gateways > VG200**. In the VG200 Gateway Options window, choose **Insert VG200 Gateways**, and perform the following tasks:

1. Only when you are adding FXS ports, create a Gateway Directory Number template. See the "Creating a Gateway Directory Number Template for FXS Ports" section on page 7-3.
2. Create a Cisco VG200 gateway template to define common values for a set of gateways and ports. See the "Creating a Cisco VG200 Gateway Template" section on page 7-4.

3. Create a CSV data file to define individual values for each gateway and port that you want to add. See the "Creating CSV Data Files for Cisco VG200 Gateways" section on page 7-10.
4. Insert gateways and ports in the Cisco CallManager database. See the "Inserting Cisco VG200 Gateways to Cisco CallManager" section on page 7-15.

Related Topics

- Working with Cisco VG200 Gateways and Ports, page 7-2
- Inserting Cisco VG200 Gateways to Cisco CallManager, page 7-15
- Deleting Cisco VG200 Gateways, page 7-17

Creating a Gateway Directory Number Template for FXS Ports

You use the Gateway Directory Number template when you add directory numbers to FXS ports on Cisco VG200 gateways or Cisco Catalyst 6000 (FXS) analog interface modules.

You can create a BAT template that has common directory number details such as partition, calling search space, and so on, for POTS port types.

Note If you are adding ports other than FXS to the Cisco VG200 gateway (such as FXO ports), go to the "Creating a Cisco VG200 Gateway Template" section on page 7-4.

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

Procedure

Step 1 Choose **Add, view, or modify Gateway Directory Number template for FXS ports** and click **Next**. The Gateway Directory Number Template Configuration window displays.

Step 2 In the Gateway Directory Number Template Name field, enter a unique name, up to 50 alphanumeric characters, for this template.

Step 3 Enter settings for the fields. See the "Field Descriptions for Gateway Directory Number Template" section on page 7-27, for more information.

Step 4 To add the new template, click **Insert**. The template appears in the list of templates.

Step 5 To return to the Steps to Insert Gateways window, click **Back**.

Related Topics

- Adding Cisco VG200 Gateways, page 7-2
- Adding Cisco Catalyst 6000 FXS Analog Interface Module Ports, page 7-19
- Modifying a Template, page 6-5
- Copying a Template, page 6-6
- Deleting Templates, page 6-7

Creating a Cisco VG200 Gateway Template

You must create a Cisco VG200 template and then add endpoint identifiers for the network modules. If you already created the gateway template but did not add endpoint identifiers, skip to the "Updating the Endpoint Identifiers for Cisco VG200 Gateway Template" section on page 7-9.

You must use a BAT template to configure the following endpoint identifiers:

- Foreign Exchange Station (FXS) ports
- Foreign Exchange Office (FXO) trunks
- T1 PRI trunks
- E1 PRI trunks
- T1 CAS trunks

Before You Begin

Use the following procedure to add a VG200 Gateway template.

Procedure

Step 1 In the Steps to Insert VG200 Gateways window, choose **Insert Gateways** and click **Next**.

Step 2 Choose **Add, view, or modify VG200 template** and click **Next**. The VG200 Gateway Template Configuration window displays.

Step 3 Enter values for the following fields:

- **VG200 Gateway Template Name**—Enter a unique name, up to 50 alphanumeric characters for this BAT template.
- **Cisco CallManager Group**—Choose the Cisco CallManager Group for this gateway.

Step 4 In the Module in Slot 1 field in the Installed Voice Interface Cards area, choose the type of network 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 either for T1 CAS or T1 PRI, or for E1 PRI.
- None—No network modules are installed.

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

- **Switchback Timing**—Choose the timing mechanism that is used to switch back to a primary Cisco CallManager.
- **Switchback Uptime-Delay**—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**—Designate 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**. When the Status indicates that the insert completed, 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**. When the Status indicates that the update completed, the endpoint identifiers display as links to the right of the subunit drop-down list boxes.

Note Continue to the "Adding Endpoint Identifiers in a Cisco VG200 Gateway Template" section on page 7-6 to complete the VG200 gateway template.

Adding Endpoint Identifiers in a Cisco VG200 Gateway Template

Use the following procedure to add endpoints for FXS ports, FXO trunks, and T1 PRI or E1 PRI trunk interfaces to the template. If you are configuring T1 CAS endpoints, you must also configure ports by using the Port Configuration window.

You must use a BAT template to configure all ports that you want to add. For example, if you want to add ports 1, 2, and 3 on endpoint identifier (1/0), you must first configure ports 1, 2, and 3 in the BAT template before attempting to add these ports by using the CSV data file.

Procedure

Step 1 In the VG200 Gateway Template Configuration window, click the link for the endpoint identifier that has a small question mark above the endpoint icon. The question mark indicates that the endpoint is not configured.

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

Step 2 Complete one of the following options for the trunk or port type that you are configuring for this endpoint:

- If you are configuring FXS ports for POTS devices, enter the appropriate settings. See the "Field Descriptions for FXS Ports on Cisco VG200 Gateways" section on page 7-32 for more information. You must specify the Gateway Directory Number template that you are using with these ports.
- If you are configuring FXO trunks, enter the appropriate trunk settings. See the "Field Descriptions for FXO Trunks on a Cisco VG200 Gateway" section on page 7-34 for more information.
- If you are configuring T1 trunks, choose either **T1 CAS** or **T1 PRI** signaling protocol:
  - T1 PRI trunk interface protocol—Enter the appropriate settings. See the "Field Descriptions for T1 PRI or E1 PRI Trunks on a Cisco VG200 Gateway" section on page 7-42 for more information.
  - T1 CAS trunk interface protocol—Go to the "Adding T1 CAS Endpoints and Ports to the Cisco VG200 Gateway Template" section on page 7-8
- If you are configuring E1 trunks, enter the appropriate settings. See the "Field Descriptions for T1 PRI or E1 PRI Trunks on a Cisco VG200 Gateway" section on page 7-42 for more information.

Step 3 After entering the endpoint settings, click **Update**. When the Status indicates that the update completed, the endpoint identifier icon shows the interface type instead of a question mark.

Step 4 To configure additional endpoints, repeat Step 1 through Step 3 until all endpoints are configured.

Step 5 Click **Back to VG200 Template Configuration** and then click **Back** to return to the Steps to Insert VG200 Gateways window.

Related Topics

- Adding T1 CAS Endpoints and Ports to the Cisco VG200 Gateway Template, page 7-8
- Creating a Cisco VG200 Gateway Template, page 7-4
- Modifying a Template, page 6-5
- Copying a Template, page 6-6

Adding T1 CAS Endpoints and Ports to the Cisco VG200 Gateway Template

Use the following procedure to add T1 CAS endpoints to the VG200 Gateway template.You must also configure the E&M ports for T1 CAS by using the Port Configuration window. You can configure any number of ports between 1 through 24 for each T1 CAS trunk interface endpoint.

You must use a BAT template to configure all ports that you want to add. For example, if you want to add ports 1, 2, and 3 on endpoint identifier (1/0), you must first configure ports 1, 2, and 3 in the BAT template before attempting to add these ports by using the CSV data file.

Note The three-digit port identifier represents the combination of endpoint identifier number and port number, where the first digit specifies the endpoint, and the last two digits indicate the port number. For example, for endpoint 0 and port number 7, the port identifier specifies 007.

Procedure

Step 1 In the VG200 Endpoint Configuration window for T1 CAS trunks, enter the appropriate settings. See the "Field Descriptions for T1 CAS Trunks on a Cisco VG200 Gateway" section on page 7-36 for more information.

Step 2 After entering the endpoint settings, click **Update**. When the Status indicates that the update completed, the endpoint identifier icon shows the interface type instead of a question mark.

Step 3 To configure the E&M ports for T1 CAS, click **Add a New Port** in the left pane. The Port Configuration popup window displays.

Step 4 Choose values for the following fields:

- Beginning 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 the "Field Descriptions for E & M Ports for T1 CAS" section on page 7-40, for more information.

Step 5 If you have more ports to configure, click **Insert** and repeat Step 3 through Step 5.

If you have configured all the E&M ports for the T1 CAS endpoints, choose **Insert and Close**. The popup window closes, and the ports display in the left column on the VG200 Gateway Template window as Port: <number>.

- You can modify port attributes in a template by clicking a port identifier in the left pane to open the Port Configuration window. Make changes to the details and then click **Update** or **Update and Close**.
- You can delete ports in a template by clicking a port identifier in the left pane to open the Port Configuration window. Click **Delete** to remove the port.

Step 6 Click **Back to VG200 Template Configuration**.

Related Topics

- Creating a Cisco VG200 Gateway Template, page 7-4
- Modifying a Template, page 6-5
- Copying a Template, page 6-6
- Deleting Templates, page 6-7

Updating the Endpoint Identifiers for Cisco VG200 Gateway Template

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. To access the endpoint identifier option, choose **Configure > Gateways > VG200**.

Procedure

Step 1 In the VG200 Options window, choose **Insert Gateways** and click **Next**. The Steps to Insert VG200 Gateways window displays.

Step 2 Choose **Add, view, or modify VG200 template** and click **Next**. The VG200 Gateway Template Configuration window displays.

Step 3 In the list of VG200 Gateway Templates, choose 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**. When the Status indicates that the update completed, the endpoint identifiers display on the left pane.

Step 6 Choose the endpoint identifier that you want to configure.You can tell which endpoint identifiers need to be configured because the endpoint icon displays with a question mark to indicate that it is not configured.

The Cisco VG200 Endpoint Configuration window displays with settings for the endpoints. See the "Adding Endpoint Identifiers in a Cisco VG200 Gateway Template" section on page 7-6 for complete instructions.

Step 7 Repeat Step 4 through Step 6 until all endpoint identifiers are configured.

Step 8 Click **Back to VG200 Template Configuration** and then click **Back** to return to the Steps to Insert VG200 Gateways window.

Related Topics

- Creating a Cisco VG200 Gateway Template, page 7-4
- Adding T1 CAS Endpoints and Ports to the Cisco VG200 Gateway Template, page 7-8
- Modifying a Template, page 6-5
- Modifying a File Format, page 6-18
- Deleting Templates, page 6-7

Creating CSV Data Files for Cisco VG200 Gateways

When you use BAT to insert VG200 gateways and ports to the Cisco CallManager database, you can add new ports or update existing ports.

You can use the BAT spreadsheet to create a CSV data file for VG200 gateways and ports. See the following sections:

- Using the BAT Spreadsheet for CSV Data Files for Cisco VG200 FXS or FXO Gateways, page 7-11
- Using the BAT Spreadsheet for CSV Data Files for Cisco VG200 T1 CAS, T1 PRI, or E1 PRI Gateways and Ports, page 7-13

You can use a text editor to create a text file in CSV format for VG200 gateways and ports. See the following sections:

- Creating a Text-Based CSV File for Cisco VG200 Gateways, page A-21

Using the BAT Spreadsheet for CSV Data Files for Cisco VG200 FXS or FXO Gateways

Use the BAT spreadsheet to create the CSV data file that contains the details for each individual FXS or FXO port, such as directory number, description of port, and partition.

For information about installing and using the BAT spreadsheet, see the "Using the BAT Spreadsheet for Gathering Data" section on page 1-11.

To create a text-based CSV data file for VG200 gateways, see the "FXO or FXS Trunks CSV File Format" section on page A-22 for information and examples.

Procedure

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

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

Step 3 To add gateway attributes, click the **VG200 FXS FXO** tab at the bottom of the spreadsheet.

Step 4 In each row, provide the information for the following fields:

- **MGCP Domain Name**—Enter a name, from 1 to 64 characters, that identifies the gateway. Use the Domain Name System (DNS) host name if it is configured to resolve correctly; otherwise, use the host name as defined on the Cisco MGCP gateway.

  The host name must match exactly the host name that is configured on the Cisco IOS gateway. For example, if the host name is configured on the gateway to resolve to vg200-1 and the IP domain name is not configured, enter the host name in this field (in this case, vg200-1). If the host name is configured on the gateway as vg200-1 and the IP domain name is configured on the gateway as cisco.com, enter vg200-1.cisco.com in this field.

- **Description**—Enter a description, up to 100 characters for the gateway. Use a specific description that helps you locate the gateway.

- **Port 1 Description**—Enter a description for port 1, up to 50 characters. Use a description to help identify the port in a list of ports. This applies to the description field for port 2 through port 4.
- **Port 1 Directory Number**—Enter the directory number, up to 24 numerals and special characters, for this port. This applies to the directory number field for port 2 through port 4.

Note Port 1 Directory Number and Partition fields are required for FXS ports only. For FXO ports, leave these fields blank.

- **Port 1 Partition**— Enter the name of the route partition, up to 50 characters, to which you want this port to belong. 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 5 To transfer the data from the BAT Excel spreadsheet into a CSV file, click **Export to BAT Format**.

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

VG200Gateways#timestamp.txt

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

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

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

You must copy the CSV data file to the Cisco CallManager publisher database server, so BAT can access the data input file. 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.

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

Related Topics

- Inserting Cisco VG200 Gateways to Cisco CallManager, page 7-15
- Using the BAT Spreadsheet for CSV Data Files for Cisco VG200 T1 CAS, T1 PRI, or E1 PRI Gateways and Ports, page 7-13
- Deleting Cisco VG200 Gateways, page 7-17

Using the BAT Spreadsheet for CSV Data Files for Cisco VG200 T1 CAS, T1 PRI, or E1 PRI Gateways and Ports

Use the BAT spreadsheet to create the CSV data file that contains the details, such as domain name, MGCP description, and port identifier, for individual T1 CAS, T1 PRI, or E1 PRI ports.

For information about installing and using the BAT spreadsheet, see the "Using the BAT Spreadsheet for Gathering Data" section on page 1-11.

To create a text-based CSV data file for VG200 gateways, see the "T1 CAS, T1 PRI, or E1 PRI Trunks File Format" section on page A-23 for information and examples.

Procedure

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

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

Step 3 Click the **VG200 T1-Pri T1-Cas E1-Pri** tab.

Step 4 For T1 CAS endpoints only, scroll to the right until you see the Number of Port Identifiers field. Enter the number of port identifiers that you want to add for each Cisco VG200 gateway. If you want only one port identifier, skip this step.

Step 5 In each row, provide the information for the following fields:

- **MGCP Domain Name**—Enter a name, from 1 to 64 characters that identifies the gateway. Use the Domain Name System (DNS) host name if it is configured to resolve correctly; otherwise, use the host name as defined on the Cisco MGCP gateway.

  The host name must match exactly the host name that is configured on the Cisco IOS gateway. For example, if the host name is configured on the gateway to resolve to vg200-1 and the IP domain name is not configured, enter the host name in this field (in this case, vg200-1). If the host name is configured on the gateway as vg200-1 and the IP domain name is configured on the gateway as cisco.com, enter vg200-1.cisco.com in this field.
- **MGCP Description**—Enter a description, up to 100 characters for the gateway. Use a specific description that helps you locate the gateway.
- **Port Identifier 1**—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 data file, you can specify none, some, or all ports that were configured in the template. Do not configure any ports in the CSV data file that were not also configured in the template, or an error will result when you attempt to insert the BAT VG200 template and the CSV file.

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

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

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

VG200Gateways#timestamp.txt

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

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

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

You must copy the CSV data file to the Cisco CallManager publisher database server, so BAT can access the data input file. 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.

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

Inserting Cisco VG200 Gateways to Cisco CallManager

To add Cisco VG200 gateways and ports to Cisco CallManager, use this procedure.

Before You Begin

- You must have a Cisco VG200 gateway template for the trunks or ports. See the "Creating a Cisco VG200 Gateway Template" section on page 7-4.
- If you want to insert directory number details for FXS ports, you must have a Gateway Directory Number template. See the "Creating a Gateway Directory Number Template for FXS Ports" section on page 7-3.
- You must have a CSV data file for the VG200 gateway ports. See the Creating CSV Data Files for Cisco VG200 Gateways, page 7-10:

Procedure

Step 1 In the Steps to Insert VG200 Gateways window, choose **Insert Gateways** and click **Next**. The Insert Gateways window displays.

Step 2 In the File Name field, choose the name of the CSV data file that contains the Cisco VG200 gateway information to be added.

Step 3 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 4 Click **Insert**.

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

Step 5 To insert VG200 gateways, click **OK** or click **Cancel** to cancel the transaction.

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

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

Step 6 You can click **View Latest Log File** to see a log file that indicates the number of records that are added and the number of records that failed, including an error code. For more information on log files, see the "BAT Log Files" section on page 11-1.

Related Topics

- Working with Cisco VG200 Gateways and Ports, page 7-2
- Adding Cisco VG200 Gateways, page 7-2
- Deleting Cisco VG200 Gateways, page 7-17
- Generating Reports for Cisco VG200 Gateways, page 9-11

Deleting Cisco VG200 Gateways

You can delete some or all Cisco VG200 gateway records from the Cisco CallManager database. To access VG200 Options, choose **Configure > Gateways > VG200**. To delete Cisco VG200 gateways, use this procedure.

Procedure

Step 1 In the VG200 Options window, choose **Delete VG200 Gateways** and click **Next**. The Delete Gateways window displays

Step 2 In the Select VG200 gateways where area, choose the field that you want to search, such as MGCP Domain Name or Description, from the drop-down list.

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

Step 4 In the search field, enter the value that you want to locate, such as the name for MGCP domain or the description of the gateway.

Step 5 To add the defined filter to the query, click **Add to Query**.

Step 6 To add multiple filters to the query, click **AND** or **OR**.

Step 7 To verify the records that are going to be deleted, click **View Query Results**.

Caution If you have not specified a query (as described in Step 2 through Step 5), clicking **Delete** removes all Cisco VG200 gateways.

Step 8 To delete the records, click **Delete**.

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 the "BAT Log Files" section on page 11-1.

Related Topics

- Working with Cisco VG200 Gateways and Ports, page 7-2
- Adding Cisco VG200 Gateways, page 7-2
- Generating Reports for Cisco VG200 Gateways, page 9-11

Working with Cisco Catalyst 6000 FXS Analog Interface Modules

Before using BAT to add the FXS ports for the analog interface modules, you must install the Cisco Catalyst 6000 gateway by performing these tasks:

1. Configure the gateway by using Cisco IOS software command line interface. See the documentation that was supplied with your gateway for configuration instructions.
2. Use Cisco CallManager Administration to add the Cisco Catalyst 6000 gateway in the Cisco CallManager database. In Cisco CallManager Administration, choose **Device > Add a New Device > Gateway > Next**. Choose the Cisco Catalyst 6000 24 Port FXS Gateway and device protocol and then click the **Next**.

You can use BAT to add FXS ports on the Cisco Catalyst 6000 (FXS) analog interface modules for analog devices. You must configure a Gateway Directory Number template to associate with these FXS ports and a Catalyst 6000 (FXS) ports template before adding these ports to the Cisco CallManager database.

The following topics provide information and procedures for these tasks:

- Adding Cisco Catalyst 6000 FXS Analog Interface Module Ports, page 7-19
- Updating Cisco Catalyst 6000 FXS Ports in Cisco CallManager, page 7-24
- Deleting Ports for Cisco Catalyst 6000 FXS Gateway, page 7-25

Adding Cisco Catalyst 6000 FXS Analog Interface Module Ports

To insert Cisco Catalyst 6000 (FXS) ports to Cisco CallManager, you must access the Catalyst 6000 (FXS) Options window by choosing **Configure > Gateways > Catalyst 6000 (FXS)**. In the Catalyst 6000 Options window, choose **Insert Catalyst 6000 (FXS) ports**, and perform the following tasks:

1. Create a Gateway Directory Number template for adding FXS ports that require directory number details. See the "Creating a Gateway Directory Number Template for FXS Ports" section on page 7-3.
2. To define common values for a set of FXS ports, create a Cisco Catalyst 6000 (FXS) ports template. See the "Creating a Cisco Catalyst 6000 (FXS) Ports Template" section on page 7-19.
3. To define individual values for the FXS ports that you want to add, create a CSV data file. See the Creating the CSV Data File for Cisco Catalyst 6000 (FXS) Ports, page 7-20.
4. To insert the FXS ports in the Cisco CallManager database, see the "Inserting Cisco Catalyst 6000 (FXS) Ports to Cisco CallManager" section on page 7-22.

Related Topics

- Updating Cisco Catalyst 6000 FXS Ports in Cisco CallManager, page 7-24
- Deleting Ports for Cisco Catalyst 6000 FXS Gateway, page 7-25

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 the batch, such as the port direction, and port level.

To create a Cisco Catalyst 6000 FXS ports template, use this procedure. You must complete all fields unless otherwise noted.

Procedure

Step 1 In the Steps to Insert Catalyst 6000 (FXS) Gateways window, choose **Add, view, or modify Catalyst 6000 (FXS) Ports template** and click **Next**. The Catalyst 6000 (FXS) Ports Template Configuration window displays.

Step 2 In the Catalyst 6000 (FXS) Ports Template Name field, enter a unique name for this template.

Step 3 Enter the settings for the fields. See the "Field Descriptions for FXS Ports on Cisco Catalyst 6000 Gateway" section on page 7-55 for more information.

Step 4 Click **Insert**. When the Status indicates that the update completed, the template displays on the left pane.

Step 5 To return to the The Steps to Insert Catalyst 6000 (FXS) Gateways window, click **Back**.

Related Topics

- Adding Cisco Catalyst 6000 FXS Analog Interface Module Ports, page 7-19
- Modifying a Template, page 6-5
- Copying a Template, page 6-6
- Deleting Templates, page 6-7
- Creating the CSV Data File for Cisco Catalyst 6000 (FXS) Ports, page 7-20

Creating the CSV Data File for Cisco Catalyst 6000 (FXS) Ports

To create the CSV data file that contains the details for each individual Cisco Catalyst 6000 (FSX) port, such as directory number, description of port, and partition, use the BAT spreadsheet.

For information about installing and using the BAT spreadsheet, see the "Using the BAT Spreadsheet for Gathering Data" section on page 1-11.

To create a text-based CSV data file for Catalyst 6000 (FSX) ports, see the "Creating a Text-Based CSV File for Cisco Catalyst 6000 FXS Ports" section on page A-24 for information and examples.

Procedure

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

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

Step 3 Click the **Catalyst 6000 (FXS) Ports** tab.

Step 4 Enter information for each port record in a row. Complete all mandatory fields and any relevant, optional fields. Each column heading specifies the length of the field.

- **MAC Address**—Enter the 12-character MAC address for the gateway.
- **Port Number**—Enter the numeric port number (1 through 24) that you want to add to the gateway.
- **Directory Number**—Enter a directory number, up to 24 numerals and special characters, for this port. You must enter a directory number if you have specified a partition.(Optional)
- **Partition**—Enter the route partition, up to 50 characters, to which you want this port to belong. Do not specify a partition unless you also have specified a directory number. (Optional)

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

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

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

Catalyst6000_24PortsFXSGateway#timestamp.txt

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

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

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

Related Topics

- Adding Cisco Catalyst 6000 FXS Analog Interface Module Ports, page 7-19
- Inserting Cisco Catalyst 6000 (FXS) Ports to Cisco CallManager, page 7-22

Inserting Cisco Catalyst 6000 (FXS) Ports to Cisco CallManager

To insert ports on Cisco Catalyst 6000 FXS analog interface modules to Cisco CallManager, use this procedure.

Before You Begin

- You must have a Cisco Catalyst 6000 Ports template for this bulk transaction. See the "Creating a Cisco Catalyst 6000 (FXS) Ports Template" section on page 7-19.
- You must have a CSV data file that contains port details for this bulk transaction. See the "Creating the CSV Data File for Cisco Catalyst 6000 (FXS) Ports" section on page 7-20.
- If you want to add or update Directory Number details, you need a Gateway Directory Number template. See the "Creating a Gateway Directory Number Template for FXS Ports" section on page 7-3.

Procedure

Step 1 In the Steps to Insert Catalyst 6000 (FXS) Gateways window, choose **Insert FXS Ports**. The Insert Ports window displays.

Step 2 In the File Name field, choose the CSV data file for Cisco Catalyst 6000 ports that you created for this bulk transaction.

Step 3 In the Catalyst 6000 (FXS) Ports Template field, choose the BAT template that you created for adding Cisco Catalyst 6000 FXS ports.

Step 4 In the Gateway Directory Number Template Name, choose the BAT template that you created for adding directory numbers to Cisco Catalyst 6000 FXS ports.(Optional)

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

Step 5 Click **Insert**.

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

Step 6 To insert Cisco Catalyst 6000 FXS ports, click **OK** or click **Cancel** to cancel the transaction.

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

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

Step 7 To see a log file that indicates the number of records that are added and the number of records that failed, including an error code, you can click **View Latest Log File.** For more information on log files, see the "BAT Log Files" section on page 11-1.

Related Topics

- Adding Cisco Catalyst 6000 FXS Analog Interface Module Ports, page 7-19
- Updating Cisco Catalyst 6000 FXS Ports in Cisco CallManager, page 7-24
- Deleting Ports for Cisco Catalyst 6000 FXS Gateway, page 7-25

Updating Cisco Catalyst 6000 FXS Ports in Cisco CallManager

To update existing ports for Cisco Catalyst 6000 FXS analog interface modules to Cisco CallManager, use this procedure. To access the update ports option, choose **Configure > Gateways > Catalyst 6000 FXS**.

Before You Begin

- You must have a Cisco Catalyst 6000 Ports template for this bulk transaction. See the "Creating a Cisco Catalyst 6000 (FXS) Ports Template" section on page 7-19.
- You must have a CSV data file that contains modified port details for this bulk transaction. See the "Creating the CSV Data File for Cisco Catalyst 6000 (FXS) Ports" section on page 7-20.
- If you want to update Directory Number details, you need a Gateway Directory Number template. See the "Creating a Gateway Directory Number Template for FXS Ports" section on page 7-3.

Procedure

Step 1 In the Catalyst 6000 (FXS) Options window, choose **Update Catalyst 6000 FXS ports** and click **Next**. The Steps to Update Catalyst 6000 (FXS) Gateways window displays.

Step 2 Choose **Update FXS Ports**. The Update Ports window displays.

Step 3 In the File Name field, choose the CSV data file for the Catalyst 6000 ports for this bulk transaction.

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

Step 5 (Optional) 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 data file, you do not need a Gateway Directory Number Template.

Step 6 Click **Update**.

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

Step 7 To update Cisco Catalyst 6000 FXS ports, click **OK** or click **Cancel** to cancel the transaction.

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

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

Step 8 To see a log file that indicates the number of records that are updated and the number of records that failed, including an error code, you can click **View Latest Log File**. For more information on log files, see the "BAT Log Files" section on page 11-1.

Related Topics

- Working with Cisco Catalyst 6000 FXS Analog Interface Modules, page 7-18
- Deleting Ports for Cisco Catalyst 6000 FXS Gateway, page 7-25

Deleting Ports for Cisco Catalyst 6000 FXS Gateway

To delete all ports from a Cisco Catalyst 6000 24 Port FXS gateway, use this procedure. To access the delete ports option, choose **Configure > Gateways > Catalyst 6000 FXS**.

Procedure

Step 1 In the Catalyst 6000 (FXS) Options window, choose **Delete Catalyst 6000 FXS ports** and click **Next**. The Delete Ports window displays.

Step 2 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.

BAT deletes all the ports for only the gateways shown in the Selected Gateways list box.

Step 3 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 4 You can click **View Latest Log File** link to open the log file for this transaction. See the "BAT Log Files" section on page 11-1 for more information about errors.

Related Topics

- Working with Cisco Catalyst 6000 FXS Analog Interface Modules, page 7-18
- Updating Cisco Catalyst 6000 FXS Ports in Cisco CallManager, page 7-24

Field Descriptions for Gateway Templates

This section provides descriptions of the fields that are used in the following gateway templates.

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.

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

In the BAT user interface, field names that have an asterisk require an entry. Consider an entry in fields without an asterisk as optional.

Table 7-1 Field Descriptions for Gateway Directory Number Template

Field	Description
Line Details	
Partition	Choose the partition to which the directory number will be added.
Directory Number Settings	
Voice Mail 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 messaging.
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.
AAR Group	Choose the AAR group to which this directory number will be added.
Network Hold Audio Source	Choose the music on hold audio source that plays when the system places a call on hold (such as when user transfers a call or initiates a conference or call park).
Call Forward and Pickup Settings	

Table 7-1 Field Descriptions for Gateway Directory Number Template (continued)

Field	Description
Forward All Voice Mail	Check this check box if you want calls to forward to the number that you chose in the voice-mail profile. If you check this box, the Forward All Destination field and Forward All Calling Search Space box have no relevance.
Forward All Destination	Enter the directory number to which all calls are forwarded. **Note** The setting applies to any dialable phone number, including an outside destination unless restricted, and to all devices that are using this directory number.
Forward All Calling Search Space	Choose the calling search space to use when calls are forwarded to the specified destination. **Note** This setting applies to all devices that are using this directory number.
Forward Busy Voice Mail	Check this check box if you want calls to forward to the number that you chose in the voice-mail profile. If you check this box, the Forward Busy Destination field and Calling Search Space box have no relevance.
Forward Busy Destination	Enter the directory number to which a call is forwarded when the line is in use. **Note** This setting applies to any dialable phone number, including an outside destination unless restricted, and to all devices that are using this directory number.
Forward Busy Calling Search Space	Choose the calling search space to use when calls are forwarded to the specified destination. **Note** This setting applies to all devices that are using this directory number.
Forward No Answer Voice Mail	Check this check box if you want calls to forward to the number that you chose in the voice-mail profile. If you check this box, the Forward No Answer Destination field and Calling Search Space box have no relevance.

Table 7-1 Field Descriptions for Gateway Directory Number Template (continued)

Field	Description
Forward No Answer Destination	Enter directory number to which a call is forwarded when the phone is not answered. **Note** This setting applies to any dialable phone number, including an outside destination unless restricted, and to all devices that are using this directory number.
Forward No Answer Calling Search Space	Choose the calling search space to use when calls are forwarding to the specified destination. The setting displays only if it is configured in the system. **Note** This setting applies to all devices that are using this directory number.
No Answer Ring Duration	Enter the number of seconds to allow the call to ring before forwarding the call to the Forward No Answer Destination.
Call Pickup Group	Enter a number that can be dialed to answer calls to this directory number (in the specified partition); for example, 3003/Partitionl.
Multilevel Precedence and Preemption Alternate Party Settings	
Target (Destination)	Enter the number to which MLPP precedence calls should be directed if this directory number receives a precedence call and neither this number nor its call forward destination answers the precedence call. Values can include numeric characters, pound (#), and asterisk (*).
Calling Search Space	From the drop-down list box, choose the calling search space to associate with the alternate party target (destination) number.
No Answer Ring Duration	Enter the number of seconds (between 4 and 30) after which an MLPP precedence call will be directed to this directory number's alternate party if this directory number and its call forwarding destination have not answered the precedence call. Leave this setting blank to use the value that is set in the Cisco CallManager enterprise parameter, Precedence Alternate Party Timeout.

Table 7-1 Field Descriptions for Gateway Directory Number Template (continued)

Field	Description
Line Settings for This Device	
Display (Internal Caller ID)	Use this field only if you do not want the directory number to show on the line appearance. Enter text that identifies this directory number for a line/phone combination. Suggested entries include boss's name, department's name, or other appropriate information to identify multiple directory numbers to secretary/assistant who monitors multiple directory numbers.
External Phone Number Mask	Enter the phone number (mask), up to 24 digits, that is used to send Caller ID information when a call is placed from this directory number.
Maximum Number of Calls	You can configure up to 200 calls for a line on a device in a cluster, with the limiting factor being the device. As you configure the number of calls for one line, the calls available for another line decrease. The default specifies 4. If the phone does not allow multiple calls for each line, the default specifies 2. For CTI route points, you can configure up to 10,000 calls for each port. The default specifies 5000 calls. Use this field in conjunction with the Busy Trigger field.
Busy Trigger	This setting, which works in conjunction with Maximum Number of Calls and Call Forward Busy, determines the maximum number of calls to be presented at the line. If maximum number of calls is set for 50 and the busy trigger is set to 40, then incoming call 41 gets rejected with a busy cause (and will get forwarded if Call Forward Busy is set). If this line is shared, all the lines must be busy before incoming calls get rejected. Use this field in conjunction with Maximum Number of Calls for CTI route points. The default specifies 4500 calls.
Forwarded Call Information Display for this Device	

Table 7-1 Field Descriptions for Gateway Directory Number Template (continued)

Field	Description
Caller Name	Check this check box to include the caller's name in the display when a forwarded call is received. Default leaves this field enabled (checked).
Redirected Number	Check this check box to include the redirected number in the display when a forwarded call is received.
Caller Number	Check this check box to include the caller's number in the display when a forwarded call is received.
Dialed Number	Check this check box to include the dialed number in the display when a forwarded call is received. Default leaves this field enabled (checked).

Related Topics

- Adding Cisco VG200 Gateways, page 7-2
- Adding Cisco Catalyst 6000 FXS Analog Interface Module Ports, page 7-19

Field Descriptions for FXS Ports Template on a Cisco VG200 Gateway

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

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

In the BAT user interface, field names that have an asterisk require an entry. Consider an entry in fields without an asterisk as optional.

Table 7-2 Field Descriptions for FXS Ports on Cisco VG200 Gateways

Field	Description
Device Information	
Device Pool	Choose the device pool for this group of gateways/ports. A device pool defines sets of common characteristics for devices, such as region, date/time group, Cisco CallManager group, and calling search space for auto-registration.
Calling Search Space	Choose the calling search space for this group of gateways/ports. A calling search space specifies the collection of route partitions that are searched to determine how a dialed number should be routed.
AAR Calling Search Space	Choose the appropriate calling search space for the device to use when it performs automated alternate routing (AAR). The AAR calling search space specifies the collection of route partitions that are searched to determine how to route a collected (originating) number that is otherwise blocked due to insufficient bandwidth.
Media Resource Group List	Choose the media resource group list (MRGL) for this group of gateways/ports. An MRGL specifies a list of prioritized media resource groups. An application can choose required media resources from among the available ones according to the priority order that is defined in the MRGL.
Network Hold Audio Source	Choose the music on hold audio source that plays when the system places a call on hold (such as when user transfers a call or initiates a conference or call park).
Location	Choose the location for this group of gateways/ports. A location indicates the remote location that is accessed by using restricted bandwidth connections.
AAR Group	Choose the automated alternate routing (AAR) group for this device. The AAR group provides the prefix digits that are used to route calls that are otherwise blocked due to insufficient bandwidth. An AAR group setting of None specifies that no rerouting of blocked calls will be attempted.

Table 7-2 Field Descriptions for FXS Ports on Cisco VG200 Gateways (continued)

Field	Description
Network Locale	Choose the network locale that you want to associate with this gateway. The Network Locale provides 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.
Gateway Directory Number Template Name	When you are adding a POTS port type and want to assign a directory number to that port, you must have configured a Gateway Directory Number template. Choose the Gateway Directory Number template to be used for these ports.
Multilevel Precedence and Preemption (MLPP) Information	
MLPP Domain (e.g., “0000FF”)	Enter a hexadecimal value for the MLPP domain associated with this device. Must be blank or a value between 0 and FFFFFF.
MLPP Indication	Not available on this device.
MLPP Preemption	Not available on this device
Port Information	
Prefix DN	For this optional field, specify the prefix digits that are appended to the digits that are received on incoming calls.
Num Digits	Specify the number of digits, from 0 to 32, to collect. 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.
SMDI Port Number (0-4096)	Use this field for analog access ports that connect to a voice-mail system. Set the SMDI Port Number equal to the actual port number on the voice-mail system to which the analog access port connects. **Note** Voice-mail logical ports typically must match physical ports for the voice-mail system to operate correctly.

Related Topics

- Creating a Cisco VG200 Gateway Template, page 7-4
- Creating a Cisco Catalyst 6000 (FXS) Ports Template, page 7-19
- Adding Cisco VG200 Gateways, page 7-2
- Adding Cisco Catalyst 6000 FXS Analog Interface Module Ports, page 7-19

Field Descriptions for FXO Trunks on a Cisco VG200 Gateway

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

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

In the BAT user interface, field names that have an asterisk require an entry. Consider an entry in fields without an asterisk as optional.

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

Field	Description
Device Information	
Port Type	Choose the type of port, either Ground Start or Loop Start.
Device Pool	Choose the device pool for this group of gateways/ports. A device pool defines sets of common characteristics for devices, such as region, date/time group, Cisco CallManager group, and calling search space for auto-registration.
Calling Search Space	Choose the calling search space for this group of gateways/ports. A calling search space specifies the collection of route partitions that are searched to determine how a dialed number should be routed.
AAR Calling Search Space	Choose the appropriate calling search space for the device to use when automated alternate routing (AAR) is performed. The AAR calling search space specifies the collection of route partitions that are searched to determine how to route a collected (originating) number that is otherwise blocked due to insufficient bandwidth.

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

Field	Description
Media Resource Group List	Choose the media resource group list (MRGL) for this group of gateways/ports. An MRGL specifies a list of prioritized media resource groups. An application can select required media resources from among the available ones according to the priority order that is defined in the MRGL.
Location	Choose the location for this group of gateways/ports. A location indicates the remote location that is accessed by using restricted bandwidth connections.
AAR Group	Choose the automated alternate routing (AAR) group for this device. The AAR group provides the prefix digits that are used to route calls that are otherwise blocked due to insufficient bandwidth. An AAR group setting of None specifies that no rerouting of blocked calls will be attempted.
Network Locale	Choose the network locale that you want to associate with this gateway. The Network Locale provides 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.
Multilevel Precedence and Preemption (MLPP) Information	
MLPP Domain (e.g., “0000FF”)	Enter a hexadecimal value for the MLPP domain associated with this device. Must be blank or a value between 0 and FFFFFF.
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	Enter the directory number to which you want incoming calls routed; for example, zero for an attendant.

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

Field	Description
Product-Specific Configuration for Loop-Start or Ground-Start Trunks	
The gateway manufacturer specifies the model-specific fields under product-specific configuration. To view field descriptions and help for product-specific configuration items, click the **i** information icon to the right of the **Product Specific Configuration** heading to display help in a popup window. If you need more information, refer to the documentation for the specific gateway that you are configuring.	

Related Topics

- Creating a Cisco VG200 Gateway Template, page 7-4
- Adding Cisco VG200 Gateways, page 7-2

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 E&M ports for T1 CAS trunks on a Cisco VG200 gateway.

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

In the BAT user interface, field names that have an asterisk require an entry. Consider an entry in fields without an asterisk as optional.

Table 7-4 Field Descriptions for T1 CAS Trunks on Cisco VG200 Gateways

Field	Description
Device Information	
Device Pool	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 7-4 Field Descriptions for T1 CAS Trunks on Cisco VG200 Gateways (continued)

Field	Description
Calling Search Space	Choose the calling search space for this group of gateways/ports. A calling search space specifies the collection of route partitions that are searched to determine how a dialed number should be routed.
AAR Calling Search Space	Choose the appropriate calling search space for the device to use when automated alternate routing (AAR) is performed. The AAR calling search space specifies the collection of route partitions that are searched to determine how to route a collected (originating) number that is otherwise blocked due to insufficient bandwidth.
Media Resource Group List	Choose the media resource group list (MRGL) for this group of gateways/ports. An MRGL specifies a list of prioritized media resource groups. An application can chose required media resources from among the available ones according to the priority order that is defined in the MRGL.
Location	Choose the location for this group of gateways/ports. A location indicates the remote location that is accessed by using restricted bandwidth connections.
AAR Group	Choose the automated alternate routing (AAR) group for this device. The AAR group provides the prefix digits that are used to route calls that are otherwise blocked due to insufficient bandwidth. An AAR group setting of None specifies that no rerouting of blocked calls will be attempted.
MLPP Domain (e.g., “0000FF”)	Enter a hexadecimal value for the MLPP domain associated with this device. Must be blank or a value between 0 and FFFFFF.

Table 7-4 Field Descriptions for T1 CAS Trunks on Cisco VG200 Gateways (continued)

Field	Description
MLPP Indication	If available, this setting specifies whether a device capable of playing precedence tones will use the capability when it places an MLPP precedence call. From the drop-down list box, choose a setting to assign to this device from the following options: • **Default**—This device inherits its MLPP indication setting from its device pool. • **Off**—This device does not send indication of an MLPP precedence call. • **On**—This device does send indication of an MLPP precedence call. **Note** Do not configure a device with the following combination of settings: MLPP Indication is set to *Off* while MLPP Preemption is set to *Forceful*.
MLPP Preemption	If available, this setting specifies whether a device capable of preempting calls in progress will use the capability when it places an MLPP precedence call. From the drop-down list box, choose a setting to assign to this device from the following options: • **Default**—This device inherits its MLPP preemption setting from its device pool. • **Disabled**—This device does not preempt calls in progress when it places an MLPP precedence call. • **Forceful**—This device preempts calls in progress when it places an MLPP precedence call. **Note** Do not configure a device with the following combination of settings: MLPP Indication is set to *Off* while MLPP Preemption is set to *Forceful*.
Handle DTMF Precedence Signaling	Check this checkbox to enable DTMF Precedence signaling.

Table 7-4 Field Descriptions for T1 CAS Trunks on Cisco VG200 Gateways (continued)

Field	Description
Load Information	Enter the appropriate load information for the custom software for gateway. The values that you enter here override the default values for this gateway. To use the default load, leave this field blank.
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).
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
Network Locale	Choose the network locale that you want to associate with this gateway. The Network Locale provides 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.
SMDI Base Port	Enter the first SMDI port number of the T1 span.

Product-Specific Configuration

The gateway manufacturer specifies the model-specific fields under product-specific configuration. To view field descriptions and help for product-specific configuration items, click the **i** information icon to the right of the **Product Specific Configuration** heading to display help in a popup window. If you need more information, refer to the documentation for the specific gateway that you are configuring.

Related Topics

- Adding Endpoint Identifiers in a Cisco VG200 Gateway Template, page 7-6
- Creating a Cisco VG200 Gateway Template, page 7-4
- Adding Cisco VG200 Gateways, page 7-2

Field Descriptions for E & M Ports for T1 CAS

Use the following field descriptions when you are adding or updating values for E&M ports for the T1 CAS trunks on a Cisco VG200 gateway.

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

In the BAT user interface, field names that have an asterisk require an entry. Consider an entry in fields without an asterisk as optional.

Table 7-5 Field Descriptions for E&M Ports for T1 CAS

Field	Description
Port Details	
Port Direction	Choose the direction of calls that are passing through this port: • Inbound—Use for incoming calls only. • Outbound—Use for outgoing calls. • Bothways—Use for inbound and outbound calls. 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. • First Redirect Number (External)—Send the external directory number of the redirecting device. • Last Redirect Number (External)—Send the external directory number of the last device that redirected the call.

Table 7-5 Field Descriptions for E&M Ports for T1 CAS (continued)

Field	Description
Port Details	
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	Enter the pattern, from 0 to 24 digits, that you want to use for caller ID. For example, in North America • 555XXXX = Variable caller ID, where X equals an extension number. The CO appends the number with the area code if you do not specify it. • 5555000 = Fixed caller ID, for when you want the Corporate number to be sent instead of the exact extension from which the call is placed. The CO appends the number with the area code if you do not specify it.
Prefix DN	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, from 0 to 32 to collect. Cisco CallManager counts significant digits from the right (last digit) of the number called. The default specifies 4.
Expected Digits	Enter the number of digits expected on the inbound side of the trunk. Use zero if you are unsure. The default specifies 4.
Product Specific Configuration	
Signaling Type	Choose the type of signaling for E and M protocol on the trunk interface: Wink Start or Delay Dial.

Related Topics

- Adding T1 CAS Endpoints and Ports to the Cisco VG200 Gateway Template, page 7-8
- Creating a Cisco VG200 Gateway Template, page 7-4
- Adding Cisco VG200 Gateways, page 7-2

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.

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

In the BAT user interface, field names that have an asterisk require an entry. Consider an entry in fields without an asterisk as optional.

Table 7-6 Field Descriptions for T1 PRI or E1 PRI Trunks

Field	Descriptions
Device Information	
Device Pool	Choose the device pool for this group of gateways/ports. A device pool defines sets of common characteristics for devices, such as region, date/time group, Cisco CallManager group, and calling search space for auto-registration.
Network Locale	Choose the network locale that you want to associate with this gateway. The Network Locale comprises a set of tones and cadences that Cisco gateways and phones use when communicating with the PSTN and other networks in a specific geographical area.

Table 7-6 Field Descriptions for T1 PRI or E1 PRI Trunks (continued)

Media Resource Group List	Choose the media resource group list (MRGL) for this group of gateways/ports. An MRGL specifies a list of prioritized media resource groups. An application can choose required media resources from among the available ones according to the priority order that is defined in the MRGL.
Location	Choose the location for this group of gateways/ports. A location indicates the remote location that is accessed by using restricted bandwidth connections.
AAR Group	Choose the automated alternate routing (AAR) group for this device. The AAR group provides the prefix digits that are used to route calls that are otherwise blocked due to insufficient bandwidth. An AAR group setting of None specifies that no rerouting of blocked calls will be attempted.
Load Information	Enter the appropriate load information for the custom software for gateway. The values that you enter here override the default values for this gateway. To use the default load, leave this field blank.
Multilevel Precedence and Preemption (MLPP) Information	
MLPP Domain (e.g., “0000FF”)	Enter a hexadecimal value for the MLPP domain associated with this device. Must be blank or a value between 0 and FFFFFF.

Table 7-6 Field Descriptions for T1 PRI or E1 PRI Trunks (continued)

MLPP Indication	If available, this setting specifies whether a device capable of playing precedence tones will use the capability when it places an MLPP precedence call. From the drop-down list box, choose a setting to assign to this device from the following options: • **Default**—This device inherits its MLPP indication setting from its device pool. • **Off**—This device does not send indication of an MLPP precedence call. • **On**—This device does send indication of an MLPP precedence call. **Note** Do not configure a device with the following combination of settings: MLPP Indication is set to *Off* while MLPP Preemption is set to *Forceful*.
MLPP Preemption	If available, this setting specifies whether a device capable of preempting calls in progress will use the capability when it places an MLPP precedence call. From the drop-down list box, choose a setting to assign to this device from the following options: • **Default**—This device inherits its MLPP preemption setting from its device pool. • **Disabled**—This device does not preempt calls in progress when it places an MLPP precedence call. • **Forceful**—This device preempts calls in progress when it places an MLPP precedence call. **Note** Do not configure a device with the following combination of settings: MLPP Indication is set to *Off* while MLPP Preemption is set to *Forceful*.
Interface Information	

Table 7-6 Field Descriptions for T1 PRI or E1 PRI Trunks (continued)

PRI Protocol Type	Choose the communications protocol for the span: For E1 PRI spans, you have these options: • PRI AUSTRALIAN—Australian ISDN • PRI EURO—European ISDN • PRI ISO QSIG E1—European inter-PBX signaling protocol For T1 PRI spans you have several options, depending on the carrier or switch: • PRI 4ESS —AT&T interexchange carrier, Lucent Definity switch • PRI 5E8 Custom—Cisco IP Phone, Nortel Meridian switch, Lucent Definity switches • PRI 5E8 Teleos—Madge Teleos box • PRI 5E8 Intecom—Intecom PBX • PRI5E9—AT&T family local exchange switch or carrier • PRI NI2—Sprint local exchange switch or carrier • PRI DMS-100—Sprint local exchange switch or carrier • PRI DMS-250—MCI and Sprint local exchange switch or carrier • PRI ETSI SC—European local exchange carrier on T1; also, Japanese local exchange. • PRI ISO QSIG T1—Inter-PBX signaling protocol
Protocol Side	Choose the appropriate protocol side. This setting specifies whether the gateway connects to a Central Office/Network device or to a User device. Make sure that the two ends of the PRI connection use opposite settings. For example, if you connect to a PBX and the PBX uses User as its protocol side, choose Network for this device. Typically, use User for Central Office (CO) connections.

Table 7-6 Field Descriptions for T1 PRI or E1 PRI Trunks (continued)

Channel Selection Order	Choose the order in which channels or ports are enabled from first (lowest number port) to last (highest number port) or from last to first. Valid entries include TOP_DOWN (last to first) or BOTTOM_UP (first to last). If you are not sure which port order to use, choose TOP_DOWN. The default specifies BOTTOM_UP.
Channel IE Type	Choose one of the following values to specify whether channel selection is presented as a channel map or a slot map: • Number—B-channel usage always presents a channel map format. • Slotmap—B-channel usage always presents a slotmap format. • Use Number When 1B—Channel usage presents a channel map for one B-channel but presents a slotmap if more than one B-channel exists. This represents the default value.
Delay for First Restart	For this optional field, enter the rate, in 1/8-second increments, at which the spans are brought in service. The delay occurs when many PRI spans are enabled on a system and the Inhibit Restarts at PRI Initialization check box is unchecked. The default value specifies 32. For example, set the first five cards to 0 and set the next five cards to 16. (Wait 2 seconds before bringing them in service.)
Delay Between Restarts	Enter the time, in 1/8-second increments, between restarts. The delay occurs when a PRI RESTART is sent if the Inhibit Restarts check box is unchecked. The default value specifies 4.
Inhibit Restarts at PRI Initialization	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 gets checked. When the D-channel successfully connects with another PRI trunk D-channel, it sends restarts when this box is unchecked.

Table 7-6 Field Descriptions for T1 PRI or E1 PRI Trunks (continued)

Enable Status Poll	Check the check box to enable the Cisco CallManager advanced service parameter, "Change B-Channel Maintenance Status." This service parameter allows you to take individual B-channels out of service while the B-channels are active. Uncheck this check box to disable the service parameter "Change B-Channel Maintenance Status." Default leaves this field unchecked.
Call Routing Information - Inbound Calls	
Significant Digits	This field represents the number of final digits that a PRI span should retain on inbound calls. A trunk with significant digits enabled truncates all but the final few digits of the address that is provided on an inbound call. Enable or disable this check box depending on whether you want to collect significant digits: • If you do not check the check box, Cisco CallManager does not truncate the inbound number. • If you check the check box, you also need to choose the number of significant digits to collect. By default, the box remains checked.
Calling Search Space	Choose the calling search space for this group of phones/ports. A calling search space specifies the collection of Route Partitions that are searched to determine how a dialed number should be routed.
AAR Calling Search Space	Choose the appropriate calling search space for the device to use when it performs automated alternate routing (AAR). The AAR calling search space specifies the collection of route partitions that are searched to determine how to route a collected (originating) number that is otherwise blocked due to insufficient bandwidth.
Prefix DN	For this optional field, enter the prefix digits that are appended to the digits that this trunk receives on incoming calls. Cisco CallManager adds prefix digits after first truncating the number in accordance with the Num Digits setting.
Call Routing Information - Outbound Calls	

Table 7-6 Field Descriptions for T1 PRI or E1 PRI Trunks (continued)

Calling Line ID Presentation	Choose whether you want the Cisco CallManager to transmit or block the caller's phone number. Choose *Default* if you do not want to change calling line ID presentation. Choose *Allowed* if you want Cisco CallManager to send "Calling Line ID Allowed." Choose *Restricted* if you want Cisco CallManager to send "Calling Line ID Restricted."
Calling Party Selection	Any outbound call on a gateway can send directory number information. Choose which directory number is sent: • Originator—Send the directory number of the calling device. This number serves as the default value. • First Redirect Number—Send the directory number of the redirecting device. • Last Redirect Number—Send the directory number of the last device that redirected the call.
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 option represents the default value. • International—Use when you are dialing outside the dialing plan for your country. • National—Use when you are dialing within the dialing plan for your country. • Unknown—This option specifies that the dialing plan is unknown.

Table 7-6 Field Descriptions for T1 PRI or E1 PRI Trunks (continued)

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. • 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 7-6 Field Descriptions for T1 PRI or E1 PRI Trunks (continued)

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—This option specifies that the dialing plan is unknown.

Table 7-6 Field Descriptions for T1 PRI or E1 PRI Trunks (continued)

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. • ISDN—Use when you are dialing outside the dialing plan for your country. • National Standard—Use when you are dialing within the dialing plan for your country. • Private—Use when you are dialing within a private network. • Unknown—This option specifies that the dialing plan is unknown.
Number of Digits to Strip	Choose the number of digits, from 0 to 32, to strip on outbound calls. The default value specifies 0. For example, 8889725551234 is dialed; the number of digits to strip is 3. In this example, Cisco CallManager strips 888 from the outbound number.

Table 7-6 Field Descriptions for T1 PRI or E1 PRI Trunks (continued)

Caller ID DN	Enter the pattern, from 0 to 24 digits, that you want to use for caller ID. For example, in North America • 555XXXX = Variable caller ID, where X equals an extension number. The CO appends the number with the area code if you do not specify it. • 5555000 = Fixed caller ID, for when you want the Corporate number to be sent instead of the exact extension from which the call is placed. The CO appends the number with the area code if you do not specify it.
SMDI Base Port	Enter the first SMDI port number of the T1 span.
PRI Protocol Type Specific Information	
Display IE Delivery	For this optional field, check the check box to enable delivery of the display information element (IE) in SETUP and CONNECT messages for the calling and called party name delivery service. By default, the box remains unchecked.
Redirecting Number IE Delivery—Outbound	For this optional field, check the check box to include the Redirecting Number IE in the SETUP message to indicate the first redirecting number and the redirecting reason of the call when a call is forwarded. By default, the box remains unchecked. This setting applies to the SETUP message only on all protocols for digital access gateways.
Redirecting Number IE Delivery—Inbound	For this optional field, check the check box to include the Redirecting Number IE in the SETUP message to indicate the first redirecting number and the redirecting reason of the call when a call is forwarded. By default, the box remains unchecked. This setting applies to the SETUP message only on all protocols for digital access gateways.

Table 7-6 Field Descriptions for T1 PRI or E1 PRI Trunks (continued)

Send Extra Leading Character in DisplayIE	Check this check box to include a special leading character byte (non ASCII, nondisplayable) in the DisplayIE field. Uncheck this check box to exclude this character byte from the DisplayIE field. This check box only applies to the DMS-100 protocol and the DMS-250 protocol. Default leaves this setting disabled (unchecked).
Number of Digits to Strip	Choose the number of digits to strip on outbound calls, from 0 to 32. The default value specifies 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.
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 inband ringback. This problem usually associates with Cisco CallManagers that connect to PBXs through digital gateways.
MCDN Channel Number Extension Bit Set to Zero	This field applies to DMS-100 protocol only. Check the check box to indicate that an Interface Identifier is present. By default, the box remains unchecked.
Send Calling Name in Facility IE	This field applies to DMS-100 protocol only. Enter the value that you obtained from the PBX provider. Valid values range from 0 to 255.
Interface Identifier Present	This field applies to DMS-100 protocol only. Check the check box to indicate that an Interface Identifier is present. By default, the box remains unchecked.

Table 7-6 Field Descriptions for T1 PRI or E1 PRI Trunks (continued)

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.
Connected Line ID Presentation	Choose whether you want the Cisco CallManager to allow or block the connected party's phone number. Choose *Default* if you do not want to change the connected line ID presentation. Choose *Allowed* if you want Cisco CallManager to send "Connected Line ID Allowed." Choose *Restricted* if you want Cisco CallManager to send "Connected Line ID Restricted."
Connected PBX Model	Choose the type and model of the private branch exchange (PBX) or VoIP switch with which this gateway communicates. This field applies only to gateways that are using QSIG protocol. Options include: • Siemens Hicom • Ericsson MD-110 • Alcatel PBX • Meridian Option 11C • Lucent Definity G3 • IPC MX • Cisco CallManager (CCM)

Product-Specific Configuration

The gateway manufacturer specifies the model-specific fields under product-specific configuration. To view field descriptions and help for product-specific configuration items, click the **i** information icon to the right of the **Product Specific Configuration** heading to display help in a popup window. If you need more information, refer to the documentation for the specific gateway that you are configuring.

Related Topic

- Adding Cisco VG200 Gateways, page 7-2
- Creating a Cisco VG200 Gateway Template, page 7-4

Field Descriptions for FXS Ports on Cisco Catalyst 6000 Gateway

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

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

In the BAT user interface, field names that have an asterisk require an entry. Consider an entry in fields without an asterisk as optional.

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

Field	Description
Catalyst 6000 (FXS) Ports Template Name	Enter a name, up to 50 alphanumeric characters, for the template.
Port Direction	Choose the direction of calls that pass through this port: • Inbound—Use for incoming calls only. • Outbound—Use for outgoing calls. • Both Ways—Use for inbound and outbound calls. This choice represents the default value.
Prefix DN	Enter the prefix digits to be appended to the digits that are received on incoming calls.
Num Digits	Enter the number of digits, from 0 to 32, to collect. 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-messaging system to which the analog access port connects.

Product Specific Configuration

The gateway manufacturer specifies the model-specific fields under product-specific configuration. To view field descriptions and help for product-specific configuration items, click the **i** information icon to the right of the **Product Specific Configuration** heading to display help in a popup window. If you need more information, refer to the documentation for the specific gateway that you are configuring.

Related Topics

- Creating a Cisco Catalyst 6000 (FXS) Ports Template, page 7-19
- Adding Cisco Catalyst 6000 FXS Analog Interface Module Ports, page 7-19
- Working with Cisco Catalyst 6000 FXS Analog Interface Modules, page 7-18