Nordic Tools

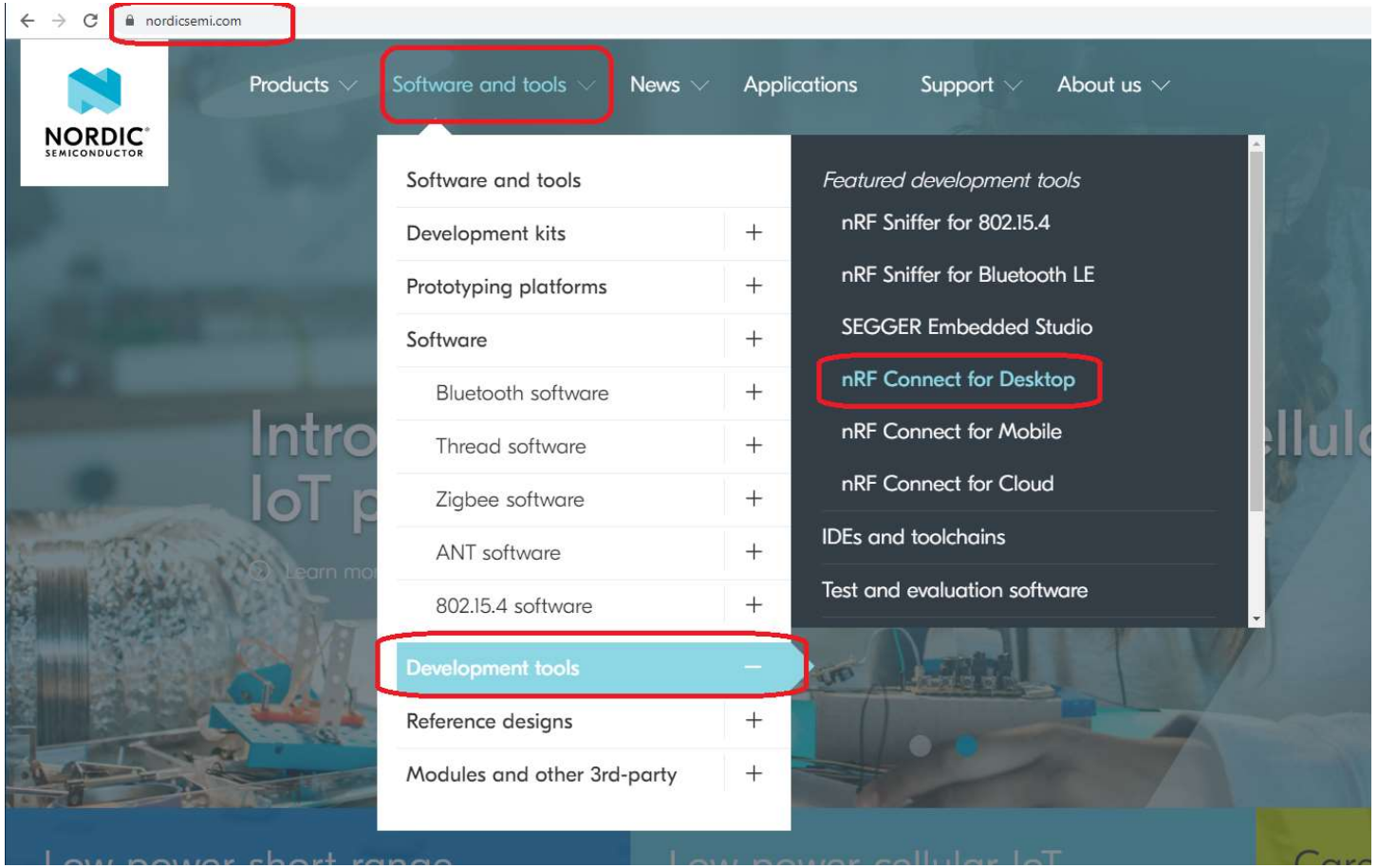
Introduction to the different tools used for development on Nordic's BLE solutions.

Edvin Holmseth

Uni. Of Strathclyde

January 2020

nRF Connect for Desktop



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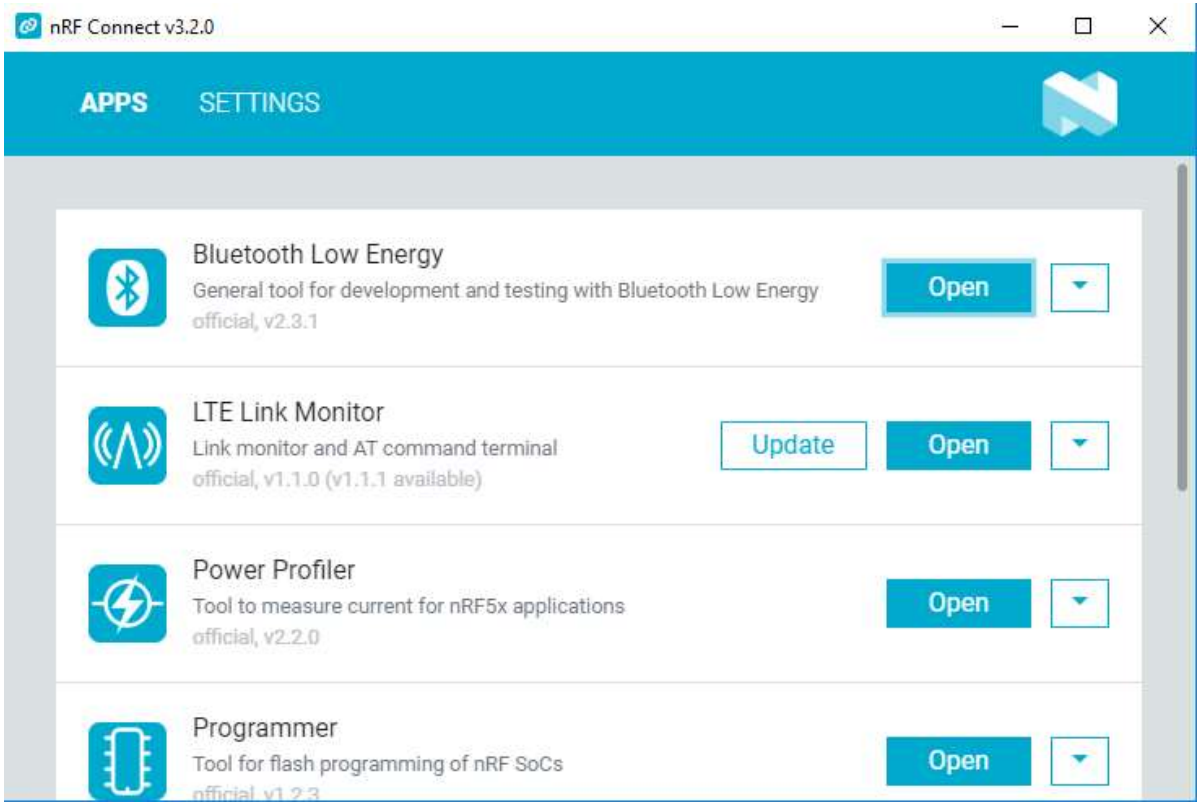
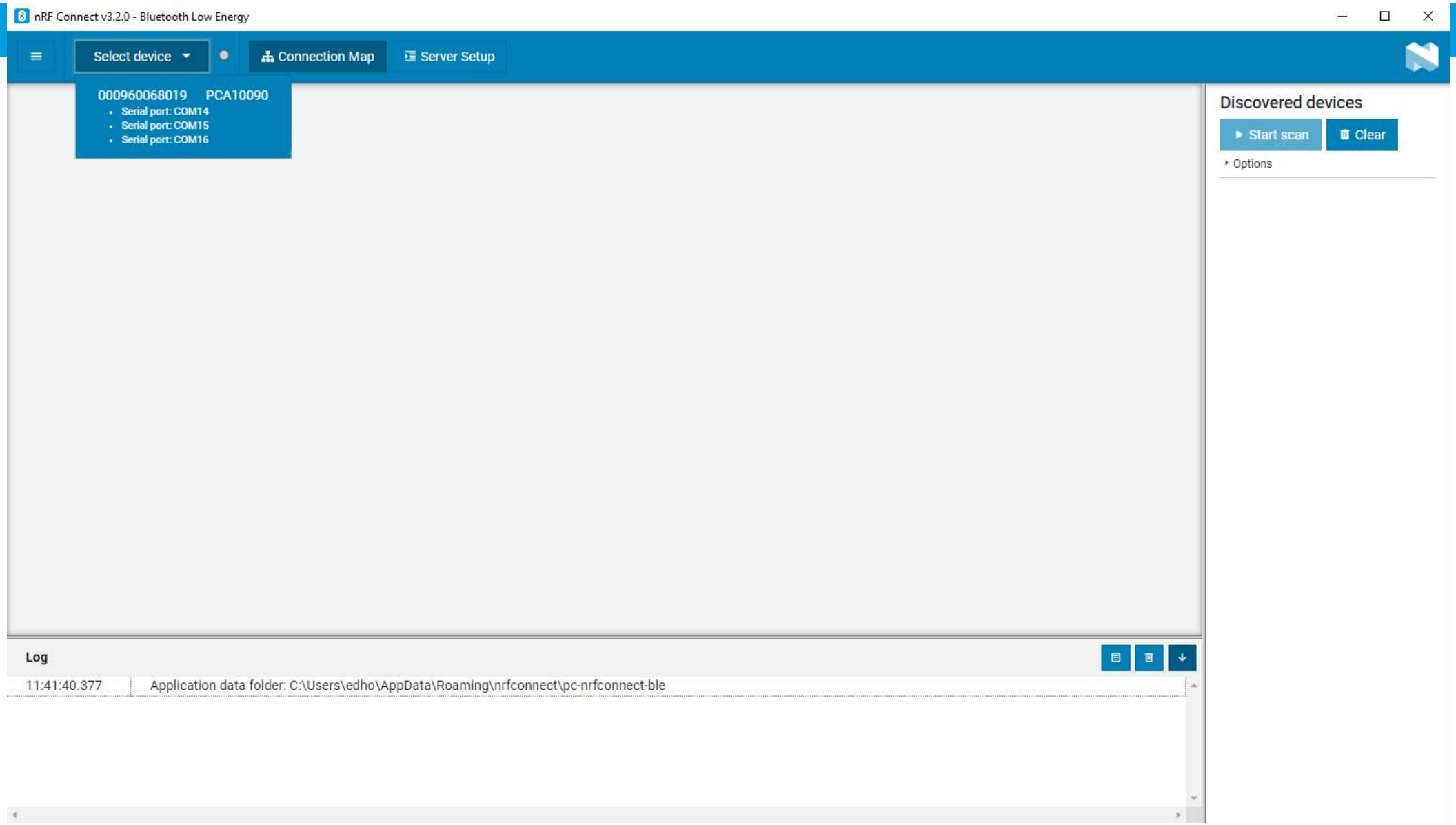


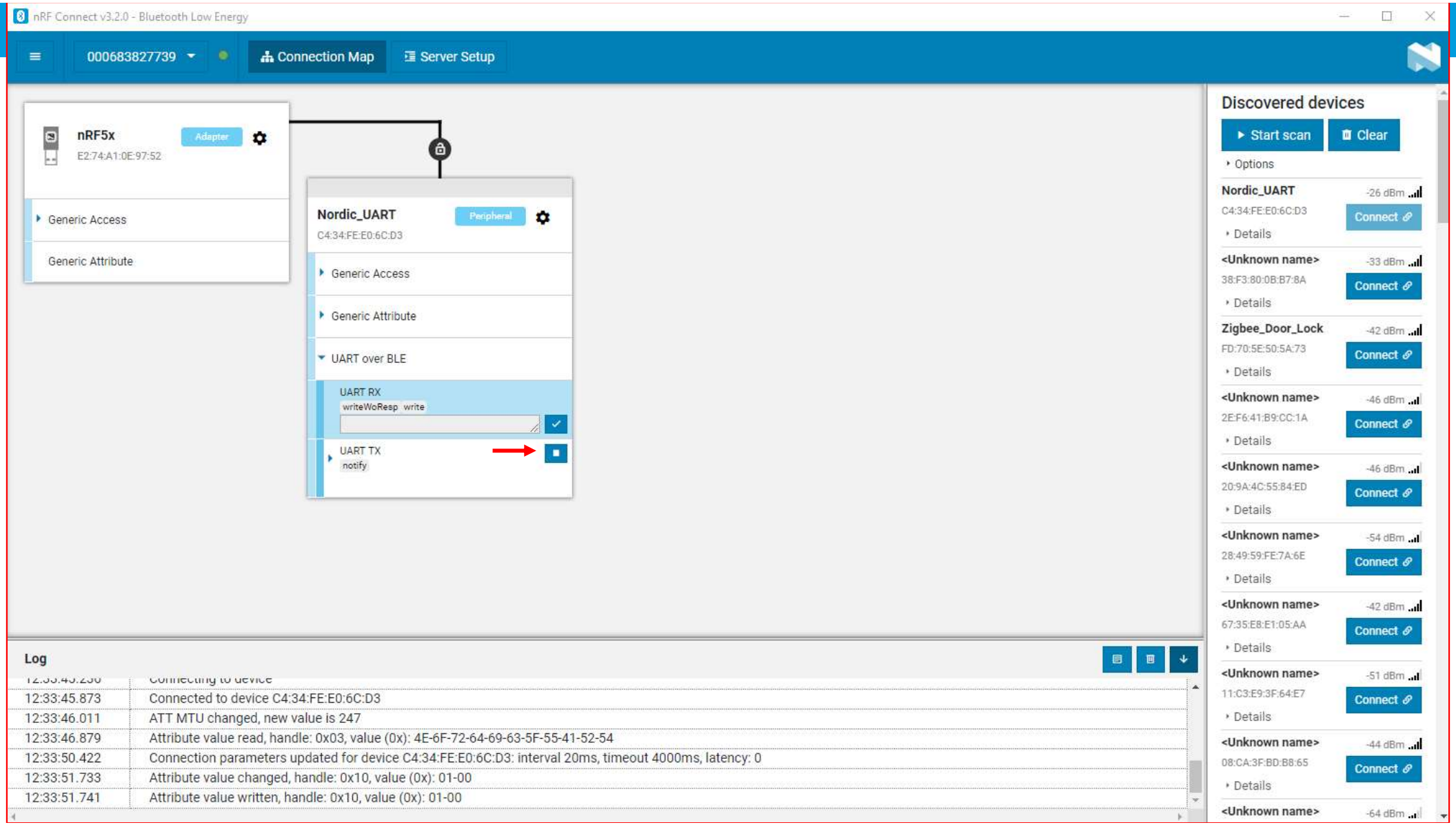

nRF Connect v3.2.0 - Bluetooth Low Energy
Select device
Connection Map
Server Setup
000960068019 PCA10090
Serial port: COM14
Serial port: COM15
Serial port: COM16
Discovered devices
Start scan
Clear
Options
Log
11:41:40.377
Application data folder: C:\Users\edho\AppData\Roaming\nrfconnect\pc-nrfconnect-ble

nRF Connect for Desktop

1. Compile the example found in:

   SDK15.3.0\examples\ble_peripheral\ble_app_uart\pca10040\s132\ses\

2. Press “Build”->”Build and Debug”
3. Press Green arrow (continue execution)
4. Press scan start in nRF Connect
5. Connect to the device called “Nordic_UART”


nRF Connect v3.2.0 - Bluetooth Low Energy
000683827739
Connection Map
Server Setup
nRF5x
Adapter
E2:74:A1:0E:97:52
Generic Access
Generic Attribute
Nordic_UART
Peripheral
C4:34:FE:E0:6C:D3
Generic Access
Generic Attribute
UART over BLE
UART RX
writeWoResp write
UART TX
notify
Discovered devices
Start scan
Clear
Options
Nordic_UART -26 dBm
C4:34:FE:E0:6C:D3
Connect
Details
<Unknown name> -33 dBm
38:F3:80:0B:B7:8A
Connect
Details
Zigbee_Door_Lock -42 dBm
FD:70:5E:50:5A:73
Connect
Details
<Unknown name> -46 dBm
2E:F6:41:B9:CC:1A
Connect
Details
<Unknown name> -46 dBm
20:9A:4C:55:84:ED
Connect
Details
<Unknown name> -54 dBm
28:49:59:FE:7A:6E
Connect
Details
<Unknown name> -42 dBm
67:35:E8:E1:05:AA
Connect
Details
<Unknown name> -51 dBm
11:C3:E9:3F:64:E7
Connect
Details
<Unknown name> -44 dBm
08:CA:3F:BD:B8:65
Connect
Details
<Unknown name> -64 dBm
Log
12:33:45.873 Connected to device C4:34:FE:E0:6C:D3
12:33:46.011 ATT MTU changed, new value is 247
12:33:46.879 Attribute value read, handle: 0x03, value (0x): 4E-6F-72-64-69-63-5F-55-41-52-54
12:33:50.422 Connection parameters updated for device C4:34:FE:E0:6C:D3: interval 20ms, timeout 4000ms, latency: 0
12:33:51.733 Attribute value changed, handle: 0x10, value (0x): 01-00
12:33:51.741 Attribute value written, handle: 0x10, value (0x): 01-00

nRF Connect for Desktop

1. Open a UART Terminal.

   PuTTY or Termite are good options

2. Write «Hello» and press send.

3. Monitor that the UART TX characteristic says:

48:65:6C:6C:6F:0D Is ASCII code for:
'H' 'E' 'L' 'L' 'O' '\n'

nRF Connect for Mobile

- A Mobile version of nRF Connect for Desktop
- Works for Android and Apple
  - Can be found in Google Play Store and App Store

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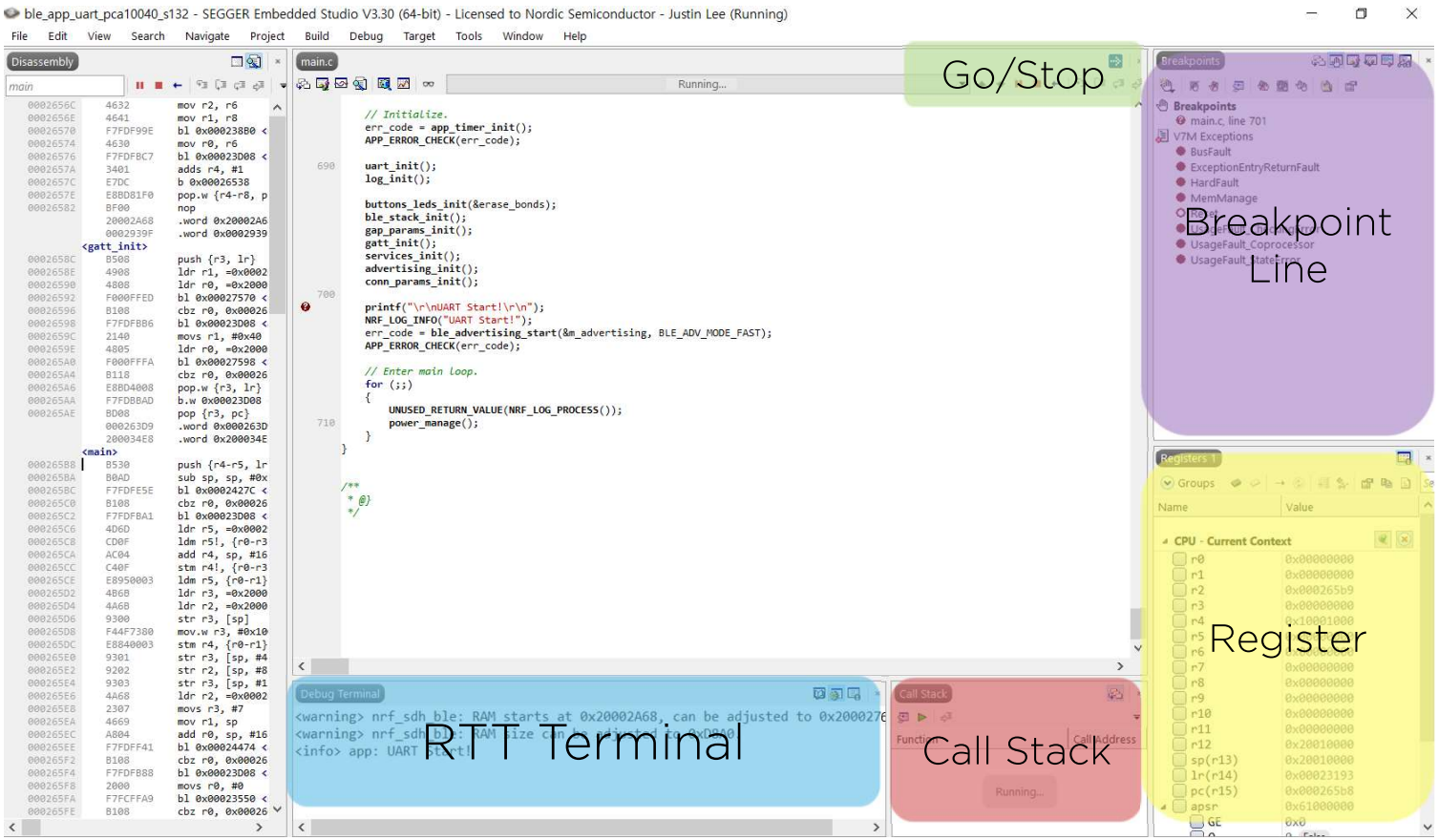
Logging module in Nordic's SDK

- Most of the examples in the SDK comes with the logging module enabled.
- When you debug, you can monitor the logging near the bottom of the screen

Debugging Mode



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