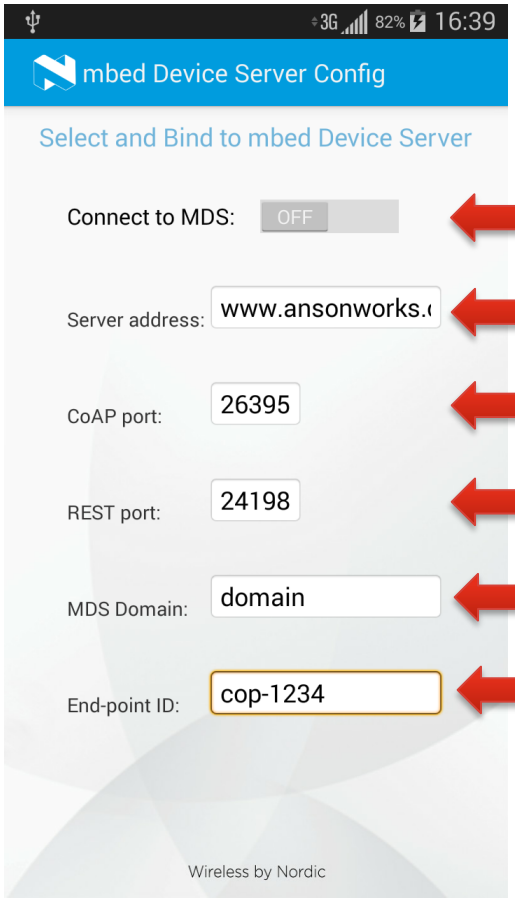
Workshop: Getting Started

This workshop assumes you have *already* setup and are comfortable with:

Android Developers	MBED Developers
Using Windows (x86), Linux, or MacOS ✓	Browser-based. ✓
Android Eclipse/ADT bundle installed ✓ https://developer.android.com/sdk/installing/index.html	Windows Users: MBED USB driver installed ✓ https://mbed.org/handbook/Windows-serial-configuration
Android SDK populated with: ✓ • Latest Tools • Android API 19 installed • Windows: Google USB Driver installed (in Extras) • Google Place Services Installed (in Extras) • Android Support Library installed (in Extras)	
Android Device configuration ✓ • USB debugging enabled in android device	
Android Project “PoliceHRM” cloned and imported ✓ • Imported into Eclipse • Compiled • Installed onto android device • MDS configured (*** see next slide! ***) https://github.com/ansondtx20/PoliceHRM	MBED “BLE_Police_HRM_Button” imported into project space ✓ • Nordic platform set as compile target • Update line 24 of main.cpp: make it “unique” for BLE joining • Compiled OK and HEX bin file copied into Nordic device https://developer.mbed.org/teams/MBED_DEMOS/code/BLE_Police_HRM/
✓ Pair up to bring both development environments together ✓	

Workshop: Getting Started…

- For *Android Developers*, the PoliceHRM mbed Device Server (MDS) configuration should be as follows:



** **Helpful hint**: After editing each text field, just hit return/enter on your android keyboard to save the edited value… the next text field will get automatically brought into focus

Ensure "OFF" initially on first launch

Server Address: www.ansonworks.com

CoAP Port: 26395

REST Port: 24198

Domain: domain

End-point ID: cop-XXYY
(make XXYY unique to YOU in the room…)

BLE to CoAP Proxy

- Application installed on Android device, connects BLE devices to mbed Device Server
- Combines Nordic BLE library with ARM mbed Java Client to create a BLE to CoAP Gateway
- Scans BLE and registers nearby HRS as CoAP endpoint
- Exposes HR value, location, battery level, and descriptors
- Pushes updates of HR value to mbed Device Server
- Application software can discover and interact with all registered HRS endpoints

BLE to CoAP Proxy