

GENERAL INFORMATION:**At Avaya:**

1. Include SDP in the invite, otherwise the call will be rejected by Rauland system

For settings at Avaya to add SDP in Avaya re-invite

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

2. Add Brekeke SIP Server's IP address at Avaya/Nortel PBX's [Routing Service Manager] -> [Configuration] -> [Gateway Endpoints] page
3. When Avaya uses TCP transport and sends TCP segments, some version Windows OS and Java may not reassemble the TCP segments correctly, which makes call cannot be established between Avaya and Rauland

Please install "TFplugin.jar" as following to solve the issue

- ```

```
1. download Plugin zip file from link below  
<http://www.brekeke-sip.com/download/oss/dl/TFplugin-1028.zip>
  2. unzip the download file and put "TFplugin.jar" under  
C:\Program Files\Brekeke\proxy\common\lib\
  3. Restart Brekeke server machine.
- ```
-----
```

4. At Avaya session manager, set "Far-end Domain" with <Brekeke SIP Server IP address> Otherwise, Avaya will reply "403 Forbidden(Invalid domain in From header)" for the calls forwarded from Brekeke SIP Server
5. Disable session-timer settings at Avaya devices
6. Use codec G711U with 20ms payload-time at Avaya device which make/receive call with Rauland system. Rauland system only supports G711u codec with 20ms payload-time
7. Rauland cannot accept call with 24 and above characters callerID in the INVITE packets. Set caller ID with 24 characters or less

At Rauland:

1. Disable session-timer settings at both Rauland system and devices work with Rauland
2. 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)

At Brekeke SIP Server:

1. At Brekeke SIP server admintool GUI > [Configuration] > [SIP],
 set [Authentication] -> [REGISTER] and [INVITE] off
 and restart Brekeke SIP Server from Admintool
2. Rauland uses different ports for sending and receiving RTP packets
 Set at Brekeke SIP server as following to let Brekeke SIP server relay the RTP packets

```

-----
1. Go to the [Configuration] > [RTP] page.
2. Set [RTP relay] = "on"
3. Set [RTP relay UA on this machine]] = "auto"
4. Set [Port mapping] = "sdp"
-----

```

restart Brekeke SIP Server from Admintool

3. If Avaya/Nortel cannot send RTP packets, add the following lines to the dial plan rules used for calls from and to Avaya/Nortel
 then click [Apply Rules] button after adding following lines to related dial plan rules.

```

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

```

4. Dial plan rule is needed for sending Rauland calls to Avaya/Nortel side
 At Brekeke SIP Server Admintool GUI > [Dial Plan], create new rule as below

```

-----
[Matching Patterns]
$request = ^INVITE
-----

```

```
$registered = false
```

```
To = sip:(.+)
```

```
[Deploy Patterns]
```

```
To = sip:%1@Avaya_IP
```

```
-----
```

Replace "Avaya_IP" with IP address used by Avaya and click [Apply Rules] button after adding above dial plan rule.

5. Rauland cannot support following header in the INVITE request packets

- Alert-Info
- P-Location

If above headers are used by caller, use one of the following solutions

- Disable the usage of above header from caller side device settings
- Create dial plan rule at Brekeke SIP server to remove the headers from the INVITE, dial plan rule is like below and click [Apply Rules] button after editing dial plan rules

```
-----
```

```
[Matching Patterns]
```

```
$addr = Avaya_IP
```

```
$request = ^INVITE
```

```
Alert-Info = .*
```

```
P-Location = .*
```

```
[Deploy Patterns]
```

```
$transport = udp
```

```
Alert-Info =
```

```
P-Location =
```

```
-----
```

6. Rauland cannot support multiple record-route and via headers

Solution: Set \$b2bua on with either method below:

- From dial plan rule, adding \$b2bua = true in [Deploy Patterns] and click [Apply Rules] button after editing dial plan rules
- Set [B2B-UA mode] as "on" from Brekeke SIP Server Admintool > [Configuration] > [SIP] and restart Brekeke SIP Server from Admintool

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>