BLUETOOTH firmware update version jan 2024

| **TAGS**: single core nRF52840 BT-name: 'AIRTT', 'AIRBT' (ball-tag)	**ANCHORS**: dual core nRF5340 BT-name: 'AIRAA'
Firmware filename: **52_122_signed.bin**	Firmware filename: **53_122_signed.bin**

Prepare: charge the device before updating and/or keep the USB-charge-cable connected during the update process.

Step 1:
use mobile app **nRF connect** for mobile
(iOS, android)

Apps

nRF Connect
Device Manager
⊳ Installed

nRF Connect for
Mobile
⊳ Installed
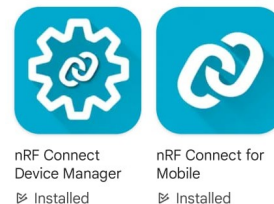
Alternative: nRF Device Firmware Update
*https://www.nordicsemi.com/Products/Development-tools/nRF-Device-Firmware-Update*

Step 2:
connect to a device
select from the list of devices shown in app

tags have **'T'** in the device name and use single core nRF**52**840 chipset
    Board type Tag 'T'   with UWB network role Tag 'T'   AIRTT
    Board type Ball 'B'   with UWB network role Tag 'T'   AIRBT
    Board type '*generic*' role Tag 'T'   AIRTLS
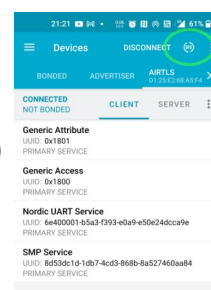**anchors** have **'A'** in the device name and use dual core nRF**53**40 chipset
    Board type Anchor 'A' with UWB network role Anchor 'A'   AIRAA
    Board type Anchor 'F' with UWB network role Anchor 'A'   AIRFA
    Board type HornAnchor 'H', UWB network role Anchor 'A'   AIRHA
    Board type LineAnchor 'L' with UWB network role Anchor 'A' AIRLA
    Board type SolarPowered 'P', UWB network role Anchor 'A' AIRPA
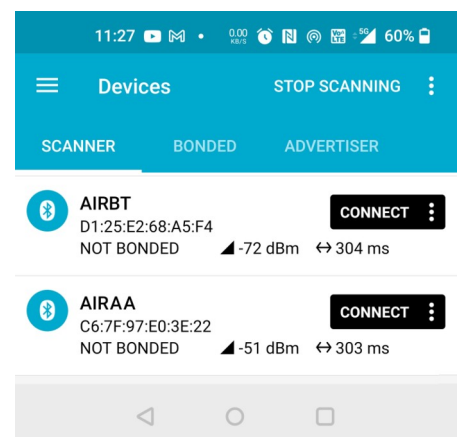
The app also shows the bluetooth signal strength. In the example -51 dBm for the anchor and a weaker signal of -72dBm for the tag 'AIRTBT' mainly because of a larger distance between the phone and device. The signal strength gets weaker when the phone is a few meters away from the device compared to close by. The phone can be 10+ meter away and still update the device. In case of packet loss the process takes longer.

Step 3:
Use the 'connect' button to connect
After connection click on button 'dfu' (in the header)

Step 4:

Select file (.bin) from filesystem on the phone

Make sure the selected file is for the correct board
2 chipsets are used:
Single core and dual core controller chips

nRF52840 single core used in **tags** '**52**'
nRF5340 dual core used in **anchors** '**53**'

File names start with '52' or '53'
52_122_signed.bin
53_122_signed.bin
122 refers to firmware version 1.2.2.

tags have '**T**' in the device name and use single core nRF**52**840 chipset
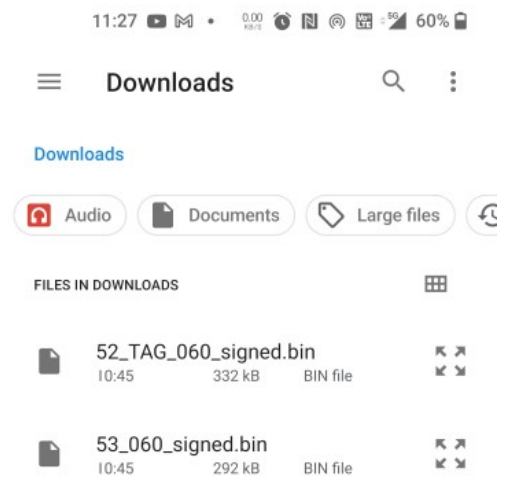   Board type Tag 'T' with UWB network role Tag 'T' AIRT**T**
    Board type Ball 'B' with UWB network role Tag 'T' AIRB**T**
anchors have '**A**' in the device name and use dual core nRF**53**40 chipset
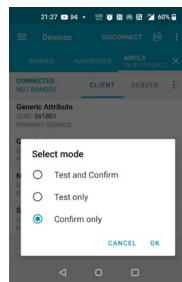   Board type Anchor 'A' with UWB network role Anchor 'A'   AIRA**A**
    Board type HornAnchor 'H' with UWB network role Anchor 'A' AIRH**A**
    Board type WallSocket mount 'L' with UWB network role Anchor 'A' AIRL**A**
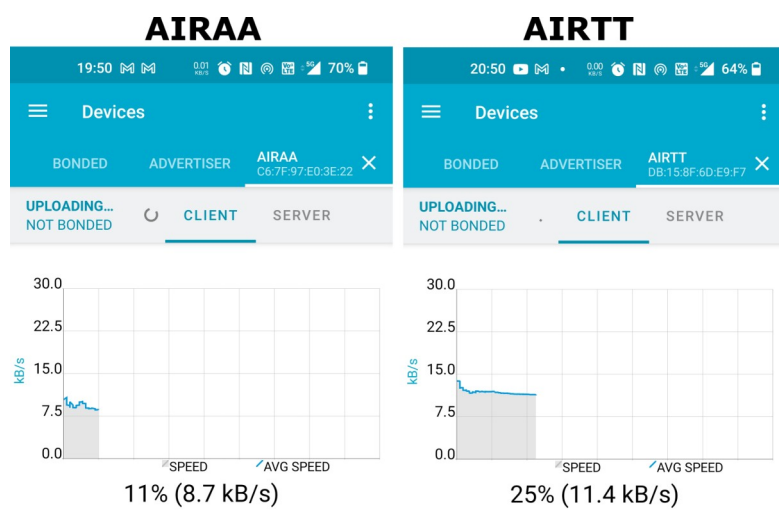
Step 5:

Update mode
'confirm only'

Step 6:

Transfer starts
Takes about 15 sec

After checking the file
on the board in about
10 seconds the boards
will restart automatically

When a (USB) charge cable is connected to the tag or a ball. The board will first perform a hardware reset. For FWOA (Firmware over the air) this is not needed.

done