CHAPTER **18**

Changing the Audio Format of Recordings and Media Streams in Cisco Unity Connection 10.x

See the following sections:

Changing the Audio Format That Cisco Unity Connection 10.x Uses for Calls

For calls, Cisco Unity Connection advertises the audio format (or codec) that is preferred for the media stream with the phone system. You should consider the following when setting the audio format:

- When Unity Connection advertises a different audio format than the one used by the phone system, the phone system transcodes the media stream.
- Unity Connection should use the same audio format for the media stream that the phone system uses for the following reasons:
    - To reduce the need for transcoding the media stream from one audio format to another.
    - To minimize the performance impact on the Unity Connection server and on the phone system.
    - To preserve the audio quality of calls.

For more information on audio format codecs, see the "Audio Codecs" section in the "Sizing and Scaling Cisco Unity Connection 10.x Servers" chapter of the *Design Guide for Cisco Unity Connection Release 10.x*, at
http://www.cisco.com/en/US/docs/voice_ip_comm/connection/10x/design/guide/10xcucdgx.html.

To Change the Audio Format That Cisco Unity Connection Uses for Calls

Step 1   In Cisco Unity Connection Administration, expand **Telephony Integrations**, then select **Port Group**.

Step 2   On the **Search Port Groups** page, select the port group that belongs to the phone system integration for which you want to change the audio format of the media stream.

Step 3   On the **Port Group Basics** page, on the **Edit** menu, select **Codec Advertising**.

Step 4   On the **Edit Codec Advertising** page, select the **Up** and **Down** arrows to change the order of the codecs or to move codecs between the **Advertised Codec** box and the **Unadvertised Codecs** box.

If only one codec is in the **Advertised Codecs** box, Cisco Unity Connection sends the media stream in that audio format. The phone system transcodes if it does not use this audio format.

If two or more codecs are in the **Advertised Codecs** box, Unity Connection advertises its preference for the first codec in the list but sends the media stream in the audio format from the list that the phone system selects.

Step 5   Select **Save**.

Step 6   *(All integrations except SCCP)* If you want to change the packet size that is used by the advertised codecs, on the **Port Group Basics** page, under **Advertised Codec** Settings, select the applicable packet setting for each codec in the Packet Size list, and select **Save**.

Step 7   On the **Port Group** menu, select **Search Port Groups**.

Step 8   Repeat Step 2 through Step 7 for all remaining port groups that belong to the phone system integration for which you want to change the audio format of the media stream.

Changing the Audio Format for Recordings in Cisco Unity Connection 10.x

Typically, you configure Cisco Unity Connection to use the same audio format (or codec) for recording a message that the playback device uses. For example, if users listen to messages primarily on a phone system extension, you should configure Unity Connection to record messages in the same audio format that the phone system uses. If users listen to messages on Personal Digital Assistants (PDAs), however, you should configure Unity Connection to record messages in the audio format that the PDAs use (such as GSM 6.10).

Consider the following when setting the audio format for recording messages:

- Setting the audio format for recordings affects all messages, greetings, and names systemwide for all users.

- The audio format that you choose affects only recordings made by phone, either by using the TUI or by using the Media Master and TRAP. Recordings made by using the Media Master and a microphone are always stored in G.711 mu-law.

- Minimizing the number of different audio formats in use by Unity Connection for recording and playing recorded messages, greetings, and names reduces transcoding between audio formats that Unity Connection must perform, and thus reduces the effect on the performance of the Unity Connection server.

- When a message, greeting, or name is recorded in a lower quality audio format and later transcoded to a higher quality audio format during playback, the sound quality is not improved. Usually, the sound quality of a recording suffers during transcoding, especially when the sampling rate is changed.

  For example, sound quality suffers when messages that are recorded in the G.729a audio format are played on devices that use the G.711 Mu-Law audio format. However, sound quality is preserved when messages that are recorded in the G.711 Mu-Law audio format are played on devices that use the same audio format.

- Changing the audio format for recordings affects only messages, greetings, and names that are recorded after the setting is changed. Existing messages, greetings, and names that were recorded in a different audio format are not affected by the new setting.

For more information on audio format codecs, see the "Audio Codecs" section in the "Sizing and Scaling Cisco Unity Connection 10.x Servers" chapter of the *Design Guide for Cisco Unity Connection Release 10.x*, at
http://www.cisco.com/en/US/docs/voice_ip_comm/connection/10x/design/guide/10xcucdgx.html.

To Change the Audio Format for Recording Messages By Using the Phone

Step 1   In Cisco Unity Connection Administration, expand **System Settings**, then select **General Configuration**.

Step 2   On the **Edit General Configuration** page, in the **Recording Format** list, select the applicable setting.

> **Note**   If the playback device uses a different audio format, Unity Connection must transcode the messages, greetings, and names into the applicable audio format or the playback device is not able to play them.

Step 3   Select **Save**.