



NetVanta Unified Communications Technical Note

Recording Calls with Polycom Phones

Introduction

The NetVanta Unified Communications Server provides call recording functionality on a per-user basis by leveraging the Polycom SoundPoint IP's enhanced feature keys (EFK), which allow for automating custom keystrokes much like a legacy PBX or key system. In this case, an EFK is leveraged to create a softkey that, when pressed during a call, initiates recording of audio from both parties of a connected call.

Call recording with Polycom phones works with the UC server by auto-conferencing the conversation with a service that automatically records audio. When a call is in progress and the Polycom user presses the **StrtRec** softkey, the other phone is automatically joined to a conference with the Polycom phone and the recording service. When the call is disconnected or if the Polycom user presses the **StpRec** softkey, the UC server saves the recorded audio as a voice message in the mailbox of the user whose identity is registered on the Polycom phone.

Polycom softkeys are displayed above the physical buttons located below the LCD display as shown in the image below.



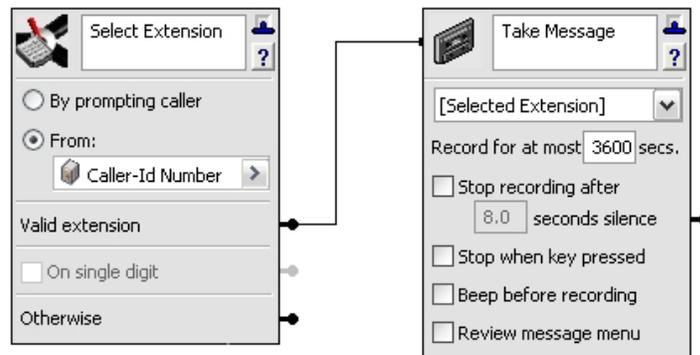
Configuring the NetVanta UC Server for Call Recording

To allow for call recording to take place on the UC server, you must create a service and identity to manage call recording requests from all Polycom phones in the local area network (LAN).

Creating a Service and Identity to Answer Call Recording Requests

NOTE: If you are running NetVanta UC Server version 4.4.1 or higher, you can skip the steps below in [To Create the Call Recording Service](#), since the call recording service has been included in the installation. You must activate the call recording service on a new identity as outlined in [Creating an Identity on page 3](#).

To Create the Call Recording Service



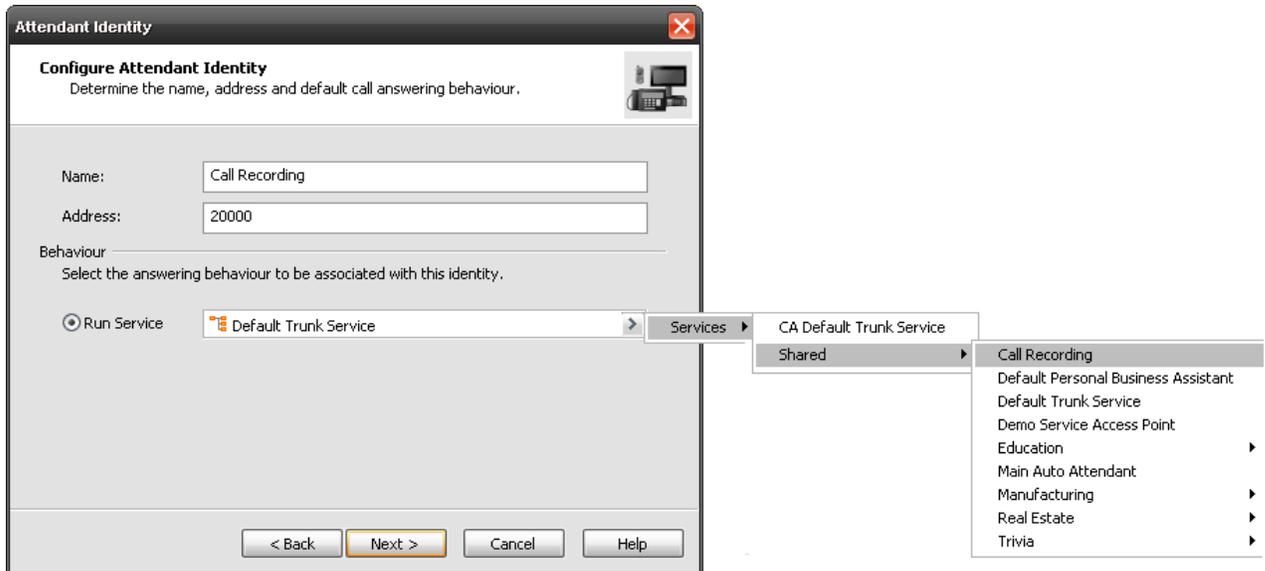
1. Open the UC client and log into the server as a user with administrative privileges.
2. In the **Admin** tab, navigate to the **Services** pane, and under the **Shared** folder create a new service called **Call Recording**. Double-click to edit the service.
3. In the service editor menu, select the **Advanced** tab at the bottom of the element palette and drag the **Select Extension** element onto the canvas. Set the following properties for the **Select Extension** element:
 - Select the **From** button.
 - Click on the drop-down menu, move the mouse over **System Values**, and select **Caller-Id Number**.
4. On the **Select Extension** element, right-click the connector pin beside **Valid Extension**. Move the mouse over **Insert** and then **Advanced**. Select **Take Message**.

5. Set the following properties for the **Take Message** element:
 - [Selected Extension]
 - In the **Record for at most ___ secs.** box, choose the number of seconds for the maximum length of a recorded voice conversation. Be sure to choose a value in seconds that is large enough to accommodate the length of conversations to be recorded by your users (err on the large side; 3600 seconds is usually sufficient).
 - Disable (uncheck) all of the check boxes in the **Take Message** element.
6. Save the service and close the service editor.

Creating an Identity

1. Open the UC client and log into the server as a user with administrative privileges.
2. Navigate to the **Identities** pane, and create a new attendant service for **Admin** using the New Identity Wizard.
3. Assign the identity a name such as **Call Recording**.
4. Set the address to **20000**.
5. Assign the **Call Recording** service to the identity.

The example below creates an identity named **Call Recording** and assigns the address **20000**. The identity is associated with the **Call Recording** service.



6. Finish the wizard and close.

Configuring the Polycom Phone for Call Recording

The Polycom phone's configuration files need a minimal amount of customizing in order to support call recording. The custom softkey already defined in your configuration files simply needs to be activated.

NOTE: *You must have system administration privileges for the machine running the UC server in order to make the necessary configuration file changes.*

Configuring All SoundPoint IP Phones Except the 320 and 330

The following instructions describe how to activate call recording functionality for all Polycom SoundPoint IP phones except the 320 and 330 models. If you have any 320 or 330 phones for which you want to activate call recording, follow the instructions in [Configuring SoundPoint IP 320 and 330 Phones on page 5](#).

1. Log in to the UC server machine as a user with administrative privileges.
2. Using Windows® Explorer, navigate to the Polycom PhoneTypes directory. The default path is C:\Program Files\ADTRAN\NetVanta UC Server\Data\System\PhoneTypes\Polycom.
3. Edit **allphones.cfg** using a standard text or XML editor. Change **feature.18.enabled="0"** to **feature.18.enabled="1"**.
4. If you chose an address other than 20000 for the call recording identity like in the example in [Creating an Identity on page 3](#), you must do the following:
 - Locate the attribute **efk.efklist.1.action.string**. The current value for this attribute contains **\$FDialpad#\$** where the pound sign (#) is a digit corresponding to each digit of the identity address, as shown here:

```
$FConference$$FDialpad2$$FDialpad0$$FDialpad0$$FDialpad0$$FDialpad0$$FSoftKey1$$Cpause1$$FConference$
```
 - Modify the string so that you have **\$FDialpad#\$** (where # is a digit) for each digit in your call recording identity address.
5. Save the file and close it.
6. Verify that the file was propagated automatically to the file transfer protocol (FTP) server by comparing the modified date in both locations. The default FTP server path is C:\inetpub\ftproot.

NOTE: *If the file was not propagated automatically, then restart the NetVanta UC Server Application Services service using the Windows Services administration control panel.*

Limitations and Restrictions

- The recorded conversations that are saved in the associated user's mailbox appear as having been sent and received by the same user. For example, if a user by the name of John Smith at address 100 initiates call recording, a message is saved in John Smith's mailbox with the sender and recipient both appearing as John Smith [100].
- When Polycom users press the **StrtRec** or **StpRec** softkeys, they will hear some artifacts of the conference being set up and the digits being dialed.
- If the UC server Music on Hold service is enabled, the caller being recorded (not the Polycom user) will hear a very brief moment of Music on Hold audio both when the call recording is set up and also when the Polycom user presses **StpRec** to end recording instead of disconnecting the call.
- Do not press **StrtRec** while already in a conference. If **StrtRec** is pressed in this situation, the Polycom user will hear dual-tone multifrequency (DTMF) tones until the call is ended. This is a limitation with the Polycom EFK functionality because there is no way to determine if the call is already in a conference.
- Do not press **StrtRec** a second time after call recording has already been initiated. If **StrtRec** is pressed in this situation, the Polycom user will hear DTMF tones until the call is ended.
- Pressing the redial button after a call has been recorded and disconnected will redial the call recording number instead of the last number the Polycom user dialed.