C H A P T E R

4

Configuring Cisco BTS 10200 Components

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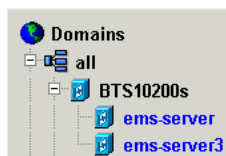
Configuring a Cisco BTS 10200 EMS Server

Use this procedure after you have added a new Cisco BTS 10200 EMS server to the Cisco EPOM inventory. (See the "Adding a Cisco BTS 10200 EMS Server" section on page 3-9.)

Step 1 In the navigation pane, expand the domain tree:

a. Click **all**.

b. Click **BTS 10200s**.

You see the Cisco BTS 10200 EMS servers currently in the inventory. In this example, there are two servers: **ems server** and **ems server 3**.

```
Domains
 all
   BTS10200s
      ems-server
      ems-server3
```

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Step 2   Click the Cisco BTS 10200 EMS server that you want to configure. The Details window opens, as shown in this example:

Details component: BTS10200	Reports	Config	Edit	Delete	Cancel

✓ **Hostname** ems-server2
✓ **Type**   BTS10200
  Site Id rtpvtc2

Step 3   Click **Config**. The Component Status window opens (see Step 4).

The navigation pane shows the Configuration tree, and the content area shows the status of the selected Cisco BTS 10200 EMS server.

Note   The first access of the Cisco BTS 10200 EMS server component status may take a few seconds.

Step 4   To show or change the Cisco BTS 10200 EMS server configuration, click objects in the Configuration tree. See the "Adding a Component to the Cisco BTS 10200 Configuration" section on page 4-7.

EPOM *Extensible Provisioning and Operations Manager*

Help ▼ | Logout

Default Administrator / (Administrator)   Domains   Users

BTS10200 : ems-server2   Reports   Config   Edit   Delete

- ems-server2
  - ⊞ AIN
  - ⊞ Centrex
  - ⊞ Feature/Services
  - ⊞ H323
  - ⊞ ISDN
  - ⊞ MGW & Terminations
  - ⊞ MultiLine Hunt Group
  - ⊞ Office Tables
  - Packet Cable
  - ⊞ POTS
  - SIP
  - SS7
  - ⊞ Routing
  - ⊞ Subscriber
  - ⊞ Tandem
  - ⊞ Trunk Groups
  - ⊞ Billing
  - ⊞ SNMP
  - ⊞ Scheduler
  - ⊞ Security
  - ⊞ Provisioning Flow
  - ⊞ Template Manager

Status component: element_manager   OK   Control   Cancel

Clear Form

✓ **id**   EM01   ?

Results

```
APPLICATION INSTANCE -> Element Manager [EM1]
PRIMARY STATUS -> ACTIVE_NORMAL
SECONDARY STATUS -> FAULTY

EMS MySQL Status is ... -> Daemon is running!

ORACLE Status is... -> Daemon is running!
```

About Cisco EPOM Templates

Cisco EPOM templates allow you to create and save templates that can be used later for creating Cisco BTS 10200 Softswitch objects (that represent Cisco BTS 10200 Softswitch components). With a template you can add several similar objects to the Cisco BTS 10200 EMS server without having to repeatedly select configuration items for each individual device.

- Templates are stored on the Cisco EPOM server by Cisco BTS 10200 Softswitch noun and template name.

- Templates can be created, viewed, and applied by all levels of Cisco EPOM users. (See the "Creating a Template from an Existing Template" section on page 4-4.)

- Administrators can edit and delete all existing templates, whereas other users can edit and delete only the templates that they created. (See the "Editing a Cisco EPOM Template" section on page 4-5 and the "Deleting a Cisco EPOM Template" section on page 4-7.)

- You can identify one template for each component type as the default template. When you add a device, the default template for this type of device is loaded automatically, however, you can also select a different template for this device. (See the "Designating a Default Cisco EPOM Template" section on page 4-6.)

- Templates are applied only when creating an object (during an "add" operation). (See the "Applying a Cisco EPOM Template" section on page 4-9.)

Creating a New Cisco EPOM Template

Note   The ID field is unique to each device and cannot be repeated among devices. Assign a unique ID for the device before adding it to the Cisco BTS 10200 EMS.

You can either specify a value in the ID field to be used as a prefix, or leave a blank field that forces the user to specify a valid, unique ID.

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

Step 2   Click **Config**.

The Cisco BTS 10200 Component Status window opens.

Step 3   In the Configuration tree, choose **Office Tables > call_agent**.

The Cisco BTS 10200 Component window opens showing a list of call agents.

Step 4   Select a call agent and click **Details**.

Details component: dial_plan		Cancel

Check All Clear All Details Edit Delete	**Template:**	Save ➡	new template name

	☑
id	zdpp01
del_digits	
dest_id	zdst01
digit_string	223456
max_digits	10
min_digits	10
noa	NATIONAL
pfx_digits	
reqd_digits	10
split_npa	NONE

103900

> **Note** The first (blank) row with the checked box indicates that the component identified in the window title was selected for displaying details, editing, or deletion.

Step 5 Enter a name for the template and click **Save**.

The template that you created contains field information from the Details Component window.

Creating a Template from an Existing Template

> **Note** The ID field is unique to each device and cannot be repeated among devices. Assign a unique ID for the device before adding it to the Cisco BTS 10200 EMS server.
>
> You can either specify a value in the ID field to be used as a prefix, or leave a blank field that forces the user to specify a valid, unique ID.

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

Step 2 Click **Config**.

The Cisco BTS 10200 Component Status window opens.

Step 3 From the Configuration tree, choose **Template Manager > Templates**.

A list of templates appears.

Step 4 Select a template and click **Details**.

Step 5   Enter a new template name and click **Save**.

The new template is stored under the specified name.

Editing a Cisco EPOM Template

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

Step 2   Click **Config**.

The Cisco BTS 10200 Component Status window opens.

Step 3   In the Configuration tree, choose **Template Manager > Templates**.

A list of templates appears.

Step 4   Select a Noun and Template Name and click **Edit**.

The Edit Template window appears.

Step 5   If necessary, make changes to the information in the fields.

Step 6   To save the changes, click **OK**.

Designating a Default Cisco EPOM Template

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

Step 2   Click **Config**.

The Cisco BTS 10200 Component Status window opens.

Step 3   In the Configuration tree, choose **Template Manager > Templates**.

A list of templates appears (see the "Editing a Cisco EPOM Template" section on page 4-5).

Step 4   Select a Noun and Template Name and click **Edit**.

The Edit Template window appears.

Step 5   Select the Default template checkbox.

Step 6   To save the changes, click **OK** .

Deleting a Cisco EPOM Template

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

Step 2   Click **Config**.

The Cisco BTS 10200 Component Status window opens.

Step 3   In the Configuration tree, choose **Template Manager > Templates**.

A list of templates appears.

Step 4   Select a Noun and Template Name and click **Delete**.

After a verification message, the template is deleted.

Adding a Component to the Cisco BTS 10200 Configuration

Tip   Make sure that you have the configuration information for the component that you want to add to the Cisco EPOM inventory.

Add components to the Cisco EPOM inventory to build a managed network. The device information includes static and dynamic selections to other parts of the configuration. Follow this example to add a dial plan.

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

Step 2   Click **Config**.

The Cisco BTS 10200 Component Status window opens.

Step 3   In the Configuration tree, choose **Office Tables > dial_plan**.

The Cisco BTS 10200 Component window opens showing a list of dial plans. If this is the first dial plan (or device of this type) that you are adding, the list is empty.

Step 4   Click **Add**.

The Cisco BTS 10200 Component Add window opens.

Step 5 Define the device. Required fields are identified with a red checkmark.

Step 6 Click **OK** or **Apply**.

- When you click **OK**, the component is added and the list of components in the Component:*name* window appears.

- When you click **Apply**, the component is added, but you remain in the Add component window for further tasks.

You return to the Cisco BTS 10200 Component window. The new dial plan is added to the list.

To edit a single component, see the "Editing a Component in the Cisco BTS 10200 Configuration" section on page 4-12; to delete a single component, see the "Deleting a Component from the Cisco BTS 10200 Configuration" section on page 4-13.

To add, edit, or delete multiple components with a single operation, see the "Bulk Command Provisioning" section on page 4-13.

Applying a Cisco EPOM Template

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

Step 2 Click **Config**.

The Cisco BTS 10200 Component Status window opens.

Step 3 In the Configuration tree, choose **Office Tables > dial_plan**.

The Cisco BTS 10200 Component window opens showing a list of dial plans. If this is the first dial plan (or device of this type) that you are adding, the list is empty.

Step 4   Click **Add**.

The Cisco BTS 10200 Component Add window opens.

Step 5   Select a template from the list.

Step 6   Click **Load**.

Step 7   Click **OK** or **Apply**.

- When you click **OK**, the component is added and the list of components in the Component:*name* window appears.

- When you click **Apply**, the component is added, but you remain in the Add component window for further tasks.

You return to the Cisco BTS 10200 Component window. The new dial plan is added to the list.

Note   The ID field is unique to each device and cannot be repeated among devices. Assign a unique ID for the device before adding it to the Cisco BTS 10200 EMS.

You can either specify a value in the ID field to be used as a prefix, or leave a blank field that forces the user to specify a valid, unique ID.

Note   To create a new template from this window, make changes to the exising component details and save the resulting dial plan as a template by entering a template name and clicking **Save**.

Editing a Component in the Cisco BTS 10200 Configuration

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

Step 2 Click **Config**.

The Cisco BTS 10200 Component Status window opens.

Step 3 In the Configuration tree, choose **Office Tables > dial_plan**.

The Cisco BTS 10200 Component window shows a list of currently configured dial plans.

Step 4 Select the dial plan that you wish to edit.

Step 5 Click **Edit** in the row of the dial plan that you wish to edit.

The Change component window appears.

Note The first (blank) row with the checked box indicates that the component identified in the window title was selected for displaying details, editing, or deletion.

Step 6 Make the required changes to the attribute fields.

Step 7 Click **OK**.

You return to the Cisco BTS 10200 Component window. The edited dial plan appears in the list.

To add a single component, see the "Adding a Component to the Cisco BTS 10200 Configuration" section on page 4-7; to delete a single component, see the "Deleting a Component from the Cisco BTS 10200 Configuration" section on page 4-13.

To add, edit, or delete multiple components with a single operation, see the "Bulk Command Provisioning" section on page 4-13.

Deleting a Component from the Cisco BTS 10200 Configuration

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

Step 2 Click **Config**.

The Cisco BTS 10200 Component Status window opens.

Step 3 In the Configuration tree, choose **Office Tables > dial_plan**.

The Cisco BTS 10200 Component window shows a list of currently configured dial plans.

Step 4 In the Component:*name* window, select one or more dial plans to delete.

Step 5 Click **Delete**.

The Delete component window with the requested deletion appears.

Note The first (blank) row with the checked box indicates that the component identified in the banner title was selected for displaying details, editing, or deletion.

Step 6 Click **OK**.

To add a single component, see the "Adding a Component to the Cisco BTS 10200 Configuration" section on page 4-7; to edit a single component, see the "Editing a Component in the Cisco BTS 10200 Configuration" section on page 4-12.

To add, edit, or delete multiple components with a single operation, see the "Bulk Command Provisioning" section on page 4-13.

Bulk Command Provisioning

Cisco EPOM allows you to perform add, delete, and edit commands on multiple components with a single operation. You can only perform bulk provisioning commands on the same type of devices. For instance, if a group of subscribers use the same media gateway and subscriber profile, you can add or edit these subscribers by using a single command.

Adding Multiple Components

Step 1 In the ems-server window left pane, click a component.

The Component:*name* window appears.

Step 2 Click **Add**.

The Add component window appears.

Step 3 Select the **Expand range expression** check box.

If you fail to select this check box, you get an error message when you enter a range expression.

> **Tip** For information on acceptable range expressions, move your cursor over the ? symbol next to the Expand range expression field.

Step 4 In the id field, enter a range expression in square brackets [ ].

For example, to add a group of 10 dial plans with the id prefix dp001_new, enter dp001_new[01-10]. Doing so adds dial plans dp001_new01, dp001_new02, through dp001_new10.

Step 5 Enter information in the remaining attribute fields.

Step 6 Click **OK** or **Apply**.

- When you click **OK**, the component is added and the list of components in the Component:*name* window appears.

- When you click **Apply**, the component is added, but you remain in the Add component window for further operations.

You have now added multiple components to the Cisco BTS 10200 EMS network.

Editing Multiple Components

Step 1   In the ems-server window left pane, click a component.

The Component:*name* window appears.

Step 2   In the Component:*name* window, select one or more components that you want to edit.

Step 3   Click **Edit**.

The Change component window appears.

✎ **Note**   The first (blank) row with the checked box indicates that the component in the window title was selected for displaying details, editing, or deletion.

Step 4   Make the required changes to the attribute fields.

Step 5   Click **OK**.

You have now edited multiple components in the Cisco BTS 10200 EMS network.

Deleting Multiple Components

Step 1   In the ems-server window left pane, click a component.

The Component:*name* window appears.

Step 2   In the Component:*name* window, select one or more components that you want to delete.

Step 3   Click **Delete**.

The Delete component window appears with the requested deletions.

Note The first (blank) row with the checked box indicates that this component was selected for displaying details, editing, or deletion.

Step 4 Click **OK**.

You have now deleted multiple components in the Cisco BTS 10200 EMS network.

Checking the Status and Controlling Components

You can check the status of a component and you can control its status. For example, you can change status of a Cisco BTS 10200 EMS server from Normal to Forced Active Standby.

Note Exercise care in changing component status.

Step 1 From the Domain window, navigate to the desired Cisco BTS 10200 EMS server.

Step 2 Click **Config**. The Cisco BTS 10200 Component Status window opens. The Configuration tree appears in the left navigation pane.

Step 3 Navigate to the desired device and click to select it.

Step 4 In the Status window, click **Control**.

Step 5 From the Component Control window, verify that you have selected the correct component, then select a **target_state**.

Step 6 Select the desired state. Options depend on the type of component that you selected.

Step 7 Click **OK**.