EnOcean Aruba IoT Demo

Demo Description

The EnOcean Aruba IoT Demo provides an easy way to visualize the data sent by EnOcean Wireless devices (EEPs: F6-03-XX, D5-00-01, A5-04-03 & D2-14-41[1]) to Aruba access point. The demo creates a local web socket to receive the data from the Aruba access points and visualizes the data in a simple way. It is intended to show the operation of the EnOcean to Aruba connection and display the data in a simple format. For more advanced operation and cloud based software applications please reach out to us at iot@enocean.com.

These steps will only need to be completed once per computer you wish to install it on.

You will need…

- Aruba Access Point with USB port and running Aruba OS version 8.7.0.0 or newer (may require firmware update to latest).
    - EnOcean IoT Starter Kit (EISK A/U/J) USB300 / USB500U / USB410J
    - At least one from the following, matching the USB gateway radio frequency (A/U/J):
        - PTM based switch
        - EMSI 5 type Multisensor
        - ETHS temp and humidity sensor
        - EMCS door and window magnet contact.
    - Hint: The letters A/U/J represents the frequency so all EnOcean pieces must have a matching designator. example, U devices will not work with A or J USB stick.

Configuring the Demo

This tutorial assumes that the Aruba AP has already been already configured, the IP-Address of the AP is known and the computer & AP are in the same subnetwork and/or routing has been properly configured. You will need your Aruba Admin login credentials to proceed.

Step 1 Visit www.enocean.com/en/aruba to download the demo

Extract the downloaded zip file into a directory of your choice.

Step 2
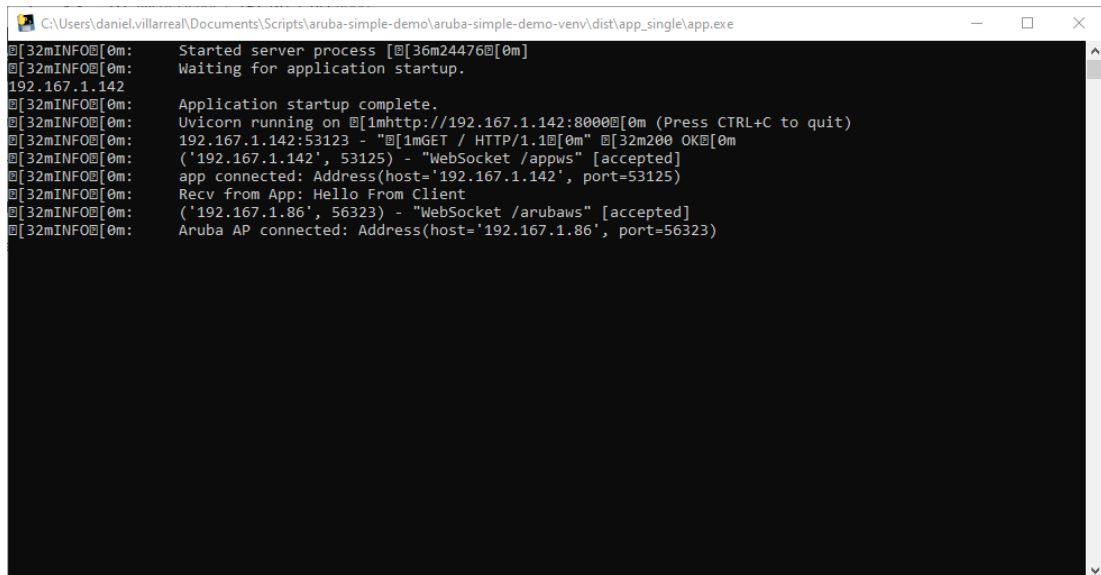
Double click on RunEnOceanArubaDemo.bat to start the demo. This will cause two windows to open.

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[1] To learn more about EEPs, please visit: http://tools.enocean-alliance.org/EEPViewer/ & https://www.enocean-alliance.org/eep/
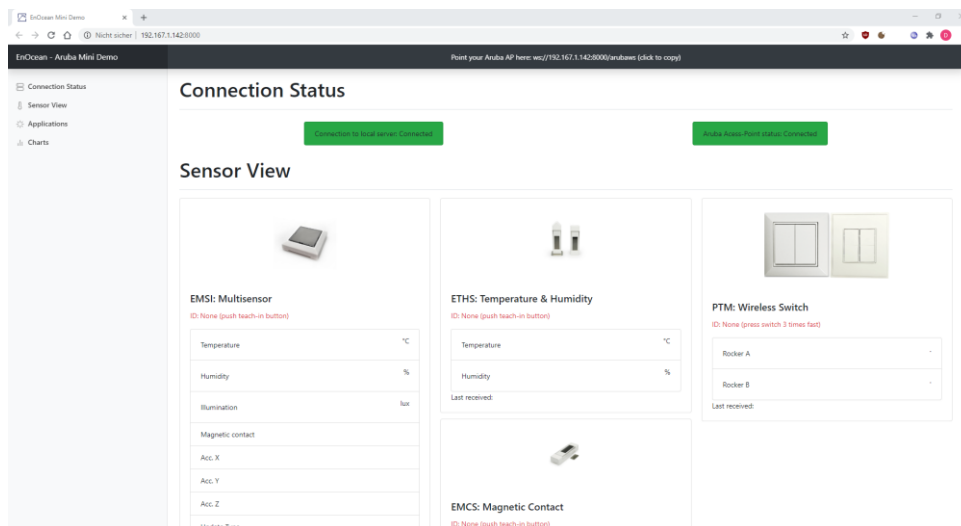
The first window is a command line instance running the local server, which processes the EnOcean data forwarded by the Aruba AP. There are no steps to take in this window but it does need to remain open in the background for the demo to operate correctly.

The second window will be The EnOcean IoT demo (client) which visualizes the data received & forwarded by the access point.
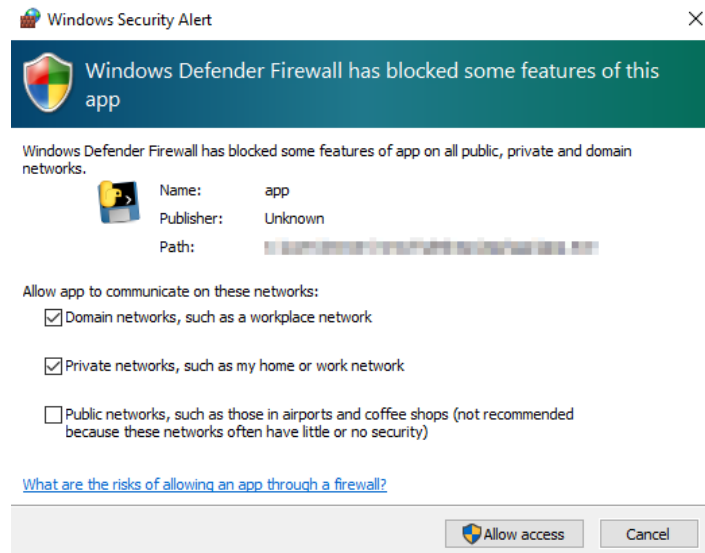

Step 3

The first time the IoT Demo is started the Windows firewall will need to be configured to allow for the IoT demo to establish a connection.

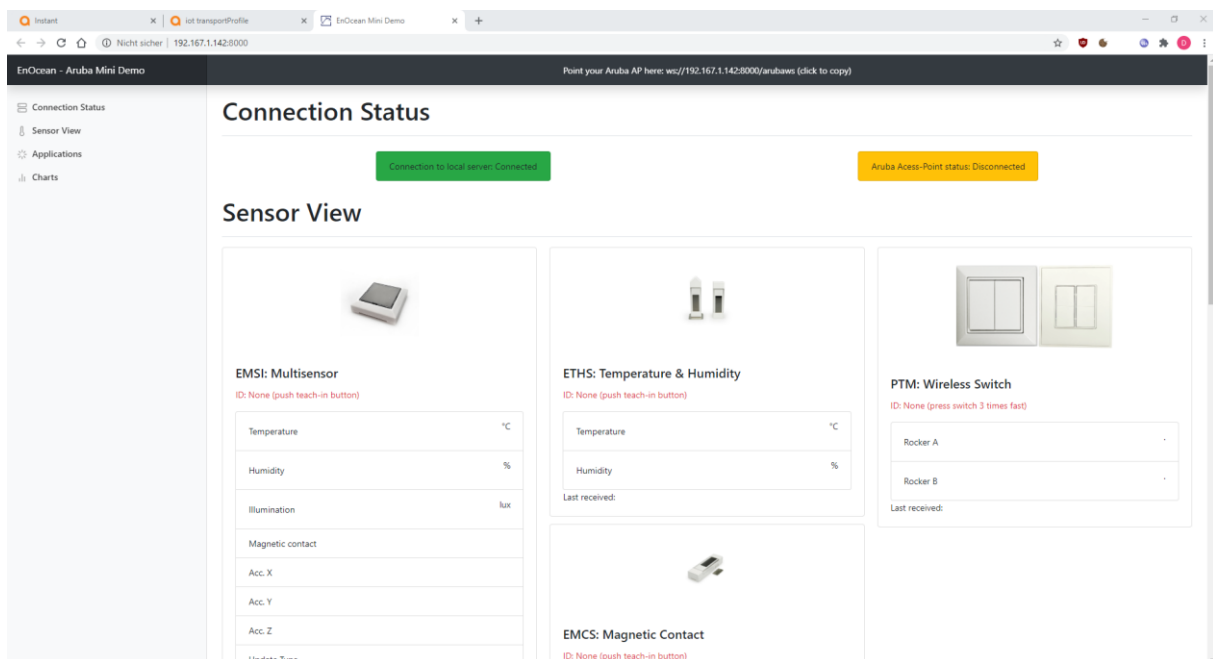Configure the firewall as shown below, then click "allow access"
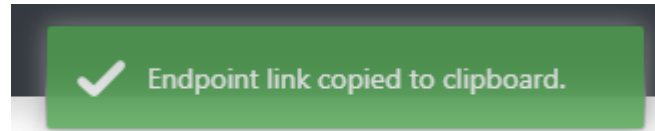
Allow Domain Networks & Private Networks

Step 4

Go to the IoT Demo (the part of this demo being displayed on the web browser):

Click on the black bar showing the end-point link. This will copy the IoT Demo address to the clipboard. A confirmation pop-up will be shown.
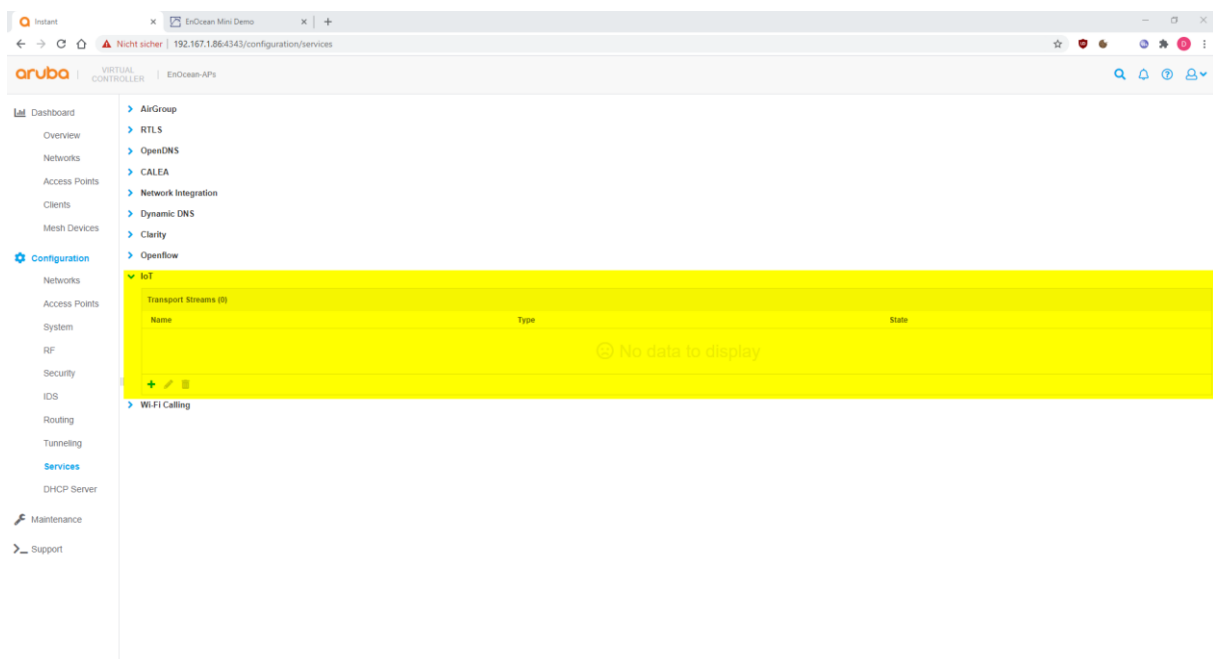
Endpoint link copied to clipboard.

Step 5

In a separate tab navigate to your Aruba access point IP address, select the administrator interface. Log in using your Aruba credentials.

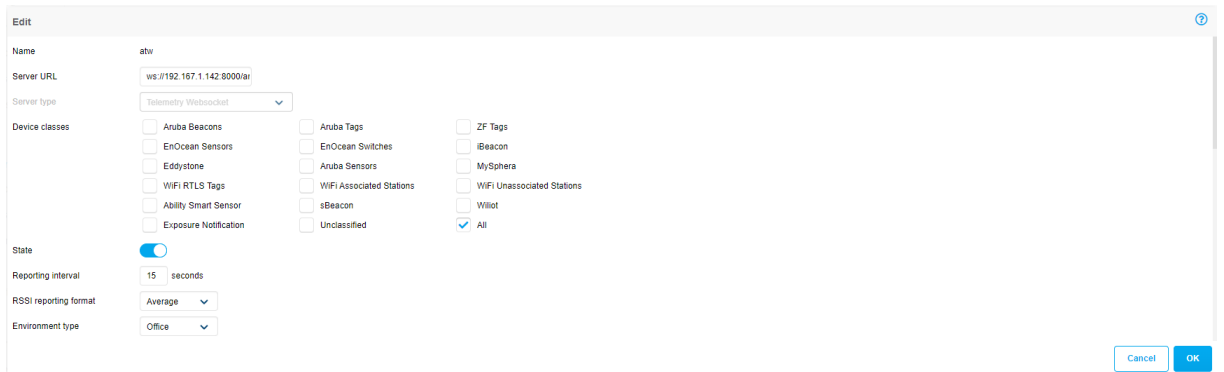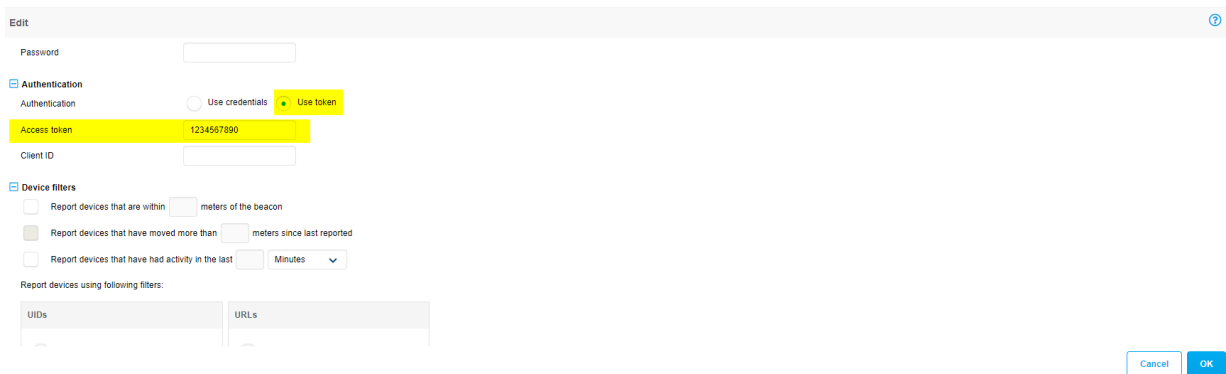Navigate to Configuration → Services, Then select IoT.

Step 6

- IoT-Transport Streams section, click on the 'plus' sign.
- 'Name' field, write a descriptive name for the profile. E.g. 'demo'
- 'Server URL' field, paste the end-point link copied from the IoT demo.
- 'Server Type' dropdown select 'Telemetry Websocket'.
- **'Device classes' section, select 'All'.**
- Turn the 'State' switch on.
- Change the 'Reporting interval' to '15'.

- Go to the 'Authentication' section and select 'Use token'.
- On the 'Access Token' field add: *1234567890*
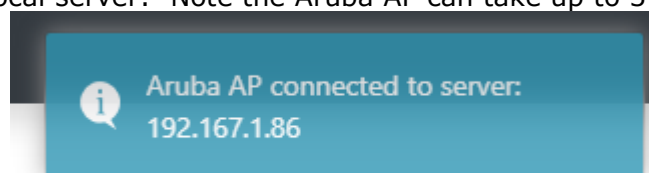- Press Ok & then Save.

Step 7

Return to the IoT demo interface & wait for the right status indicator ('Aruba Access-Point status') to turn from yellow to green. This indicates the Aruba AP has opened a connection to the local server. Both boxes green indicates success!

A pop-up will also be shown in the IoT demo indicating the IP-Address of the Aruba AP connected to the local server: Note the Aruba AP can take up to 3 minutes to connect.

Done!

The EnOcean Aruba IoT Demo has been successfully connected to your access point.

To begin to visualize the EnOcean sensor data please follow the instructions in RED listed in the IoT demo screen under each device type.

Please contact support@enocean.com should you experience any difficulties.

When you are ready to expand from a demo to a full solution or if you should have questions about your unique application for EnOcean technology please reach out to iot@enocean.com

Disclaimer

The information provided in this document describes typical features of the EnOcean radio system and should not be misunderstood as specified operating characteristics. No liability is assumed for errors and / or omissions. We reserve the right to make changes without prior notice. For the latest documentation visit the EnOcean website at www.enocean.com.