

Configuration Note for Rauland Responder 5 and Cisco CallManager

1. Rauland Responder 5 Setup

1.1 Configure Brekeke SIP Server Connectivity

In Rauland RGS Setup -> [Phone] page:

[SIP Proxy Address] = x.x.x.x (Brekeke server IP address)

[SIP Registration Server] = x.x.x.x (Brekeke server IP address)

1.2 Disable session-timer settings at Rauland system

2. Cisco Unified Communications Manager Setup

2.1 Enable the MTP (Media Termination Point Required)

To include the SDP (Session Description Protocol) body in the INVITE sent from the CUCM (Cisco Unified Communications Manager), check the [Media Termination Point Required] box under the [Device Information] section in the [Trunk Configuration]. (Figure.1)

Product:	SIP Trunk
Device Protocol:	SIP
Trunk Service Type	None(Default)
Device Name*	<input type="text"/>
Description	<input type="text"/>
Device Pool*	<input type="text"/>
Common Device Configuration	< None >
Call Classification*	Use System Default
Media Resource Group List	<input type="text"/>
Location*	Hub_None
AAR Group	< None >
Tunneled Protocol*	None
QSIG Variant*	No Changes
ASN.1 ROSE OID Encoding*	No Changes
Packet Capture Mode*	None
Packet Capture Duration	0
<input checked="" type="checkbox"/> Media Termination Point Required	
<input checked="" type="checkbox"/> Retry Video Call as Audio	
<input type="checkbox"/> Path Replacement Support	

Figure 1: Device Information, Trunk Configuration, Cisco Unified CM Administration

SIP Information		
Destination		
<input type="checkbox"/> Destination Address is an SRV		
1*	<input type="text"/>	<input type="text"/>
	Destination Address IPv6	Destination Port
		5060
MTP Preferred Originating Codec*	711ulaw	
BLF Presence Group*	Standard Presence group	

Figure 2: SIP Information, Trunk Configuration, Cisco Unified CM Administration

2.2 Set the Destination Address

To send and receive an INVITE between the CUCM and Brekeke SIP Server, set Brekeke SIP Server's IP address in the [Destination Address] field under the [SIP Information] section in the [Trunk Configuration]. (Figure 2)

2.3 Set the MTP Preferred Originating Codec

To use G.711 u-law as the audio codec, select "711ulaw" from the [MTP Preferred Originating Codec] field under the [SIP Information] section in the [Trunk Configuration]. (Figure 2)

2.4 Disable the SIP Session Timer

To avoid sending a re-INVITE from the CUCM, disable the SIP Session Timer in the CUCM.

3. Brekeke SIP Server Setup

3.1 Configure the SIP proxy

- 1) Navigate to Brekeke SIP Server Admintool > [Configuration] -> [SIP] page.
- 2) Under the [SIP exchanger] section, set the [B2B-UA mode] field to "on."
- 3) Under the [Authentication] section, set the [REGISTER] and [INVITE] fields to "off."

3.2 Configure the RTP relay

- 1) Navigate to Brekeke SIP Server Admintool > [Configuration] -> [RTP] page.
- 2) Set the [RTP relay] field to "on"
- 3) Set the [RTP relay UA on this machine] field to "auto"
- 4) Set the [Port mapping] field to "sdp."
- 5) Set the [Send UA's remote address] field
 - to "no" for Brekeke SIP Server since v3.3.3.x)
 - to "auto" for Brekeke SIP Server before v3.3.3.x

3.3 Set External IP Pattern

- 1) Navigate to Brekeke SIP Server Admintool > [Configuration] -> [System] page
- 2) Under the [Network] section, set Rauland Responder 5 IP address pattern in the field [External IP address pattern]

Example: Rauland Responder 5 are all with IP addresses starting with 10.10.1.x

Set [External IP address pattern] field as `^10\.10\.1\..+`

3.4 DialPlan

- 1) Navigate to the [Dial Plan] -> [Rule] page.
- 2) Add the new rules as below:

Name	Matching Patterns	Deploy Patterns
From Cisco	<code>\$addr = <CISCO_IP></code> <code>\$request = ^INVITE</code> <code>To = sip:(.+)</code>	<code>To = sip:%1@</code> <code>\$transport = udp</code> <code>Alert-Info =</code> <code>P-Location =</code>

Name	Matching Patterns	Deploy Patterns
To Cisco	<code>\$request = ^INVITE</code> <code>\$registered = false</code> <code>To = sip:(.+)</code>	<code>Session-Expires =</code> <code>Min-SE =</code> <code>To = sip:%1<CISCO_IP></code>

Replace "<CISCO_IP>" in above Dial Plan rules with the IP address used by the CUCM primary handler (Cisco Unified Communications Manager).

3.5 Restart Brekeke SIP Server

- 1) Navigate to the [Status] -> [Start/Shutdown] page.
- 2) Click the [Restart] button.

4. Troubleshooting

4.1 Cannot make a call to Rauland Responder 5

- Set Brekeke SIP Server's IP address in the Rauland Setup.
Refer to "1. Rauland Responder 5 Setup."
- Set the MTP in the Cisco Unified Communications Manager.
Refer to "2.1 Enable the MTP (Media Termination Point Required)."
- Set Brekeke SIP Server's IP address in the Cisco Unified Communications Manager.
Refer to "2.2 Set the Destination Address."
- Set the "From Cisco" DialPlan rule in Brekeke SIP Server.
Refer to "3.4 DialPlan."
- Disable the INVITE Authentication in Brekeke SIP Server.
Refer to "3.1 Configure the SIP proxy."

4.2 Cannot make a call to Cisco Unified Communications Manager

- Set Brekeke SIP Server's IP address in the Rauland Setup.
Refer to "1. Rauland Responder 5 Setup."
- Set Brekeke SIP Server's IP address in the Cisco Unified Communications Manager.
Refer to "2.2 Set the Destination Address."
- Set the "To Cisco" DialPlan rule in Brekeke SIP Server.
Refer to "3.4 DialPlan."
- Disable the INVITE Authentication in Brekeke SIP Server.
Refer to "3.1 Configure the SIP proxy."

4.3 No Audio or One-Way Audio

- Set the G.711 u-law in the Cisco Unified Communications Manager.
Refer to “2.3 Set the MTP Preferred Originating Codec.”

- Set the RTP-Relay in Brekeke SIP Server.
Refer to “3.2 Configure the RTP relay”

- Set external IP pattern
Refer to “3.3 Set External IP Pattern”

Related wiki pages

- For Ascom:
<http://wiki.brekeke.com/wiki/Ascom-AA60>