



Region Configuration

Use regions to specify the voice codec used for calls within a region and between existing regions. The voice codec determines the type of compression and the maximum amount of bandwidth that is used per call.



Note

The default voice codec for all calls through Cisco CallManager is G.711. If you do not plan to use any other voice codec, you do not need to use regions.

Use the following procedures to add, update, or delete regions:

- [Adding a Region, page 7-2](#)
- [Updating a Region, page 7-3](#)
- [Deleting a Region, page 7-4](#)
- [Region Configuration Settings, page 7-5](#)

Refer to the “Regions” section in the *Cisco CallManager System Guide* for more information about configuring regions and selecting voice codecs.

Adding a Region

This section describes how to add a new region to the Cisco CallManager database.

Note Addition of regions occurs in a matrixlike fashion. If you add regions A, B, and C, a matrix with region A, region B, and region C as both columns and rows results, as shown in this matrix:

	Region A	Region B	Region C
Region A			
Region B			
Region C			

If you assign 20 regions, the database adds 400 entries (20 x 20). Some performance limitations exist when large numbers of regions are assigned.

Procedure

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- Step 1** Choose **System > Region**.
- Step 2** In the Region Name field, enter the name that you want to assign to the new region and click **Insert**.
- Step 3** Using the drop-down list boxes, choose the voice codec to use for calls within the new region and between the new region and existing regions. The voice codec determines the type of compression and the maximum amount of bandwidth that is allocated for these calls.
- See [Table 7-1](#) for a summary of the available codec types and bandwidth usage.
- Step 4** Click **Update** to save the new region in the database.
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Next Step

After adding a new region to the database, you can use it to configure device pools. Devices acquire a region setting from the device pool to which they are assigned. See the “[Adding a Device Pool](#)” section on [page 8-2](#) for information on configuring device pools.

Related Topics

- [Updating a Region, page 7-3](#)
- [Deleting a Region, page 7-4](#)
- [Region Configuration Settings, page 7-5](#)
- [Adding a Device Pool, page 8-2](#)

Updating a Region

This section describes how to update the configuration for a region.

Procedure

- Step 1** Choose **System > Region**.
- Step 2** From the Region list, choose the region that you want to update.
Update the codec settings for calls within the region and between other regions. See [Table 7-1](#) for a summary of the available codec types and bandwidth usage.
- Step 3** Click **Update** to save the changes in the database.
- Step 4** Click **Restart Devices** to apply the changes to all devices that use the updated region.
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Related Topics

- [Adding a Region, page 7-2](#)
- [Deleting a Region, page 7-4](#)
- [Region Configuration Settings, page 7-5](#)

Deleting a Region

This section describes how to delete a region from the Cisco CallManager database.

Before You Begin

You cannot delete a region that is being used by any device pools. If you try to delete a region that is in use, Cisco CallManager displays an error message. Before deleting a region that is currently in use, you must perform either or both of the following tasks:

- Update the device pools to use a different region. See the [“Updating a Device Pool” section on page 8-3](#).
- Delete the device pools that are using the region that you want to delete. See the [“Deleting a Device Pool” section on page 8-4](#).

Procedure

- Step 1** Choose **System > Region**.
- Step 2** From the Region list, choose the region that you want to delete.
- Step 3** Click **Delete**.
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Related Topics

- [Adding a Region, page 7-2](#)
- [Updating a Region, page 7-3](#)
- [Region Configuration Settings, page 7-5](#)

Region Configuration Settings

[Table 7-1](#) summarizes the available voice codecs that can be specified for regions. The total bandwidth that is used per call stream depends on the voice codec type as well as factors such as data packet size and overhead (packet header size). The bandwidth figures shown in [Table 7-1](#) apply for 30-ms data packets and include IP headers. Each call comprises two call streams.

Table 7-1 Region Configuration Settings

Voice Codec	Bandwidth Used Per Call (Including IP Headers) With 30-ms Data Packets	Description
G.711	80 kbps	Default codec for all calls in Cisco CallManager.
G.723	24 kbps	Low-bit-rate codec supported for use with older Cisco IP Phone model 12 SP Series and Cisco IP Phone model 30 VIP.
G.729	24 kbps	Low bit-rate codec supported for Cisco IP Phone 7900 family models.
Wideband	272 kbps	High-quality, high-bandwidth voice codec for IP-phone to IP-phone calls supported by Cisco IP Phone 7900 family models.
GSM	29 kbps	Global System for Mobile Communications (GSM) codec that enables the MNET system for GSM wireless handsets to interoperate with Cisco CallManager.

Related Topics

- [Adding a Region, page 7-2](#)
- [Updating a Region, page 7-3](#)
- [Deleting a Region, page 7-4](#)

