

REVCORD

SIP Trunk Recording Configuration For CUCM 6.X



MULTI-MEDIA LOGGING SYSTEMS

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TABLE OF CONTENTS

INTRODUCTION	2
IMPLEMENT SIP TRUNK RECORDING	3
SETTING UP SIP TRUNK RECORDING	4
CONFIGURING THE CUCM	5
Creating The SIP Trunk	5
Creating The Route Pattern	6
Creating A Recording Profile	7
Enabling Phones for Recording	8
Adding Users For Recording And Monitoring	9
Configuring Beep Tone For Recording And Monitoring	10
Other Settings	10

INTRODUCTION

This manual describes the steps required to configure CISCO UNIFIED COMMUNICATION MANAGER (CUCM 6.X) to record IP phones using Cisco's Duplicate Media Streaming (DMS) technology via SIP trunking.

The instructions in this guide assume that you have some experience operating a personal computer and working with Microsoft Windows as well as experience with the CUCM versions 6.X. If you have any questions pertaining to the Windows operating system, refer to your Microsoft manual or Microsoft online help.

Please note that this document is for reference only and provides only general guidance. Your CUCM expert should verify the steps below relating to the CUCM configuration.

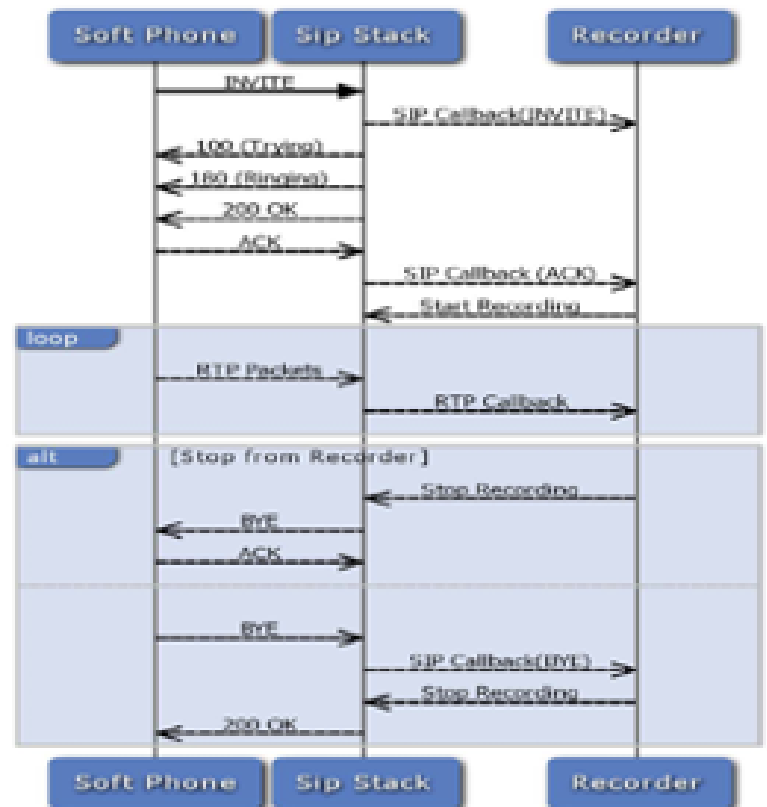
Please note that the CUCM can be in a SCCP or SIP format. In addition, for Customer (FarEnd) DN (Director Number) information, the SIP Header of the Invite that is sent to the SIP recorder contains only the information (DN/Ci) of the Agent (NearEnd). For the Customer Direct Number, you must use full JTAPI. JTAPI is not available at this time.

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IMPLEMENT SIP TRUNK RECORDING

Trunk recording is similar to the standard VoIP recording except that instead of using Network Sniffing (port mirroring), it will use a SIP interface that will actively interact with PBX using SIP protocol and receive audio directly from the PBX/Phone for recording. The SIP interface (revcord.dll) is developed by a third party and it is the core of SIP call processing and RTP Extraction.

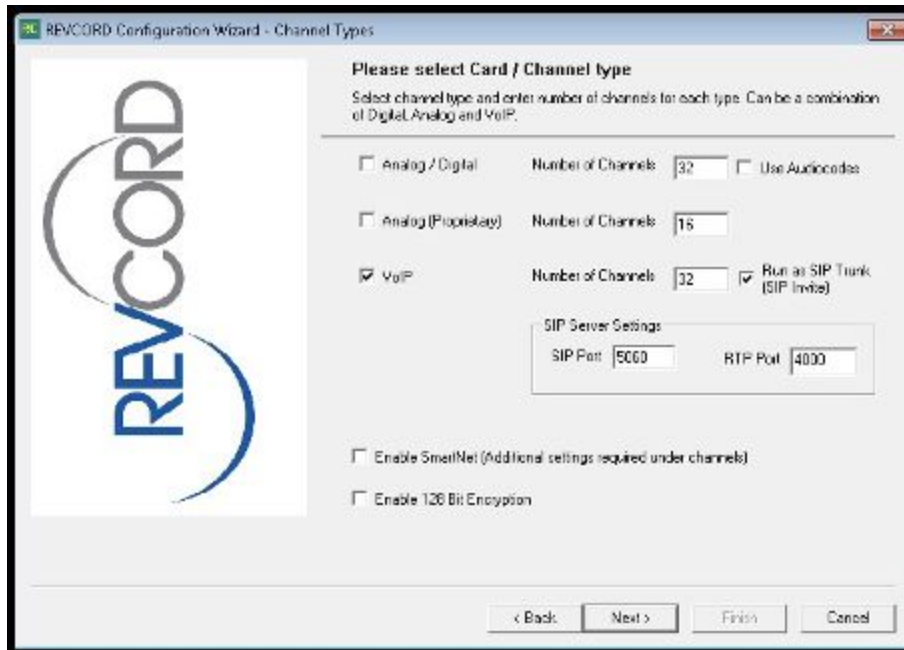
As the Call Flow diagram shows, when an invite request is received, the SIP UA sends a SIP message to the recorder informing it about the incoming call, simultaneously a 180 Ringing response and thereafter a 200 OK response is sent to the caller side informing about successful establishment of the call. The caller on receiving 200 OK sends back an ACK response. ON receiving ACK, the SIP UA sends an ACK call back to the recorder. After the successful establishment of the session, the recorder starts recording. When a BYE response is sent from the caller side, the SIP UA informs the recorder about it by a call back message and the recorder stops recording.



During the session, all the RTP packets will be routed towards the recorder through an RTP call back. During the call, anytime if Revcord recorder fails to do a particular task related to recording or intends to stop recording then it sends STOP recording message to SIP stack component which in turn sends BYE to the remote party and terminates the call.

SETTING UP SIP TRUNK RECORDING

In the installation wizard at the Channel Type page there is a check box "Run As SIP Trunk". It will instruct the Revcord software to use Active Recording based on SIP commands from PBX. Other Configurations like setting the IP address or MAC address in the Channel Settings remain the same both for active or passive recording except that the trigger for the channel must be set to SIP.



The screenshot shows the "REVCORD Configuration Wizard - Channel Types" dialog box. On the left is the REVCORD logo. The main area is titled "Please select Card / Channel type" and contains the following options:

- Analog / Digital: Number of Channels: 32, Use Audiodcodes
- Analog (Proprietary): Number of Channels: 16
- VoIP: Number of Channels: 32, Run as SIP Trunk (SIP Invite)

Below these options is a "SIP Server Settings" section with two input fields: "SIP Port" set to 5060 and "RTP Port" set to 4000.

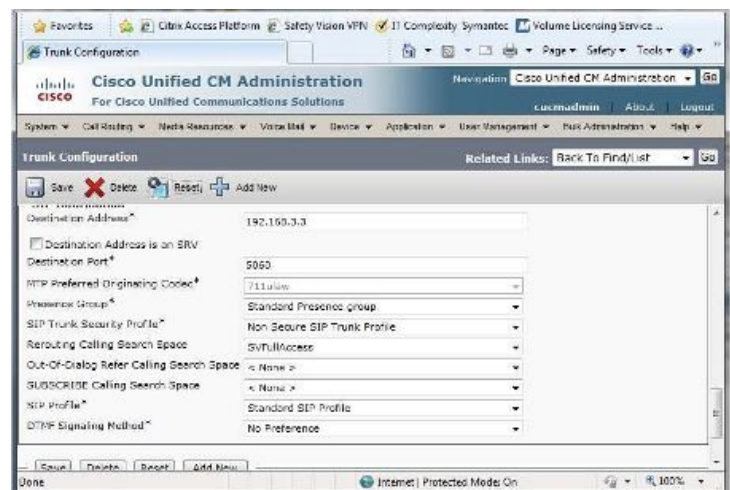
At the bottom of the dialog are four buttons: "< Back", "Next >", "Finish", and "Cancel".

CONFIGURING THE CUCM

Please note that each task below must be completed for a proper configuration.

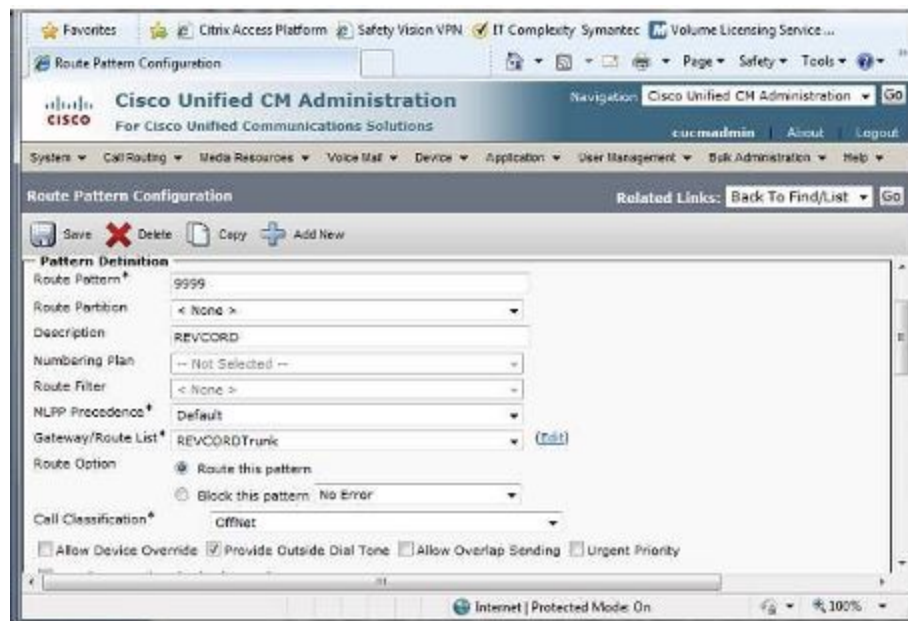
Creating the SIP Trunk

1. From the **System** menu, select **System** → **Security Profile** → **SIP Trunk Security Profile**
 - a. Change the setting to **Outgoing**
 - b. Change the Transport Type to UDP and
 - c. Save
2. From the **Device** menu, select **Trunk**
3. Click **Add New**, select SIP Trunk and Device Protocol as SIP
 - a. Click **Next**.
 - b. Give the new Trunk a name (e.g. REVCORDTrunk) and select **Default** as the Device Pool
 - c. Enter the IP address of the Revcord Recorder that will be recording these calls. Leave the **Destination Port as 5060** unless instructed otherwise
 - d. The SIP Trunk Security Profile should be set to **Non Secure SIP Trunk Profile**
 - e. The SIP Profile should be set to **Standard SIP Profile**
 - f. Save
4. Reset as requested



Creating the Route Pattern

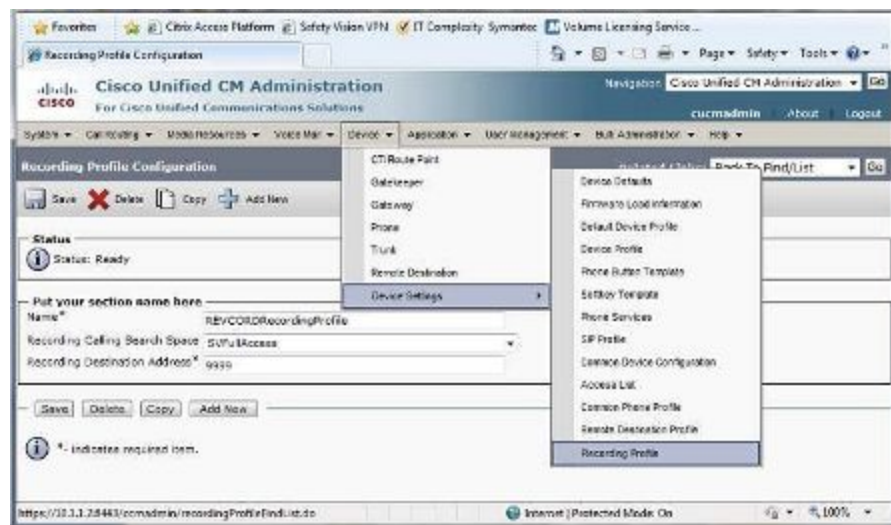
1. Create a route pattern for the recorder SIP trunk.
 - a. The Recording Destination Address in the recording profile must match this pattern
 - b. Select the SIP trunk that points to the recorder, or select a route list of which the recorder is a member
2. From the **Call Routing** menu select **Route/Hunt** and then **Route Pattern**



3. Click **Add New**.
 - a. Enter a suitable, unused Route Pattern (e.g. 9999) and select the Gateway/Route list that was created earlier (e.g. REVCORDTrunk)
 - b. **Save**
 - i. An informational message may be displayed, just click OK

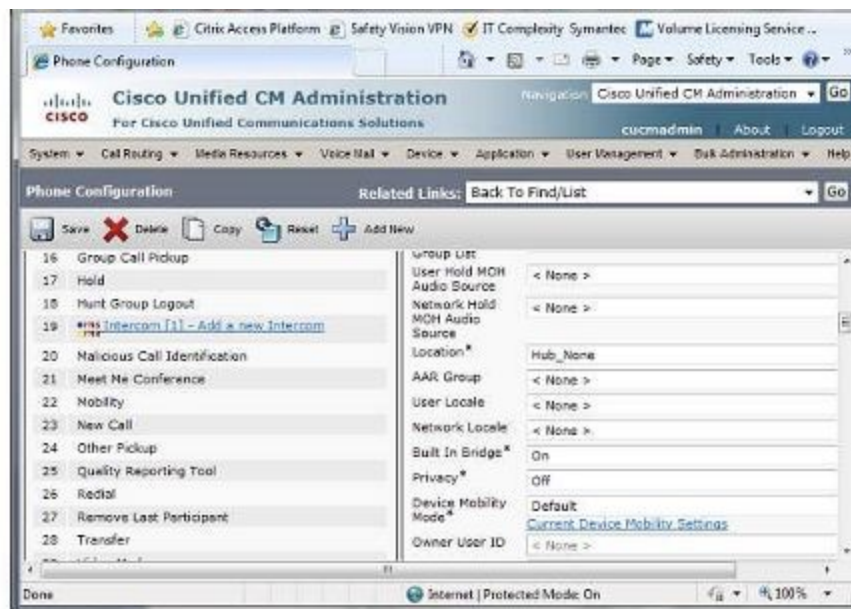
Creating A Recording Profile

1. Open the **Device** menu → **Device Settings** → **Recording Profile**
2. Enter a suitable name for this profile (e.g. REVCORDRecordingProfile) and set the destination **Route Pattern** and **Calling Search Space** that was created earlier (e.g. 9999)
3. **Save**



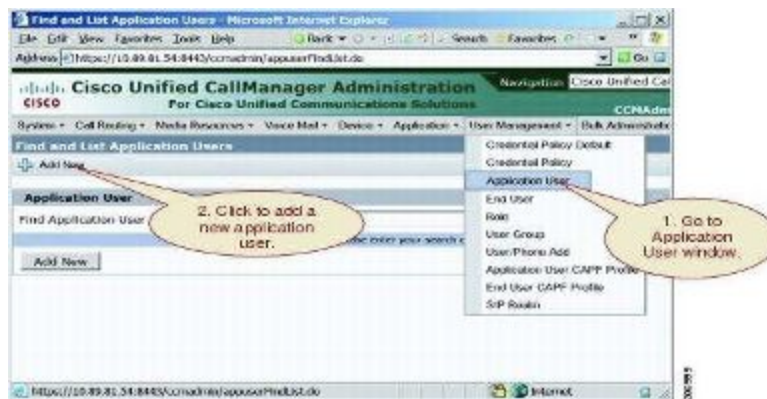
Enabling Phones for Recording

1. Open the **Device** menu, select **Phone**
 - a. Click **Find** to show the list of phones.
2. Click on a phone that you wish to enable for recording.
3. Set the **Built in Bridge (BIB)** to **On** and **Privacy** to **Off**
 - a. Save

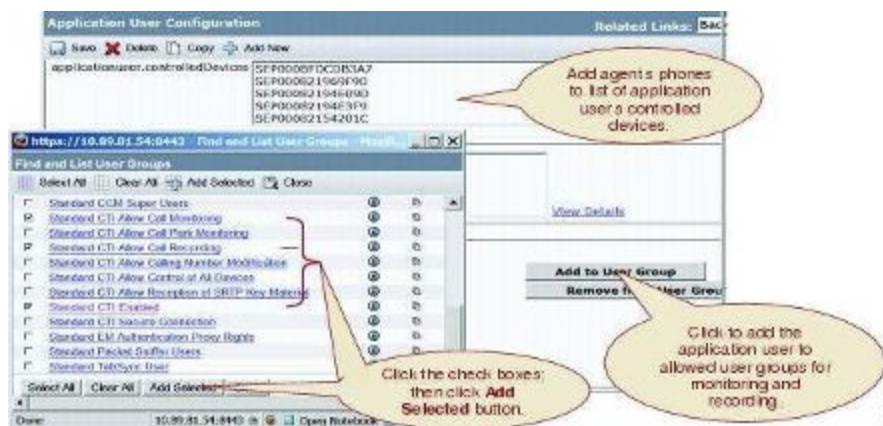


4. Do not reset the phone just yet; instead click the line on the phone you wish to record
5. Set the **Call Recording Option** to **Automatic Call Recording Enabled**.
6. Set the **Recording Profile** to the one created earlier (e.g., REVCORDRecordingProfile)
7. **Save**
8. Reset the phone by pressing the **Reset** button and following the prompts

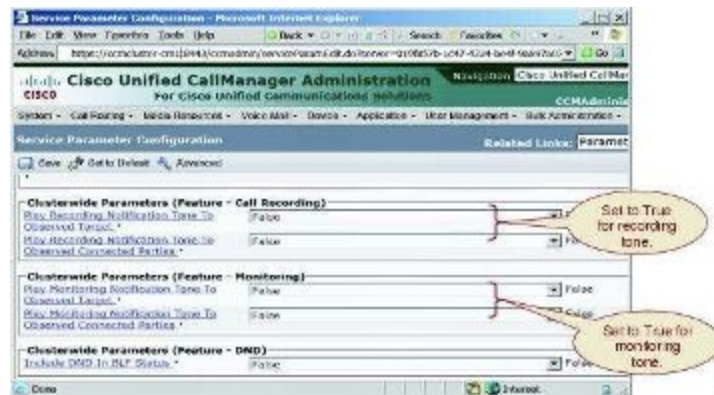
Adding Users For Recording And Monitoring



Use the **User Management** → **Application User** menu option in Cisco Unified Communications Manager Administration to perform the necessary configuration.



Configuring Beep Tone For Recording And Monitoring



Use the **System** → **Service Parameters** menu option in Cisco Unified Communications Manager Administration to perform the necessary configuration.

Other Settings

1. To disable any of the codec that was not supported by our software. This can be done across the system, by selecting the **System** menu, **Enterprise Parameter's** and then changing the **Advertise** (eg, G.722) codec to **Disabled**
2. Note: G.722 codec is supported by our software, this was just used for reference. Currently we are supporting G.711, G.722, G.723 and G.729 codecs
3. Reset the phones to be recorded so that they do not advertise G.722