

Configuration Note for Rauland Responder 5 and Avaya Session Manager

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. Avaya Session Manager Setup

2.1 Enable SDP

To include the SDP (Session Description Protocol) body in the INVITE sent from the Avaya Session Manager, set the following:

```
-----  
Direct IP-IP Audio Connections: n  
IP Audio Hairpinning: y  
-----
```

2.2 Set the Destination Address

To send and receive an INVITE between the Avaya and Brekeke SIP Server, set Brekeke SIP Server's IP address in Avaya/Nortel PBX's [Routing Service Manager] -> [Configuration] -> [Gateway Endpoints] page

2.3 Set Far-end Domain

To accept the calls forwarded from Brekeke SIP Server, at Avaya session manager, set "Far-end Domain" with <Brekeke SIP Server IP address>

2.4 Set Proper Codec

Set G.711 u-law as the audio codec, with 20ms payload at Avaya system

2.5 Disable the SIP Session Timer

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

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 Avaya	<code>\$addr = <AVAYA_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 Avaya	<code>\$request = ^INVITE</code> <code>\$registered = false</code> <code>To = sip:(.+)</code>	<code>Session-Expires =</code> <code>Min-SE =</code> <code>To = sip:%1<AVAYA_IP></code>

Replace "<Avaya_IP>" in above Dial Plan rules with the IP address used by the Avaya primary handler.

3.5 Define Session Plugin

a. If Avaya/Nortel cannot send RTP packets, add the following lines to the both of above dial plan rules [Deploy Patterns]

```
-----  
[Deploy Patterns]  
$session = sdp  
&sdp.audio.a.1 = ptime:20  
-----
```

b. For Avaya/Nortel CS1000 version 7.x, add the following dial plan rule to let Brekeke SIP Server handle re-invite on behalf of Rauland

Add the following dial plan rule on the top of other dial plan rules

Name	Matching Patterns	Deploy Patterns
INV plugin	<code>\$request = ^INVITE</code>	<code>\$session = rfc3264handler block \$continue = true</code>

3.6 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 SDP in the INVITE sent from Avaya.
Refer to "2.1 Enable SDP."
- Set Brekeke SIP Server's IP address in the Avaya Session Manager.
Refer to "2.2 Set the Destination Address."
- Set the "From Avaya" DialPlan rule in Brekeke SIP Server.
Refer to "3.4 DialPlan."
- Set the "INV plugin" DialPlan rule in Brekeke SIP Server
Refer to "3.5 Define Session Plugin" - b
- Disable the INVITE Authentication in Brekeke SIP Server.
Refer to "3.1 Configure the SIP proxy."

4.2 Cannot make a call to Avaya Session 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 Avaya Session Manager.
Refer to "2.2 Set the Destination Address" and "2.3 Set Far-end Domain"
- Set the "To Avaya" 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 Avaya Session Manager.
Refer to “2.4 Set Proper 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”

- Set session plugin to DialPlan rules “From Avaya” and “To Avaya” in Brekeke SIP Server
Refer to “3.5 Define Session Plugin” - a

Related links

- Avaya-Rauland Application Note
<http://support.avaya.com/css/P8/documents/100157090>
- For Ascom:
<http://wiki.brekeke.com/wiki/Ascom-AA60>
- For Avaya:
<http://wiki.brekeke.com/wiki/Avaya-PBX>
- For Nortel:
<http://wiki.brekeke.com/wiki/Nortel-CS1000>