ADTRAN

NetVanta Unified Communications Technical Note

Recording Calls with Polycom Phones on NetVanta ECS

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

Call recording with Polycom phones functions with the NetVanta 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 NetVanta 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.

Limitations and Restrictions

NetVanta Business Communications System (BCS) does not support the call recording feature.

The call recording feature does not support Polycom phones with multiple, different identities.

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 extension 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 NetVanta 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.

The StrtRec softkey should not be used 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.

The StrtRec softkey should not be pressed a second time after call recording has 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.

Using the call recording feature for external calls with Polycom VVX Series phones over a Total Access (TA) gateway will cause unexpected behavior. When attempting to stop a recording using the VVX phone, the call to the external party will be dropped, and the call to the recording service will remain active.

Configuring the NetVanta UC Server for Call Recording

To enable recording on the NetVanta UC Server, you must create a service and identity to manage call recording requests from all Polycom phones in the local area network (LAN).

If you are running NetVanta UC Server version 4.6.4 or later, you can skip the steps below in *Creating a Call Recording Service on page 2*, 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 for the Call Recording Service on page 6*.

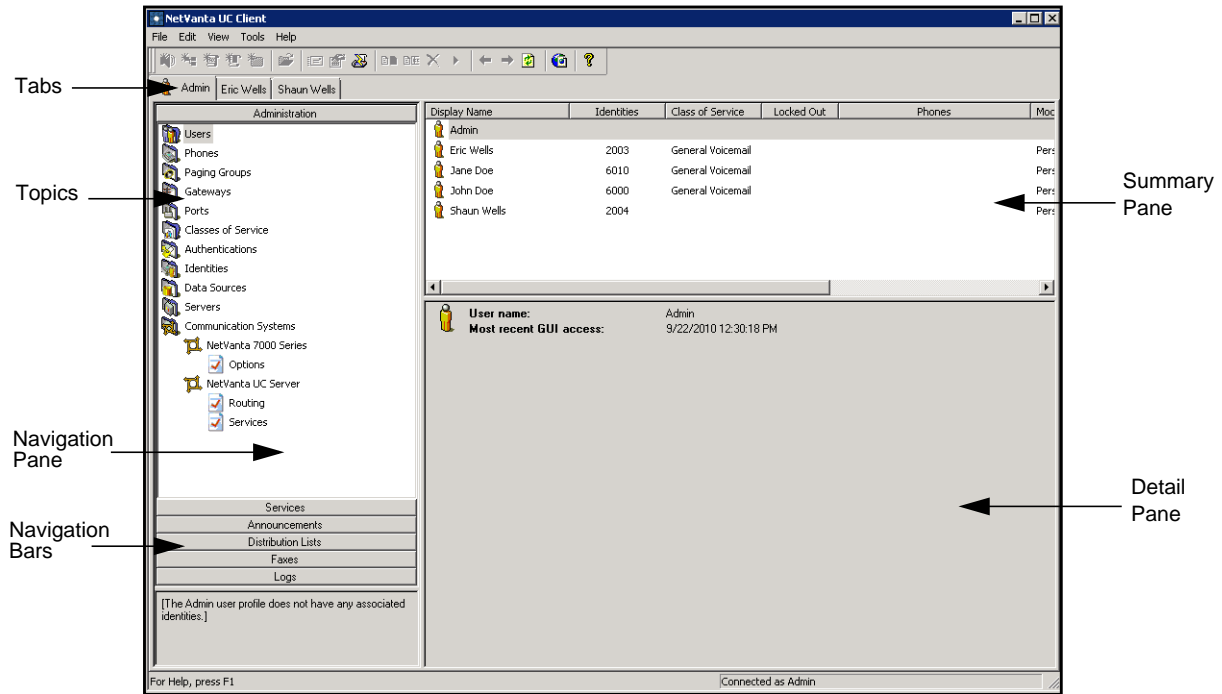### Creating a Call Recording Service

A call recording service must be created on the NetVanta UC Server in order for the Polycom call recording feature to record calls in the mailbox of the Polycom phone user.

> **NOTE** *If a call recording service already exists on the NetVanta UC Server, you can skip the steps outlined in this section. You must, however, activate the call recording service on a new identity as outlined in Creating an Identity for the Call Recording Service on page 6.*

To create a call recording service, follow these steps:

1. On the NetVanta UC Server computer, launch the NetVanta UC Client application, and log in as an administrator when prompted.

2. In the **Administration** navigation pane, select the **Services** navigation bar.

3.   In the **Services** navigation pane, select the **Shared** folder.
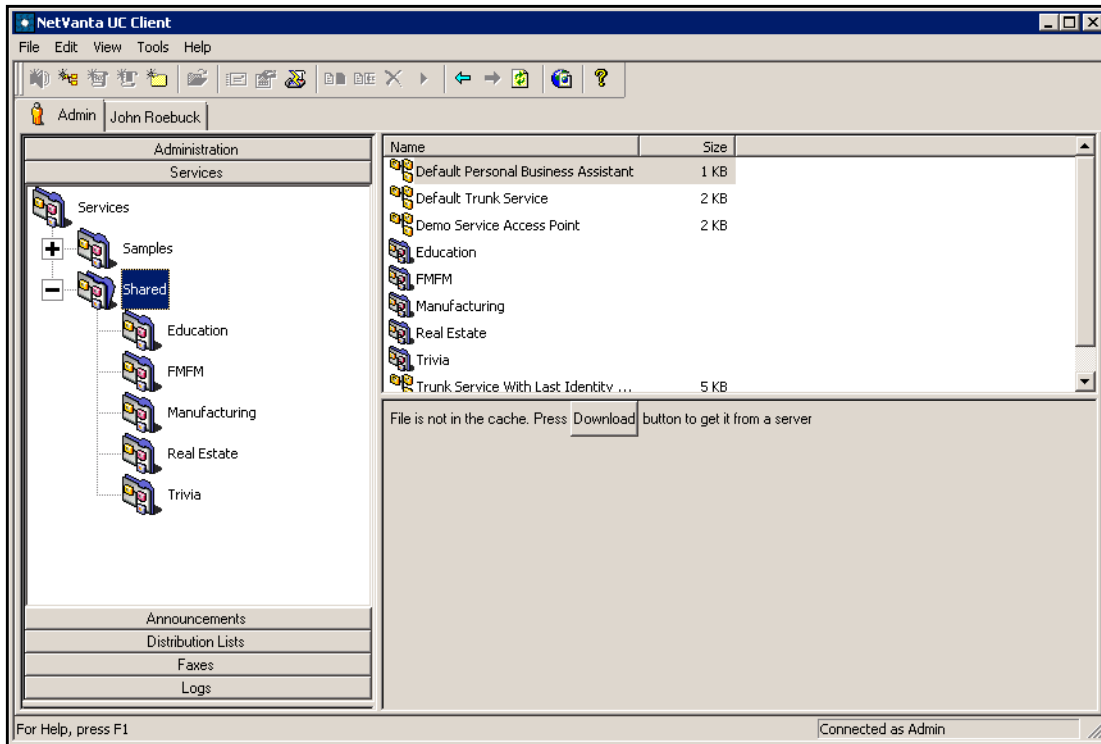
4.   Righ-click in the **Shared** summary pane, and select **New > Service**.
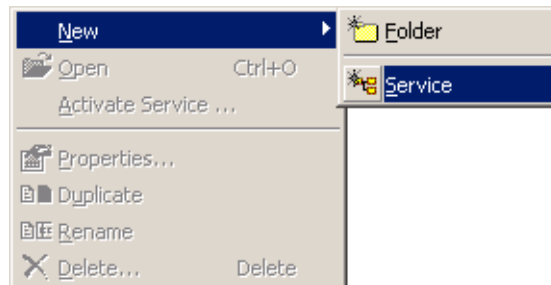

5.   Name the new service **Call Recording**. Then, double-click the **Call Recording** service to edit it using the **NetVanta UC Client Service Editor**.

6. In the **NetVanta UC Client Service Editor**, select the **Advanced** tab at the bottom of the element palette and drag the **Select Extension** element onto the canvas.
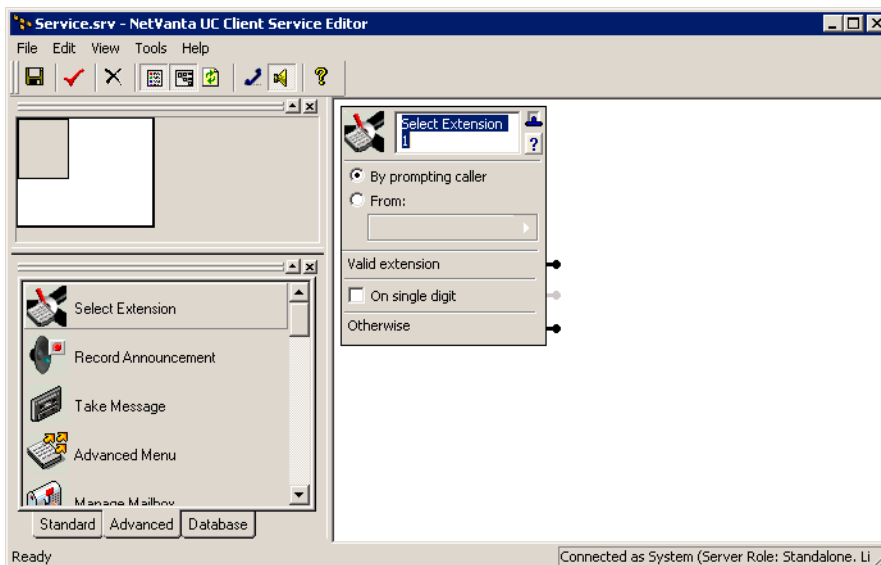

7. In the **Select Extension** element, select the **From** radio button, and use the drop-down menu to select **System Values > Caller-Id Number**.
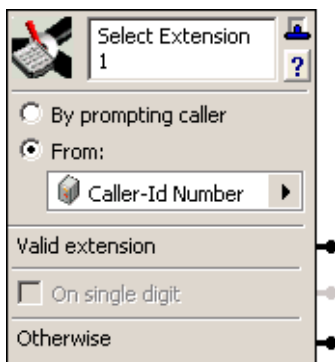
8. On the **Select Extension** element, right-click the connector pin beside **Valid extension** and select **Insert > Advanced > Take Message**. A **Take Message** element will appear attached to the **Valid extension** pin.
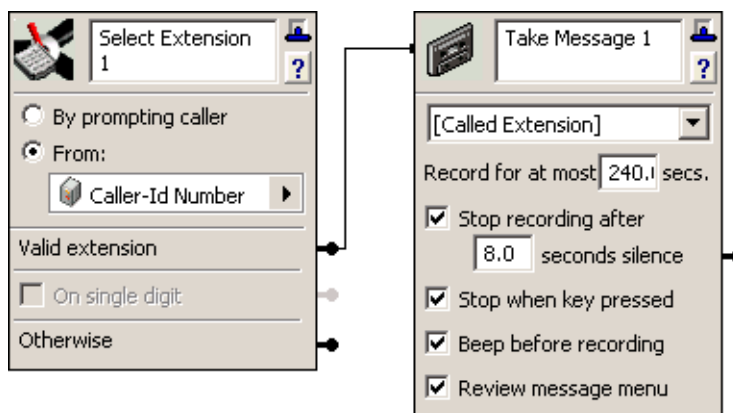
9. In the **Take Message** element, perform the following steps:

   a. Use the drop-down menu to select **[Selected Extension]**.

   b. **In the Record for at most ___ secs.** box, enter the desired number of seconds for the maximum length of a single recorded conversation. Be sure to choose a value in seconds that is large enough to accommodate the length of a conversation to be recorded by your users (**3600** seconds is usually sufficient).

   c. Disable (uncheck) all of the check boxes in the element.
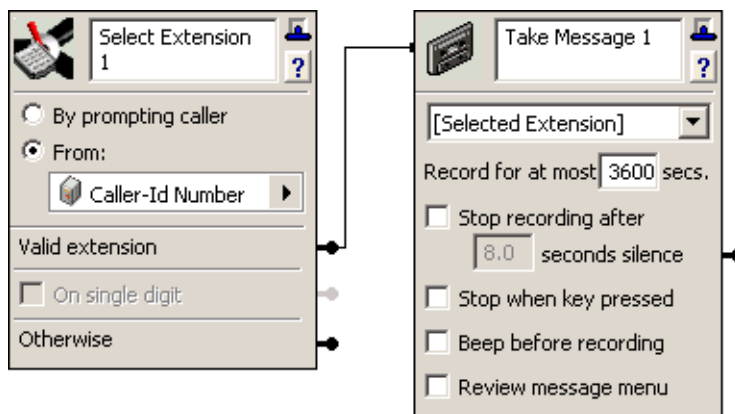
10. Save the service and close the service editor.

Creating an Identity for the Call Recording Service

An identity for the call recording service must be created on the NetVanta UC Server in order to activate the call recording service. To create an identity for the call recording service, follow these steps:

1. On the NetVanta UC Server computer, launch the NetVanta UC Client application, and log in as an administrator when prompted.

2. In the **Administration** navigation pane, select the **Administration** navigation bar. Then, select the **Identities** topic.
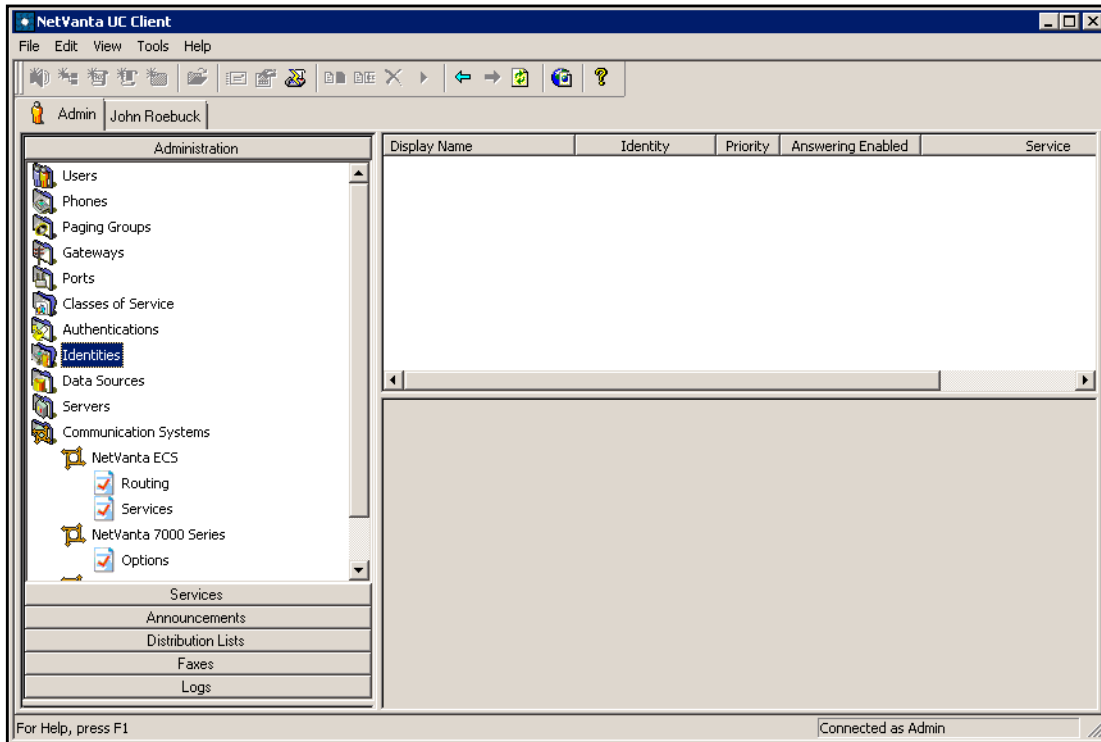
3. Right-click in the summary pane, and select **New Identity**. The **New Identity Wizard** welcome menu will appear.
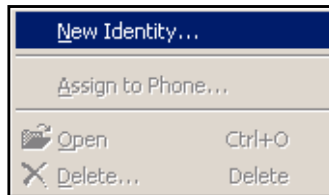
4. Select **Next** in the welcome menu, the **Select Identity Type** menu will appear.

5. In the Select Identity Type menu, perform the following steps:

    a. Select **NetVanta ECS** as the communication system using the drop-down menu.

    b. Select **Admin** as the user profile using the drop-down menu.

    c. Select the **Attendant service** radio button.

    d. Select **Next**. The **Attendant Identity** menu will appear.
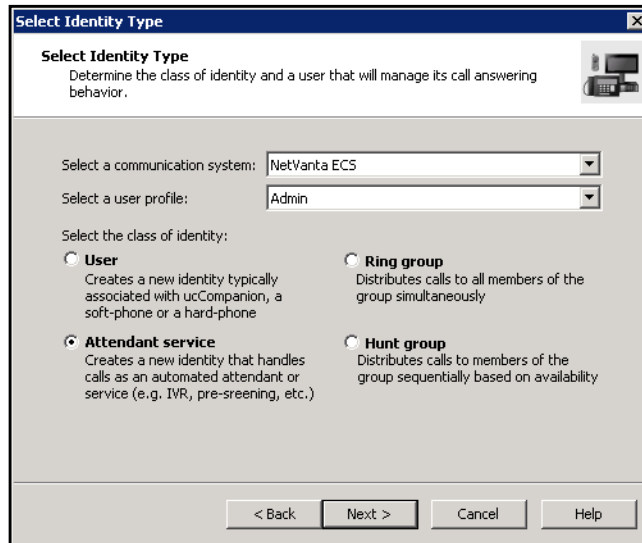
6. In the **Attendant Identity** menu, perform the following steps:

    a. Enter a name for the identity in the **Name** field.

    b. Enter **20000** in the **Address** field.

    c. Select the **Call Recording** service using the arrow next to the **Run Service** field. The default path to this service is **Services > Shared > Call Recording**.

    d. Select **Next**.
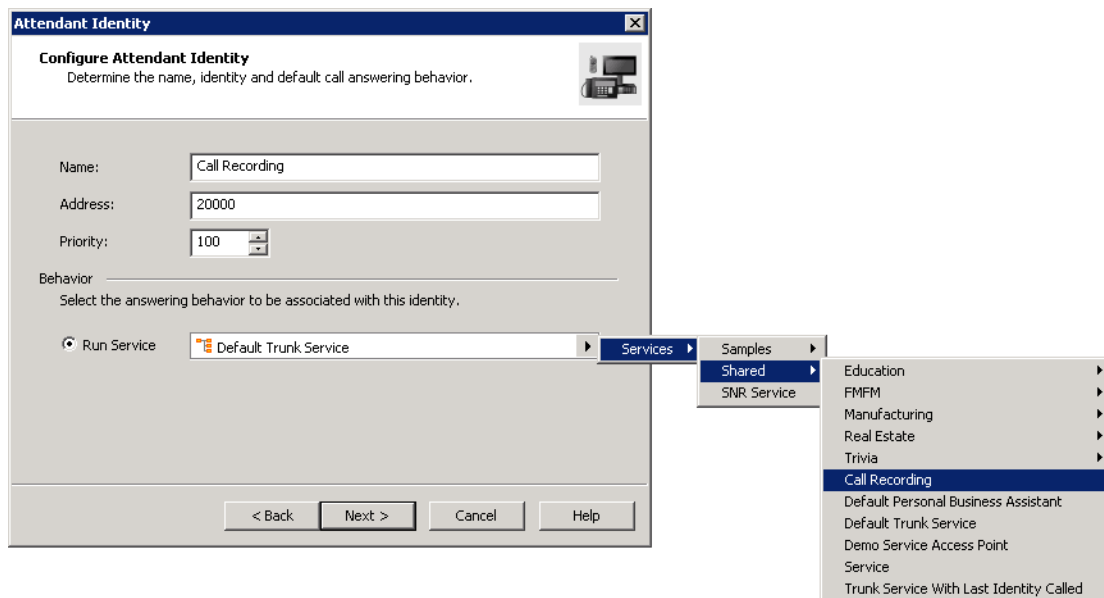
7. Select **Finish**. The call recording identity will be created.

Configuring Polycom Phone Configuration Files

The Polycom phone's configuration files need a minimal amount of customizing in order to support call recording on NetVanta UC Server. The custom softkey already defined in the Polycom phone configuration files must be activated. The steps required to activate the softkey in the Polycom configuration files differ based on the NetVanta UC Server version.

> NOTE   *You must have system administration privileges for the NetVanta UC Server computer in order to make the necessary configuration file changes outlined in this section.*

NetVanta UC Server Version 4.6.4 and Earlier

The following instructions describe how to modify the phone configuration file for call recording functionality for all Polycom SoundPoint IP phones. To modify Polycom phone configuration files for call recording, follow these steps:

1. Log in to the NetVanta UC Server computer as a user with administrative privileges.

2. Using Windows® Explorer, navigate to the **Polycom PhoneTypes** directory.
    The default path for 32-bit installations is:
    C:\Program Files\ADTRAN\NetVanta UC Server\Data\System\PhoneTypes\Polycom
    The default path for 64-bit installations is:
    C:\Program Files (x86)\ADTRAN\NetVanta UC Server\Data\System\PhoneTypes\Polycom

3. Using a standard text or XML editor, open the Polycom phone configuration file corresponding to the phone type on which you would like to enable call recording. Refer to the table below for the Polycom phone types and the name of the configuration file:

Polycom Phone Type	Filename
All Polycom SoundPoint IP phones excluding IP 320 and IP 330 models	allphones.cfg
Polycom SoundPoint IP 320 and IP 330	allphones_320-330.cfg
Polycom SoundPoint IP 335 (only in NetVanta UC Server version 4.6.4)	allphones_335.cfg

4. In the editor, change **feature.18.enabled="0"** to **feature.18.enabled="1"**.

5. If you chose an address other than **20000** when creating the call recording identity in *Creating an Identity for the Call Recording Service on page 6*, you must do the following:

    a. 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$$FDialpad**2**$$FDialpad**0**$$FDialpad**0**$$FDialpad**0**$$FDialpad**0**$$FSoftKey1$$Cpause1$$FConference$

  b. Modify the string so that you have **$FDialpad#$** (where **#** is a digit) for each digit in your call recording identity address.

6. Save the Polycom configuration file and close it.

7. Verify that the file was propagated automatically to the file transfer protocol (FTP) server by comparing the modified date of the edited file to the one located in the FTP server path. 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.*

8. To apply the changes immediately to the phones, you must restart them.

  a. To immediately restart the Polycom phones, log in to the NetVanta UC Client as a user with administrative privileges. In the **Administration** navigation pane, select the **Phones** topic. In the summary pane, select the Polycom phones you want to reboot, right-click the selection, and select **Reload configurations**.

  b. If you do not wish to immediately disrupt your services, the changes made to the configuration file will automatically propagate the next time the Polycom phone checks for changes (the default is 3 a.m. every day).

9. Repeat steps 3 through 8 for the configuration files of all phone types that require call recording functionality.

Configuring Call Recording for NetVanta UC Server Versions 5.0.1 to 5.3.0

The following instructions describe how to modify the phone configuration file for call recording functionality for all supported Polycom phones. To modify Polycom phone configuration files for call recording, follow these steps:

1. Log in to the NetVanta UC Server computer as a user with administrative privileges.

2. Using Windows Explorer, navigate to the **Polycom PhoneTypes** directory.
The default path for 32-bit installations is:
C:\Program Files\ADTRAN\NetVanta UC Server\Data\System\PhoneTypes\Polycom
The default path for 64-bit installations is:
C:\Program Files (x86)\ADTRAN\NetVanta UC Server\Data\System\PhoneTypes\Polycom

3. Using a standard text or XML editor, open the Polycom phone configuration file corresponding to the phone type on which you would like to enable call recording. Refer to the table below for the Polycom phone types and the name of the configuration file:

Polycom Phone Type	Filename
All Polycom SoundPoint IP phones excluding IP 301, 320, 330, 430, 501, 600, and 601	allphones.cfg
Polycom SoundPoint IP 320 and 330	allphones_320-330.cfg
Polycom SoundPoint IP 430	allphones_430.cfg
Polycom SoundPoint IP 301, 501, 600, and 601 Polycom SoundStation 4000	allphones_legacy.cfg
Polycom VVX Business Media Phones	allphones_vvx.cfg

4. In the editor, change **feature.enhancedFeatureKeys.enabled="0"** to **feature.enhancedFeatureKeys.enabled="1"**.

5. If you are editing either the **allphones_legacy.cfg** or the **allphones_430.cfg** configuration file, change **feature.18.enabled="0"** to **feature.18.enabled="1"**.

6. If you chose an address other than **20000** when creating the call recording identity in *Creating an Identity for the Call Recording Service on page 6*, you must do the following:

    a. 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$$FDialpad**2**$$FDialpad**0**$$FDialpad**0**$$FDialpad**0**$$FDialpad**0**$$FSoftKe y1$$Cpause1$$FConference$

    b. Modify the string so that you have **$FDialpad#$** (where **#** is a digit) for each digit in your call recording identity address.

7. Save the Polycom configuration file and close it.

8. Verify that the file was propagated automatically to the FTP server by comparing the modified date of the edited configuration file to the one located in the FTP server path. 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.*

9. To apply the changes immediately to the phones, you must restart them.

    a. To immediately restart the Polycom phones, log in to the NetVanta UC Client as a user with administrative privileges. In the **Administration** navigation pane, select the **Phones** topic. In the

summary pane, select the Polycom phones you want to reboot, right-click the selection, and select **Reload configurations**.

b. If you do not wish to immediately disrupt your services, the changes made to the configuration file will automatically propagate the next time the Polycom phone checks for changes (the default is 3 a.m. every day).

10. Repeat steps 3 through 8 for the configuration files of all phone types that require call recording functionality.

Configuring Call Recording for NetVanta UC Server Versions 5.4.0 and Later

The following instructions describe how to modify the phone configuration file for call recording functionality for all supported Polycom phones.

> **NOTE**
>
> *In NetVanta UC Server version 5.4.0, support was added for ADTRAN-Polycom co-branded IP phones. The steps in this section must be performed on the phone configuration files located in both the **Polycom** and **ADTRAN_SP** PhoneType directories. Otherwise, the configuration file may be overwritten.*

To modify Polycom phone configuration files for call recording, follow these steps:

1. Log in to the NetVanta UC Server computer as a user with administrative privileges.

2. Using Windows Explorer, navigate to the **Polycom PhoneTypes** directory.
   The default path for 32-bit installations is:
   C:\Program Files\ADTRAN\NetVanta UC Server\Data\System\PhoneTypes\Polycom
   The default path for 64-bit installations is:
   C:\Program Files (x86)\ADTRAN\NetVanta UC Server\Data\System\PhoneTypes\Polycom

3. Using a standard text or XML editor, open the Polycom phone configuration file corresponding to the phone type on which you would like to enable call recording. Refer to the table below for the Polycom phone types and the name of the configuration file:

Polycom Phone Type	Filename
All Polycom SoundPoint IP phones excluding IP 301, 320, 330, 430, 501, 600, and 601	allphones.cfg
Polycom SoundPoint IP 320 and 330	allphones_320-330.cfg
Polycom SoundPoint IP 430	allphones_430.cfg
Polycom SoundPoint IP 301, 501, 600, and 601 Polycom SoundStation 4000	allphones_legacy.cfg
Polycom VVX Business Media Phones	allphones_vvx.cfg

4. In the editor, change **softkey.5.enable="0"** to **softkey.5.enable="1"** and **softkey.6.enable="0"** to **softkey.6.enable="1"**.

5. If you chose an address other than **20000** when creating the call recording identity in *Creating an Identity for the Call Recording Service on page 6*, you must do the following:

    a. 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$$FDialpad**2**$$FDialpad**0**$$FDialpad**0**$$FDialpad**0**$$FDialpad**0**$$FSoftKey1$$Cpause1$$FConference$

    b. Modify the string so that you have **$FDialpad#$** (where **#** is a digit) for each digit in your call recording identity address.

6. Save the Polycom configuration file and close it.

7. Using Windows Explorer, navigate to the **ADTRAN_SP PhoneTypes** directory.
The default path for 32-bit installations is:
C:\Program Files\ADTRAN\NetVanta UC Server\Data\System\PhoneTypes\ADTRAN_SP
The default path for 64-bit installations is:
C:\Program Files (x86)\ADTRAN\NetVanta UC Server\Data\System\PhoneTypes\ADTRAN_SP

8. Using a standard text or XML editor, open the phone configuration file of the same name as the Polycom configuration file you previously edited for call recording functionality. For example, if you edited the **allphones.cfg** Polycom phone configuration file, open the **allphones.cfg** ADTRAN_SP configuration file using the editor.

9. Change **softkey.5.enable="0"** to **softkey.5.enable="1"** and **softkey.6.enable="0"** to **softkey.6.enable="1"**.

10. If you chose an address other than **20000** when creating the call recording identity in *Creating an Identity for the Call Recording Service on page 6*, you must do the following:

    a. 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$$FDialpad**2**$$FDialpad**0**$$FDialpad**0**$$FDialpad**0**$$FDialpad**0**$$FSoftKey1$$Cpause1$$FConference$

    b. Modify the string so that you have **$FDialpad#$** (where **#** is a digit) for each digit in your call recording identity address.

11. Save the **ADTRAN_SP** configuration file and close it.

12. Verify that the file was propagated automatically to the FTP server by comparing the modified date of the edited configuration file to the one located in the FTP server path. 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.*

13. To apply the changes immediately to the phones, you must restart them.

    a. To immediately restart the Polycom phones, log in to the NetVanta UC Client as a user with administrative privileges. In the **Administration** navigation pane, select the **Phones** topic. In the

summary pane, select the Polycom phones you want to reboot, right-click the selection, and select **Reload configurations**.

b. If you do not wish to immediately disrupt your services, the changes made to the configuration file will automatically propagate the next time the Polycom phone checks for changes (the default is 3 a.m. every day).

14. Repeat steps 3 through 13 for the configuration files of all phone types that require call recording functionality.