The quick guide to receiving RX beacons on RTX VoIP

This guide will describe the basic steps of setting up the RTX8200 Location Gateway in RX-mode on the RTX VoIP system.

Prerequisites

DECT Base (RTX8663):

- Firmware version (release): V0460_B0004

Location Gateway (RTX8200):

- Firmware version (release): V0007_B0002

Handset (RTX8633):

- Firmware version (nightly): 2019-08-27_17-01

Steps

1. Ensure Location Gateways and messaging is enabled on the DECT Base:
    - Enter the 'Management' menu
    - Set the 'Text Messaging' drop-down to 'Enabled'
    - Fill out the relevant 'Text Messaging & Alarm Server' and 'Text Messaging Port' for your
    - system.
    - Set the 'Location Gateways' drop-down to 'Enabled'
    - Press 'Save and Reboot'
2. Register the RTX8200 on the DECT Base:
    - On the base:
        - In 'Location Gateways' press 'Add Location Gateway extension ' and click 'Save'
        - Check the newly added extension, and press 'Register Location Gateway(s)'
    - On the Location Gateway:
        - Power it on
        - Press and hold the button for 20 seconds until the LED flashes green
    - The Location Gateway will now factory default and automatically register to the system.
    - Refresh the 'Location Gateways' page on the DECT Base until you see a 'Present@RPNxx' state for the Location Gateway.
3. Configure the Location Gateway for RX-mode
    - Press the button on the Location Gateway to enable BLE GATT configuration mode. The LED should be red.
    - On the Handset, enter the Service Menu using *service* in the settings menu.
    - Select the 'BTLE Config'
    - Select the correct BLE MAC from the list, and the handset will now connect to the Location Gateway
    - In General Settings
        - Select operation mode and set it to Rx Passive Mode (please note that there is a bug in release V0007_B0002 that will turn of the red led now. Don't worry the device is still connected in configuration mode).

        - ‘Beacon Server Address’ to ‘1234’ (this is the receiving number that the Location Gateway will send beacon messages to)
        - ‘Alarm Server Address’ to ‘1234’ (this is the receiving number that the Location Gateway will send any alarm messages to)
    - In ‘Passive Beacon Scan’ set ’RX Beacon Type’ to ‘All three beacon types’
    - Press back until the handset says disconnected
4. Enable BLE TX mode on the handset
    - In the ‘Service Menu’ enter ‘BTLE Beacon’
    - Enter relevant ‘Beacon Type’, ‘Config Data’, and enable the device to TX
5. The Location gateway should now be sending beacon messages to the configured messaging server.
    - Please note, that the Location Gateway only reports entering and leaving events, so to trigger new messages you will need to en- and disable the TX mode on the handset.
    - On our internal messaging testing server that would look like this:

```
2019-08-28 15:05:16,933 - mock-alarm-server - INFO - ::ffff:10.10.101.0:1300 jobdata | from:
0328D254A3 (IPEI) | to: 1234 (None) - priority 0 messageuui:
'!BT;00087B156F56;p;i;FFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFF;0;1;-53'
```

    - If you would like to trace it using e.g. tcpdump it would look like this

```
~$ sudo tcpdump -i p2p1 -A udp port 1300

15:05:48.070459 IP IPDECT00087B157409.rtx.loc.1300 > IT-02651.rtx.loc.1300: UDP, length 746
E...1...<.l.
e.
eS...../<?xml version="1.0" encoding="UTF-8"?>
<request version="19.8.6.1008" type="job">
<externalid>0366183895</externalid>
<systemdata>
<name>MSA SME VoIP</name>
<datetime>2019-08-28 08:05:45</datetime>
<timestamp>5d667c29</timestamp>
<status>1</status>
<statusinfo>System running</statusinfo>
</systemdata>
<jobdata>
<priority>0</priority>
<messages>
<message1></message1>
<message2></message2>
<messageuui>!BT;00087B18BACB;p;i;414141414141414141414141414141414111112222;30;0;</messageuui>
</messages>
<status>0</status>
<statusinfo></statusinfo>
</jobdata>
<senderdata>
<address type="IPEI">0328D254A3</address>
<location>MSA SME VoIP</location>
</senderdata>
<persondata>
<address>1234</address>
</persondata>
</request>
.
```