**C H A P T E R 5**

# Using Cisco EPOM Flow Provisioning

This chapter is designed for network operators using Cisco EPOM for ongoing provisioning once the network inventory has been set up.

This chapter contains the following topics:

## About Provisioning Flows

A provisioning flow consists of a number of steps that you perform to complete a task. You can also perform each step by expanding the Cisco BTS 10200 navigation tree, finding the right components, and clicking the appropriate action. A provisioning flow links these steps together for your convenience.

## Using a Provisioning Flow Wizard

This section describes the general process for using a wizard; specifics depend on the type of task.

**Step 1** From a Domain window, click the desired domain.

**Step 2** Click **BTS10200s.**

**Step 3** Click the desired Cisco BTS 10200 EMS server.

**Step 4** Click **Config**. The BTS 10200 Component Status window opens.

**Step 5**   In the Configuration tree, click **Provisioning Flows**; then, click the appropriate provisioning wizard. The Cisco BTS 10200 Configuration Wizard opens showing the list of provisioning tasks for this flow.

Wizard : mgw_diagnose                                                  Cancel

⬤ Control MGW MAINT
⬤ Diagnose MGW
⬤ Control MGW INS

The wizard will lead you through the necessary steps to finish ***mgw_diagnose***. You may click on any step to start with.

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**Step 6**   Click the first task. The form for the selected task opens.

Control component: mgw                        OK      Apply      Skip

Clear Form

✓ **id**          [                    ]   ❓
✓ **mode**        [FORCED    ▾]   ❓
✓ **target_state** [MAINT    ▾]   ❓

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**Step 7**   Fill in the form; then, click **OK**. Alternatively, if this task is not required or you are not ready to complete it now, click **Skip**. The form for the next task opens.

**Step 8**   Repeat step 5 for the remaining tasks.

# Adding or Deleting Subscribers

Adding a subscriber involves adding the subscriber termination, equipping the subscriber termination, and then adding the subscriber. The Cisco EPOM Subscriber wizard steps you through these tasks and also allows you to add a media gateway or subscriber profile if they have not yet been added.

Deleting a subscriber reverses the task sequence to add a subscriber. The Cisco EPOM Subscriber wizard steps you through these tasks as well.

**Tip**   Make sure that you have the subscriber information, and if you are adding a subscriber to a new media gateway, the gateway IP address or Fully Qualified Domain Name (FQDN) and its ID, the number of terminations, and the termination prefix.

# Adding a Subscriber

The Provisioning Flow wizard guides you through each of the steps to add a subscriber.

**Step 1**    From a Domain window, click the *domain* > **BTS10200s >** the *Cisco BTS 10200 EMS server.*

**Step 2**    To open the Cisco BTS 10200 Component Status window, click **Config** .

**Step 3**    In the Configuration tree, choose **Provisioning Flows > Subscriber (add)**. The Cisco BTS 10200 Configuration Wizard opens showing the list of subscriber provisioning tasks:
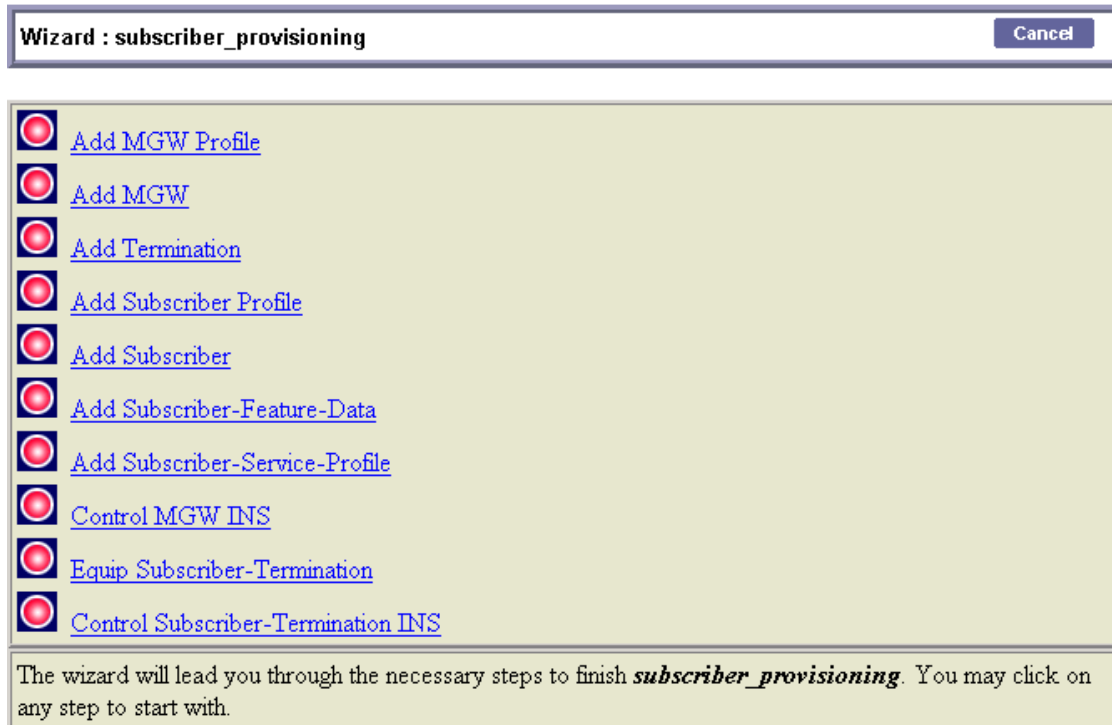


**Step 4**    Click the first task. The Component Add form for the selected task opens.

**Step 5**    Fill in the form; then, click **OK**. Alternatively, if this task is not required, or if you are not ready to complete it now, click **Skip**. The Component Add form for the next task opens.

**Step 6**    Repeat step 5 for the remaining tasks.

## Deleting a Subscriber

**Step 1**    From a Domain window, choose the *domain* > **BTS10200s >** the *Cisco BTS 10200 EMS server.*

**Step 2**    To open the Cisco BTS 10200 Component Status window, click **Config** .

**Step 3**    In the Configuration tree, choose **Provisioning Flows > Subscriber (delete)**. The Cisco BTS 10200 Configuration Wizard opens showing the list of subscriber provisioning tasks:



**Step 4**    Click the first task. The form for the selected task opens.

**Step 5**    Fill in the form; then, click **OK**. Alternatively, if this task is not required, or if you are not ready to complete it now, click **Skip**. The form for the next task opens.

**Step 6**    Repeat step 5 for the remaining tasks.

## Adding, Modifying, or Deleting Subscriber Services

You can add, modify, or delete subscriber services in two ways:

- Use the Subscriber wizard to add, modify, or delete subscriber services.
- Navigate to **subscriber-service-profile** and assign a service to a subscriber.

# Provisioning Other Components by Using Cisco EPOM Wizards

The Provisioning Flow wizards guide you through each of the steps in a multistep provisioning task. Information is carried over from one step to the next. Cisco EPOM provides wizards for these common provisioning tasks:

- Provisioning announcements
- Provisioning call agents
- Adding subscribers
- Deleting subscribers
- Deleting residential media gateways
- Diagnosing media gateways

- Provisioning Centrex groups

- Provisioning Centrex subscribers

- Provisioning multiline hunt groups

- Provisioning multiline hunt group subscribers

- Provisioning SS7 trunk groups

- Provisioning H323 trunk groups

- Provisioning basic SS7 routing

- Provisioning advanced SS7 routing

- Provisioning ISDN trunk groups

- Provisioning softswitch trunk groups

- Provisioning 911 (CAS) trunk groups

**Tip** Before you begin, make sure that you have the relevant provisioning information.

For additional information on provisioning the Cisco BTS 10200, refer to the Cisco BTS 10200 Softswitch documentation.

# Customizing Cisco EPOM Provisioning Flows

Cisco EPOM ships with several default navigation trees and provisioning flows that help you to organize frequently used tasks to reduce the need to navigate through multiple windows. (See the "Provisioning Other Components by Using Cisco EPOM Wizards" section on page 5-4.)

Cisco EPOM also allows you to define new provisioning flows (consisting of the tasks necessary to achieve them) and to add them to the list of existing provisioning flows in the left pane. To develop a customized provisioning flow, see the following:

1. "Example of an .xml File" section on page 5-5

2. "Creating a Provisioning Flow" section on page 5-7

## Example of an .xml File

The following example shows the process of creating a new provisioning flow called MTA Diag.

**Note** Cisco EPOM sees the media termination adapter (MTA) as a media gateway (MGW).

The tasks achieved by this provisioning flow are:

- Placing the MGW into a maintenance state

- Diagnosing the MGW

- Restoring the MGW to service

**Note**      In this example, the filename that is used is mgw_diagnose.xml. It is located in this directory: /opt/CSCOepom/tomcat/webapps/ROOT/xml/bts/wizard/.

```
<Provisioning_wizard>

    <step_name="Control MGW MAINT"
        url="btscompcontrol.jsp?_noun=mgw"
        help_mssg="Control the mgw into MAINT state"
        img="bluedot.gif">
        <provideParameterList>
        <parameter name="mgwId" sourceName="id"/>
        </provideParameterList>
        <takeParameterList>
        <parameter name="mode" sourceName="FIXED" value="FORCED"/>
        <parameter name="target_state" sourceName="FIXED" value="MAINT"/>
        </takeParameterList>
    </step>

    <step_name="Diagnose MGW"
        url="btscompdiag.jsp?_noun=mgw"
        help_mssg="When done with diagnosis, click the skip button, I really should not
        carry you away from this page"
        img="bluedot.gif">
        <provideParameterList>
        <parameter name="mgwId" sourceName="id"/>
        </provideParameterList>
        <takeParameterList>
        <parameter name="id" sourceName="mgwId/"/>
        <parameter name="test" sourceName="FIXED" value="3"/>
        </takeParameterList>
    </step>

    <step_name="Control MGW INS"
        url="btscompcontrol.jsp?_noun=mgw"
        help_mssg="Control the mgw into INS state"
        img="bluedot.gif">
        <provideParameterList>
        <parameter name="mgwId" sourceName="id"/>
        </provideParameterList>
        <takeParameterList>
        <parameter name="mode" sourceName="mgwId/"/>
        <parameter name="mode" sourceName="FIXED" value="INS"/>
        <parameter name="mgwId" sourceName="id"/>
        </takeParameterList>
    </step>
```

Where,

- *step_name*—The name of the task displayed in the right pane when you click on the MTA Diag provisioning flow item in the left pane.

- *url*—The jsp page name from the URL, followed by the component name.

- *help_mssg*—Reserved for future use.

- *img*—The example uses the default icon, but you can define your own icon for each step.

- *provideParameterList*—Items within this tag record user input for this step after the page appears and the user clicks **Ok**. You can use the parameters that are used here in subsequent steps.

    – *name*—The parameter name used by the page.

- – *sourceName*—When this is FIXED, the value that follows is used. Otherwise, you can use parameter names that are defined under the provideParameterList tag in previous steps.
- • *takeParameterList*—Items within this tag accept parameters passed from previous steps.
  - – *name*—The parameter name used by the page.
  - – *sourceName*—When this is FIXED, the value that follows is used. Otherwise, you can use parameter names that are defined under the provideParameterList tag in previous steps.

This file is used in the "Creating a Provisioning Flow" task on page 5-7.

# Creating a Provisioning Flow

**Note**    In this task, the filename used is mgw_diagnose.

**Step 1**    Create the mgw_diagnose.xml file (see the "Example of an .xml File" section on page 5-5).

**Step 2**    Place the mgw_diagnose.xml file in /opt/CSCOepom/tomcat/webapps/ROOT/xml/bts/wizard.

**Step 3**    Make a backup copy of the defaulttree.xml file located at /opt/CSCOepom/tomcat/webapps/ROOT/xml/bts/navigation/defaulttree.xml.

**Step 4**    Modify the defaulttree.xml by adding these commands to the file:

**<node name="MTA Diagnose">**

**<url base="btswizard">mgw_diagnose</url>**

**</node>**

**Note**    The location of this code in the .xml file defines the structure of the navigation tree. Make sure that you add it to the correct "branch."

**Step 5**    Stop and start Cisco EPOM. See the "Starting and Stopping Cisco EPOM" section on page 2-4.

**Step 6**    Verify that MTA Diag is added to the Provisioning Flow list by choosing **Domain** > **all** > **BTS10200** > **Summary** > **Provisioning Flow**.