



## CHAPTER 8

# Provisioning Dial Plans

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## Introduction

This chapter provides detailed instructions for configuring Cisco BTS 10200 Softswitch configuration dial plans using the Command Line Interface (CLI) and the Cisco Extensible Provisioning and Operations Manager (EPOM). The following subjects are discussed:

- [Provisioning a Dial Plan with the Command Line Interface](#)
- [Provisioning a Dial Plan with the Extensible Provisioning and Operations Manager](#)

## Provisioning a Dial Plan with the Command Line Interface

This section provides the detailed instructions for managing dial plans in the BTS 10200 configuration using the CLI. The CLI also allows you to perform show, add, change, and delete dial plans. The following subjects are discussed:

- [Dial Plan](#)
- [Dial Plan Profile](#)
- [International Dial Plan](#)
- [International Dial Plan Profile](#)
- [Custom Dial Plan](#)
- [Custom Dial Plan Profile](#)

## Dial Plan

Dial plans analyze, screen, and route calls based on dialed digits. The Dial Plan (dial-plan) table holds dial plan information for a specific type of call. It defines valid dialing patterns and determines call routing. All records that share a common dial-plan-profile id are considered a dial plan. For additional information on the Dial Plan, refer to the [“Dial Plan” section on page 1-45](#).

## Dial Plan Profile

The Dial Plan Profile (dial-plan-profile) table creates dial-plan-profile ids before they are assigned to subscribers or trunk groups. The dial-plan-profile id links digit-string entries in the Dial Plan table within a dial plan. Different dial-plan-profile ids are assigned to subscribers and trunk groups. A dial-plan-id must be created in this table before entries can be added to the Dial Plan table. For additional information on the Dial Plan Profile, refer to the [“Dial Plan Profile” section on page 1-36](#).

## International Dial Plan

The International Dial Plan (intl-dial-plan) table holds international dial plan information for calls to regions outside the North American Numbering Plan (NANP). It contains the country code, minimum and maximum digits, the country name, and the route-grp-id. For additional information on the International Dial Plan, refer to the [“International Dial Plan” section on page 1-50](#).

## International Dial Plan Profile

The International Dial Plan Profile (intl-dial-plan-profile) table is used to create unique IDs for international dial plans. This ID must be created before provisioning the International Dial Plan table. For additional information on the International Dial Plan Profile, refer to the [“International Dial Plan Profile” section on page 1-42](#).

## Custom Dial Plan

The Custom Dial Plan (custom-dial-plan) table translates Centrex calls. If the result of a custom dial plan (CDP) is a POTS access code, call processing uses the POTS Dial Plan table to translate the digits dialed after the POTS access code. Speed call codes are provisioned in this table as nod=speed-call and fname=SC1D (or SC2D). Screening does not apply to speed dialing.

Table Name: CUSTOM\_DIAL\_PLAN

Table Containment Area: EMS, FSPTC

### Command Types

add, audit, change, delete, help, show, sync



### Caution

The **sync** command is a restricted command and is intended for repairing data only. Improper use may corrupt the database and disrupt call processing. Use with caution.

### Examples

```
show custom-dial-plan id=cisco plan; digit-string=4xx;
add custom-dial-plan id=cisco plan; digit-string=9; nod=pots-access;
cat-string=1111111111;
change custom-dial-plan id=cisco plan; digit-string=4xx; nod=vsc; fname=CFUA;
delete custom-dial-plan id=cisco plan; digit-string=*72;
```

<b>Usage Guidelines</b>	<p>Primary Key Token(s): ID, DIGIT_STRING</p> <p>Foreign Key Token(s): id, fname</p>								
<b>Syntax Description</b>	<table border="1"> <tr> <td data-bbox="380 373 597 401">AUTO_REFRESH</td> <td data-bbox="672 373 1523 779"> <p>Description: Specifies whether to display cached data on the screen. Valid only for the show command.</p> <p>CHAR(1): Y/N (Default = Y).</p> <p>Y—Queries the database for the most current data.</p> <p>N—Queries the database for the most current data only if the cached data is unavailable.</p> <p>Valid for Command: show</p> <p>Default Value: Y</p> <p>Possible Value: Y, N</p> <p>Parser: BooleanParser</p> </td> </tr> <tr> <td data-bbox="380 793 597 821">CAT_STRING</td> <td data-bbox="672 793 1523 919"> <p>Valid for Command: add, change, audit, sync, show</p> <p>Possible Value: [1_16]</p> <p>Parser: BinaryParser</p> </td> </tr> <tr> <td data-bbox="380 934 597 961">DIGIT_STRING</td> <td data-bbox="672 934 1523 1430"> <p>Description: Primary key. Ported number which can be 7, 8, or 10 digits in the format NPA-NXX-XXXX, where NPA is the assigned geographic numbering plan area, NXX designates a specific central office within the NPA, and XXXX is the subscriber's number. N in the NXX portion of the number can be any number from 2 to 9 and X can be any number from 0 to 9. To support number pooling, the digit string can specify a pool of 1000 numbers (which requires 7 digits, NPA-NXX-X) or a pool of 100 numbers (which requires 8 digits, NPA-NXX-XX).</p> <p>VARCHAR(10): 7, 8, or 10 ASCII characters in the NPA-NXX-XXXX format.</p> <p>Valid for Command: add, change, show, delete, audit, sync</p> <p>Mandatory: add, change, delete</p> <p>Possible Value: [1_7]</p> <p>Parser: TextParser</p> </td> </tr> <tr> <td data-bbox="380 1444 597 1472">DISPLAY</td> <td data-bbox="672 1444 1523 1753"> <p>Description: Specifies what token information to display on the screen. Valid only for the show command.</p> <p>VARCHAR(1024): 1-1024 (Default = all tokens are displayed). Permitted values are any valid token that can be shown for this command. Multiple tokens can be entered by separating with a comma.</p> <p>Valid for Command: show</p> <p>Possible Value: [1_1024]</p> <p>Parser: TextParser</p> </td> </tr> </table>	AUTO_REFRESH	<p>Description: Specifies whether to display cached data on the screen. Valid only for the show command.</p> <p>CHAR(1): Y/N (Default = Y).</p> <p>Y—Queries the database for the most current data.</p> <p>N—Queries the database for the most current data only if the cached data is unavailable.</p> <p>Valid for Command: show</p> <p>Default Value: Y</p> <p>Possible Value: Y, N</p> <p>Parser: BooleanParser</p>	CAT_STRING	<p>Valid for Command: add, change, audit, sync, show</p> <p>Possible Value: [1_16]</p> <p>Parser: BinaryParser</p>	DIGIT_STRING	<p>Description: Primary key. Ported number which can be 7, 8, or 10 digits in the format NPA-NXX-XXXX, where NPA is the assigned geographic numbering plan area, NXX designates a specific central office within the NPA, and XXXX is the subscriber's number. N in the NXX portion of the number can be any number from 2 to 9 and X can be any number from 0 to 9. To support number pooling, the digit string can specify a pool of 1000 numbers (which requires 7 digits, NPA-NXX-X) or a pool of 100 numbers (which requires 8 digits, NPA-NXX-XX).</p> <p>VARCHAR(10): 7, 8, or 10 ASCII characters in the NPA-NXX-XXXX format.</p> <p>Valid for Command: add, change, show, delete, audit, sync</p> <p>Mandatory: add, change, delete</p> <p>Possible Value: [1_7]</p> <p>Parser: TextParser</p>	DISPLAY	<p>Description: Specifies what token information to display on the screen. Valid only for the show command.</p> <p>VARCHAR(1024): 1-1024 (Default = all tokens are displayed). Permitted values are any valid token that can be shown for this command. Multiple tokens can be entered by separating with a comma.</p> <p>Valid for Command: show</p> <p>Possible Value: [1_1024]</p> <p>Parser: TextParser</p>
AUTO_REFRESH	<p>Description: Specifies whether to display cached data on the screen. Valid only for the show command.</p> <p>CHAR(1): Y/N (Default = Y).</p> <p>Y—Queries the database for the most current data.</p> <p>N—Queries the database for the most current data only if the cached data is unavailable.</p> <p>Valid for Command: show</p> <p>Default Value: Y</p> <p>Possible Value: Y, N</p> <p>Parser: BooleanParser</p>								
CAT_STRING	<p>Valid for Command: add, change, audit, sync, show</p> <p>Possible Value: [1_16]</p> <p>Parser: BinaryParser</p>								
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DISPLAY	<p>Description: Specifies what token information to display on the screen. Valid only for the show command.</p> <p>VARCHAR(1024): 1-1024 (Default = all tokens are displayed). Permitted values are any valid token that can be shown for this command. Multiple tokens can be entered by separating with a comma.</p> <p>Valid for Command: show</p> <p>Possible Value: [1_1024]</p> <p>Parser: TextParser</p>								

FNAME	<p>Description: Primary key. Foreign key: Feature table. Feature name.</p> <p>VARCHAR(16): 1-16 ASCII characters.</p> <p>Valid for Command: add, change, audit, sync, show</p> <p>Possible Value: [1_16]</p> <p>Parser: TextNoCaseParser</p>
ID	<p>Description: Network ID of a specific CA or FS. Valid for the download to Standby CA or FS command.</p> <p>VARCHAR(8):1-8 ASCII characters consisting of any valid, provisioned CA, FSPTC, or FSAIN ID.</p> <p>Valid for Command: add, change, show, delete, audit, sync</p> <p>Mandatory: add, change, delete</p> <p>Possible Value: [1_16]</p> <p>Parser: TextParser</p>
LIMIT	<p>Description: Specifies the number of rows to display on the screen. Valid only for the show command.</p> <p>INTEGER: 1-100000000 (Default = 100000000).</p> <p>Valid for Command: show</p> <p>Default Value: 100000000</p> <p>Possible Value: [1_100000000]</p> <p>Parser: DecimalParser</p>
MASTER	<p>Valid for Command: sync</p> <p>Mandatory: sync</p> <p>Possible Value: [1_10]</p> <p>Parser: TextParser</p>
NOD	<p>Description: Primary key. Foreign key: Nature of Dial table. Nature of dial.</p> <p>VARCHAR(16): 1-16 ASCII characters.</p> <p>Valid for Command: add, change, audit, sync, show</p> <p>Mandatory: add</p> <p>Possible Value: VSC, ATTENDANT_ACCESS, POTS_ACCESS, EXTENSION, SPEED_CALL</p> <p>Parser: TextParser</p>
ORDER	<p>Description: Specifies whether to display data on the screen in a sorted order. Valid only for the show command.</p> <p>VARCHAR(51200): 1-51200 (Default = all rows are displayed). Permitted values are any valid token that can be shown for this command. Multiple tokens can be entered by separating with a comma.</p> <p>Valid for Command: show</p> <p>Possible Value: [1_1024]</p> <p>Parser: TextParser</p>

PLATFORM_STATE	<p>Description: State of an active or standby system shared memory database; use to audit an active or standby system shared memory database. Valid for the audit database and audit table name commands.</p> <p>VARCHAR(7): 1-7 ASCII characters. Permitted values are:</p> <p>ACTIVE (Default)—System is active (currently running).</p> <p>STANDBY—System is in standby mode.</p> <p>EMS—Audits the active EMS to the standby EMS.</p> <p>Valid for Command: sync, audit</p> <p>Default Value: ACTIVE</p> <p>Possible Value: ACTIVE, STANDBY</p> <p>Parser: TextParser</p>
START_ROW	<p>Description: Specifies to begin displaying data on the screen at a specific row. Valid only for the show command.</p> <p>INTEGER: 1-100000000 (Default = 1).</p> <p>Valid for Command: show</p> <p>Default Value: 1</p> <p>Possible Value: [1_100000000]</p> <p>Parser: DecimalParser</p>
TARGET	<p>Description: Specifies the network element to receive the request.</p> <p>VARCHAR(5): 1-5 ASCII characters. Permitted values are:</p> <p>CA—Network identifier of a Call Agent.</p> <p>FSPTC (POTS/Tandem/Centrex Feature Server)—Network identifier of a specific Feature Server.</p> <p>FSAIN (AIN Feature Server)—Network identifier of AIN Feature Servers.</p> <p>Valid for Command: sync</p> <p>Mandatory: sync</p> <p>Possible Value: [1_10]</p> <p>Parser: TextParser</p>

## Custom Dial Plan Profile

The Custom Dial Plan Profile (custom-dial-plan-profile) table defines custom dial plan IDs (CDP IDs) assigned to Centrex groups.

Table Name: CUSTOM\_DIAL\_PLAN\_PROFILE

Table Containment Area: EMS

### Command Types

add, change, delete, help, show

### Examples

```
show custom-dial-plan-profile id=cisco plan;
add custom-dial-plan-profile id=cisco plan;
change custom-dial-plan-profile id=cisco plan; description=main dialing plan for cisco;
delete custom-dial-plan-profile id=cisco plan;
```

### Usage Guidelines

Primary Key Token(s): ID

Check Rule:

Delete Rules: ID does not exist in any custom-dial-plan::id.

### Syntax Description

AUTO_REFRESH	<p>Description: Specifies whether to display cached data on the screen. Valid only for the show command.</p> <p>CHAR(1): Y/N (Default = Y).</p> <p>Y—Queries the database for the most current data.</p> <p>N—Queries the database for the most current data only if the cached data is unavailable.</p> <p>Valid for Command: show</p> <p>Default Value: Y</p> <p>Possible Value: Y, N</p> <p>Parser: BooleanParser</p>
DESCRIPTION	<p>Description: Described by the service provider.</p> <p>VARCHAR(64): 1-64 ASCII characters.</p> <p>Valid for Command: add, change, audit, sync, show</p> <p>Possible Value: [1_64]</p> <p>Parser: TextParser</p>

DISPLAY	<p>Description: Specifies what token information to display on the screen. Valid only for the show command.</p> <p>VARCHAR(1024): 1-1024 (Default = all tokens are displayed). Permitted values are any valid token that can be shown for this command. Multiple tokens can be entered by separating with a comma.</p> <p>Valid for Command: show</p> <p>Possible Value: [1_1024]</p> <p>Parser: TextParser</p>
ID	<p>Description: Primary key. Custom dial plan profile ID.</p> <p>VARCHAR(16): 1-16 ASCII characters.</p> <p>Valid for Command: add, change, show, delete, audit, sync</p> <p>Mandatory: add, change, delete</p> <p>Possible Value: [1_16]</p> <p>Parser: TextParser</p>
LIMIT	<p>Description: Specifies the number of rows to display on the screen. Valid only for the show command.</p> <p>INTEGER: 1-100000000 (Default = 100000000).</p> <p>Valid for Command: show</p> <p>Default Value: 100000000</p> <p>Possible Value: [1_100000000]</p> <p>Parser: DecimalParser</p>
MASTER	<p>Valid for Command: sync</p> <p>Mandatory: sync</p> <p>Possible Value: [1_10]</p> <p>Parser: TextParser</p>
ORDER	<p>Description: Specifies whether to display data on the screen in a sorted order. Valid only for the show command.</p> <p>VARCHAR(1024): 1-1024 (Default = all rows are displayed). Permitted values are any valid token that can be shown for this command. Multiple tokens can be entered by separating with a comma.</p> <p>Valid for Command: show</p> <p>Possible Value: [1_1024]</p> <p>Parser: TextParser</p>

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PLATFORM_STATE	<p>Description: State of an active or standby system shared memory database; use to audit an active or standby system shared memory database. Valid for the audit database and audit table name commands.</p> <p>VARCHAR(7): 1-7 ASCII characters. Permitted values are:</p> <p>ACTIVE (Default)—System is active (currently running).</p> <p>STANDBY—System is in standby mode.</p> <p>EMS—Audits the active EMS to the standby EMS.</p> <p>Valid for Command: sync, audit</p> <p>Default Value: ACTIVE</p> <p>Possible Value: ACTIVE, STANDBY</p> <p>Parser: TextParser</p>
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START_ROW	<p>Description: Specifies to begin displaying data on the screen at a specific row. Valid only for the show command.</p> <p>INTEGER: 1-100000000 (Default = 1).</p> <p>Valid for Command: show</p> <p>Default Value: 1</p> <p>Possible Value: [1_100000000]</p> <p>Parser: DecimalParser</p>
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TARGET	<p>Description: Specifies the network element to receive the request.</p> <p>VARCHAR(5): 1-5 ASCII characters. Permitted values are:</p> <p>CA—Network identifier of a Call Agent.</p> <p>FSPTC (POTS/Tandem/Centrex Feature Server)—Network identifier of a specific Feature Server.</p> <p>FSAIN (AIN Feature Server)—Network identifier of AIN Feature Servers.</p> <p>Valid for Command: sync</p> <p>Mandatory: sync</p> <p>Possible Value: [1_10]</p> <p>Parser: TextParser</p>
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# Provisioning a Dial Plan with the Extensible Provisioning and Operations Manager

This section provides the detailed instructions for adding a dial plan to the BTS 10200 configuration using the Extensible Provisioning and Operations Manager (EPOM). Additionally, detailed instructions are provided for using EPOM to manage configured dial plans. The EPOM also allows you to perform add, delete, and edit commands on multiple dial plans with a single operation. The following subjects are discussed:

- [Adding a Dial Plan to the BTS 10200 Configuration](#)
- [Applying an EPOM Template to a Selected Dial Plan](#)
- [Editing a Dial Plan in the BTS 10200 Configuration](#)
- [Deleting a Dial Plan from the BTS 10200 Configuration](#)
- [Adding Multiple Dial Plans to a BTS 10200 Configuration](#)
- [Editing Multiple Dial Plans in the BTS 10200 Configuration](#)
- [Deleting Multiple Dial Plans in the BTS 10200 Configuration](#)

For additional details on using the EPOM, refer to the *Cisco Extensible Provisioning and Operations Manager Getting Started Guide*.

## Adding a Dial Plan to the BTS 10200 Configuration

**Tip**

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

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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.

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- Step 1** From the Domain window, select the *domain* > **BTS10200s** > the *Cisco BTS 10200 Softswitch EMS server*.
- Step 2** Click **Config**.  
The BTS 10200 Component Status window opens.
- Step 3** In the Configuration tree, choose **Office Tables** > **dial\_plan**.

Success: Entries 1-101 of 2071 returned.

Component: dial\_plan Add Search

Check All Clear All Details Edit Delete

id ▲	dest_id	digit_string	Rows: 1 - 100 of 2071 ➔
<input type="checkbox"/> Dial1	dst1	222	[Details] [Edit] [Delete]
<input type="checkbox"/> Incoming	local-sub	271201	[Details] [Edit] [Delete]
<input type="checkbox"/> Incoming	local-sub	271202	[Details] [Edit] [Delete]
<input type="checkbox"/> Incoming	local-sub	271203	[Details] [Edit] [Delete]
<input type="checkbox"/> Incoming	local-sub	271204	[Details] [Edit] [Delete]
<input type="checkbox"/> Incoming	local-sub	271205	[Details] [Edit] [Delete]
<input type="checkbox"/> Incoming	local-sub	271206	[Details] [Edit] [Delete]
<input type="checkbox"/> Incoming	RLGHNCDS1	306291	[Details] [Edit] [Delete]
<input type="checkbox"/> Incoming	local-sub	306301	[Details] [Edit] [Delete]
<input type="checkbox"/> Incoming	local-sub	306362	[Details] [Edit] [Delete]
<input type="checkbox"/> Incoming	local-sub	306391	[Details] [Edit] [Delete]

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The 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 BTS 10200 Component Add window opens.

Add component: dial\_plan OK Apply Cancel

Clear Form  Expand range expression

id --- UNSET ---  
 dest\_id --- UNSET ---  
 digit\_string  
 max\_digits 10  
 min\_digits 10  
 noa NATIONAL  
 split\_npa NONE  
del\_digits 0  
pfx\_digits

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**Step 5** Define the device. Required fields are identified with a red check mark.

**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 BTS 10200 Component window. The new dial plan is added to the list.

To edit a single component, see the ““Editing a Dial Plan in the BTS 10200 Configuration” section on page 8-12; to delete a single component, see the ““Deleting a Dial Plan from the BTS 10200 Configuration” section on page 8-14.

## Applying an EPOM Template to a Selected Dial Plan

- Step 1** In a Domain view, select the **desired domain > BTS10200s > the desired BTS 10200 EMS server**.
- Step 2** Click **Config**. The BTS 10200 Component Status view opens.
- Step 3** In the Configuration tree, select **Office Tables > dial\_plan**. The BTS 10200 Component view 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.



Success: Entries 1-101 of 2071 returned.

Component: dial\_plan Add Search

[Check All](#) [Clear All](#) [Details](#) [Edit](#) [Delete](#)

id ▲	dest_id	digit_string	Rows: 1 - 100 of 2071 ↕
<input type="checkbox"/> <a href="#">Dial1</a>	<a href="#">dst1</a>	222	<a href="#">[Details]</a> <a href="#">[Edit]</a> <a href="#">[Delete]</a>
<input type="checkbox"/> <a href="#">Incoming</a>	<a href="#">local-sub</a>	271201	<a href="#">[Details]</a> <a href="#">[Edit]</a> <a href="#">[Delete]</a>
<input type="checkbox"/> <a href="#">Incoming</a>	<a href="#">local-sub</a>	271202	<a href="#">[Details]</a> <a href="#">[Edit]</a> <a href="#">[Delete]</a>
<input type="checkbox"/> <a href="#">Incoming</a>	<a href="#">local-sub</a>	271203	<a href="#">[Details]</a> <a href="#">[Edit]</a> <a href="#">[Delete]</a>
<input type="checkbox"/> <a href="#">Incoming</a>	<a href="#">local-sub</a>	271204	<a href="#">[Details]</a> <a href="#">[Edit]</a> <a href="#">[Delete]</a>
<input type="checkbox"/> <a href="#">Incoming</a>	<a href="#">local-sub</a>	271205	<a href="#">[Details]</a> <a href="#">[Edit]</a> <a href="#">[Delete]</a>
<input type="checkbox"/> <a href="#">Incoming</a>	<a href="#">local-sub</a>	271206	<a href="#">[Details]</a> <a href="#">[Edit]</a> <a href="#">[Delete]</a>
<input type="checkbox"/> <a href="#">Incoming</a>	<a href="#">RLGHNCDS1</a>	306291	<a href="#">[Details]</a> <a href="#">[Edit]</a> <a href="#">[Delete]</a>
<input type="checkbox"/> <a href="#">Incoming</a>	<a href="#">local-sub</a>	306301	<a href="#">[Details]</a> <a href="#">[Edit]</a> <a href="#">[Delete]</a>
<input type="checkbox"/> <a href="#">Incoming</a>	<a href="#">local-sub</a>	306362	<a href="#">[Details]</a> <a href="#">[Edit]</a> <a href="#">[Delete]</a>
<input type="checkbox"/> <a href="#">Incoming</a>	<a href="#">local-sub</a>	306391	<a href="#">[Details]</a> <a href="#">[Edit]</a> <a href="#">[Delete]</a>

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**Step 4** Click **Add**. The BTS 10200 Component Add view opens.

**Step 5** Select a template from the list.

**Step 6** Click **Load**.

Click **OK** or **Apply**.

- When you click **OK**, the component is added and the list of components in the Component name window is displayed.
- When you click **Apply**, the component is added, but you remain in the Add component window for further operations. The new dial plan is added to the list when you return to the BTS 10200 Component view.



**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 EPOM inventory. 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.

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

## Editing a Dial Plan in the BTS 10200 Configuration

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

**Step 2** Click **Config**.

The BTS 10200 Component Status window opens.

**Step 3** In the Configuration tree, choose **Office Tables** > **dial\_plan**.

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

**Step 4** Select the row that you wish to edit and click **Edit**.

The Change component window appears.

Change component: dial_plan		OK	Cancel
<a href="#">Clear Form</a>			
	<input checked="" type="checkbox"/>		
✓ id	Dial1		
✓ digit_string	222		
✓ noa	NATIONAL		
del_digits	0		
dest_id	dst1		
max_digits	10		
min_digits	10		
px_digits			
split_npa	NONE		

**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**

Make the required changes to the attribute fields. To make changes follow the steps mentioned below.

- a. Enter the new value in the text field or select a new value from the drop down box. This action displays a check box against the changed field. This check box is enabled by default.

Change component: dial_plan		OK	Cancel
<a href="#">Clear Form</a>			
	<input checked="" type="checkbox"/>		
✓ id	Dial1		
✓ digit_string	222		
✓ noa	NATIONAL		
del_digits	0		
dest_id	dst1		
max_digits	10		
min_digits	10		
px_digits			
split_npa	NEW_NPA		

- b. Click **OK** to save changes. EPOM will send only the checked elements along with the mandatory fields to BTS 10200, instead of sending whole edit page elements. This will update the BTS 10200 Server with the new values along with the mandatory attributes.

**Note**

Mandatory attributes cannot be edited, hence no check box will be displayed against it when the user tries to change its value.

**Caution**

If the user decides to revert back and retain the old values then it has to be done before saving. It can be done by unchecking the check box. This way the same old values are sent to the database when the user clicks **OK** to save the changes.

- Step 6** EPOM provides the option to edit multiple nouns in a single instance. Select the nouns which needs to be updated in template and click **Edit**. The browser displays multiple templates.

Clear Form	
<input checked="" type="checkbox"/> id	<input type="text" value="dial_p_prot"/> <input type="button" value="?"/> <input type="text" value="dial_p_prot"/> <input type="button" value="?"/>
<input checked="" type="checkbox"/> digit_string	<input type="text" value="233233"/> <input type="button" value="?"/> <input type="text" value="233233"/> <input type="button" value="?"/>
<input checked="" type="checkbox"/> noa	<input type="text" value="NATIONAL"/> <input type="button" value="?"/> <input type="text" value="URBANOAN"/> <input type="button" value="?"/>
del_digits	<input type="text" value=""/> <input type="button" value="?"/>
dest_id	<input type="text" value="dest_vf1"/> <input type="button" value="?"/> <input type="text" value="dest_vf2"/> <input type="button" value="?"/>
max_digits	<input type="text" value="10"/> <input type="button" value="?"/>
min_digits	<input type="text" value=""/> <input type="button" value="?"/>
prc_digits	<input type="text" value=""/> <input type="button" value="?"/>
split_npa	<input checked="" type="checkbox"/> OLD_NPA <input type="button" value="?"/> <input checked="" type="checkbox"/> NEW_NPA <input type="button" value="?"/>

**Note**

EPOM provides option to edit multiple nouns in a single instance. Select the nouns which needs to be updated in template and click **Edit**. The browser displays multiple templates.

- Step 7** Click **OK**.

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

To add a single component, see the [“Adding a Dial Plan to the BTS 10200 Configuration”](#) section on page 8-9; to delete a single component, see the [“Deleting a Dial Plan from the BTS 10200 Configuration”](#) section on page 8-14.

## Deleting a Dial Plan from the BTS 10200 Configuration

- Step 1** Choose the *domain* > **BTS10200s** > the *Cisco BTS 10200 Softswitch EMS server* from the Domain window.
- Step 2** Click **Config**.  
The BTS 10200 Component Status window opens.
- Step 3** In the Configuration tree, choose **Office Tables** > **dial\_plan**.  
The 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.

Delete component: dial\_plan

Clear Form	
<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/> id	<input type="text" value="Dial1"/> <input type="button" value="?"/> <input type="text" value="Dial1"/> <input type="button" value="?"/>
<input checked="" type="checkbox"/> digit_string	<input type="text" value="222"/> <input type="button" value="?"/> <input type="text" value="222"/> <input type="button" value="?"/>
<input checked="" type="checkbox"/> noa	<input type="text" value="NATIONAL"/> <input type="button" value="?"/> <input type="text" value="NATIONAL"/> <input type="button" value="?"/>



**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 Dial Plan to the BTS 10200 Configuration” section on page 8-9; to edit a single component, see the ““Editing a Dial Plan in the BTS 10200 Configuration” section on page 8-12.

## Adding Multiple Dial Plans to a BTS 10200 Configuration

**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 dial plans to the BTS 10200 EMS network.

## Editing Multiple Dial Plans in the BTS 10200 Configuration

**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.

Change component: dial_plan		OK	Cancel
<a href="#">Clear Form</a>			
<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
✓ id	Dial1	Incoming	
✓ digit_string	222	271201	
✓ noa	NATIONAL	NATIONAL	
del_digits	0	0	
dest_id	dst1	local-sub	
max_digits	10	10	
min_digits	10	10	
pfx_digits			
split_npa	NONE	NONE	



**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**.

**Step 6** You have now edited multiple components in the BTS 10200 EMS network.

## Deleting Multiple Dial Plans in the BTS 10200 Configuration

- Step 1** 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.

	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
✓ id	Dial1	Incoming	Incoming
✓ digit_string	222	271201	271202
✓ nea	NATIONAL	NATIONAL	NATIONAL

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 dial plans in the BTS 10200 EMS network.

