Advantech AE Technical Share Document

Date	20190320	SR#	1-3699904999
Category	□FAQ ■SOP	**Related OS**	N/A
Abstract	How to connect WISE-4210-AP with end notes?		
Keyword	WISE, WISE-4210, LPWAN,		
Related Product	WISE-40XX series, WISE-42XX, WISE-44XX		

■ **Problem Description:**

This document shows that how to connect WISE-4210-AP with WISE-4210-Sxx end nodes, and query data result.
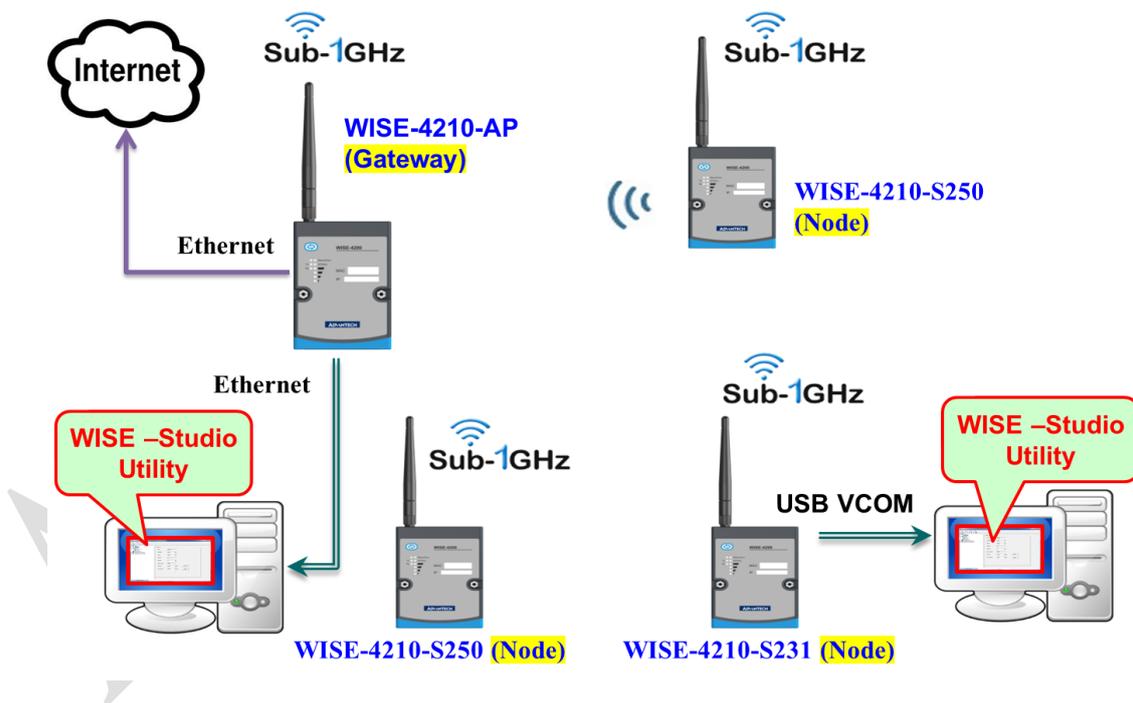

Figure 1. The topology for WISE-4210 series.

■ **Brief Solution - Step by Step:**
SOP video: https://bit.ly/2TK9ww7

NOTATION: Please make sure the AP and all of end nodes are using matching firmware version.

WISE-4210NA series Firmware

Solution : Firmware for WISE-4210 NA series.

※ Do not downgrade FW from vA102BXX to vA101Bxx.
※ The AP and end nodes should use the matching FW version for communication. Please upgrade them at the same time.

Figure 2. The execute path are pre-defined.

Step1. Install WISE Studio and USB driver. Power on the WISE-4210 module, and connect a USB cable with it.

Link for Studio: https://bit.ly/2TLFiIW

Link for driver: https://bit.ly/2CoKF5Z

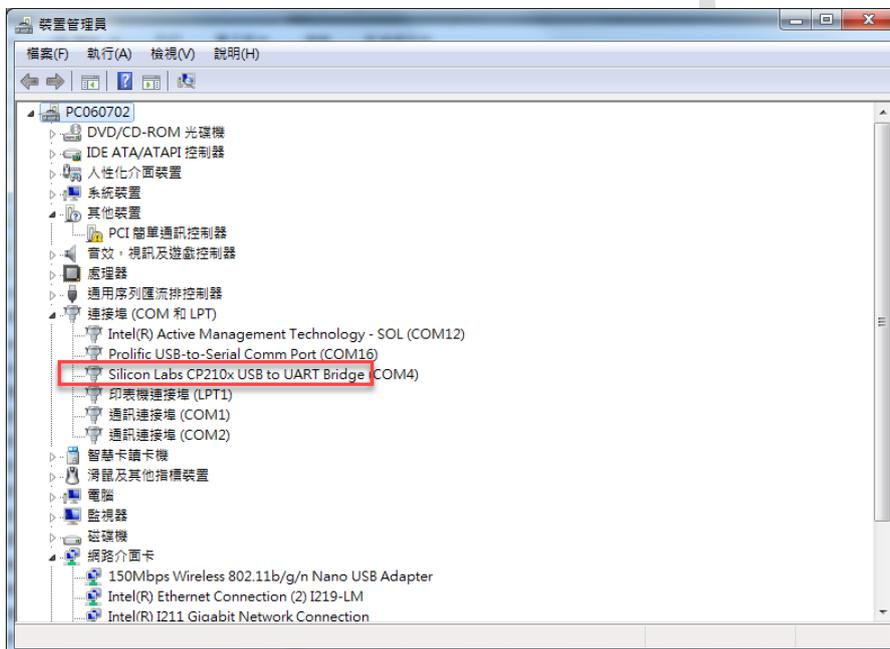Note that USB cable does **not** provide the power for a module.

Figure 3. The OS can recognize the WISE module through a USB cable after installed the driver.

Step 2. Click on "go to configuration" under USB-serial tab.
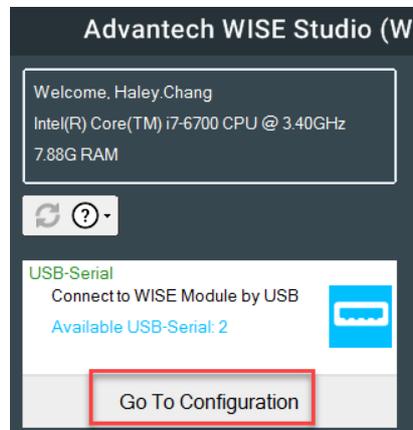

Figure 4. Configuration

Step 3. Click on "connect" according to the COM port number you are using.
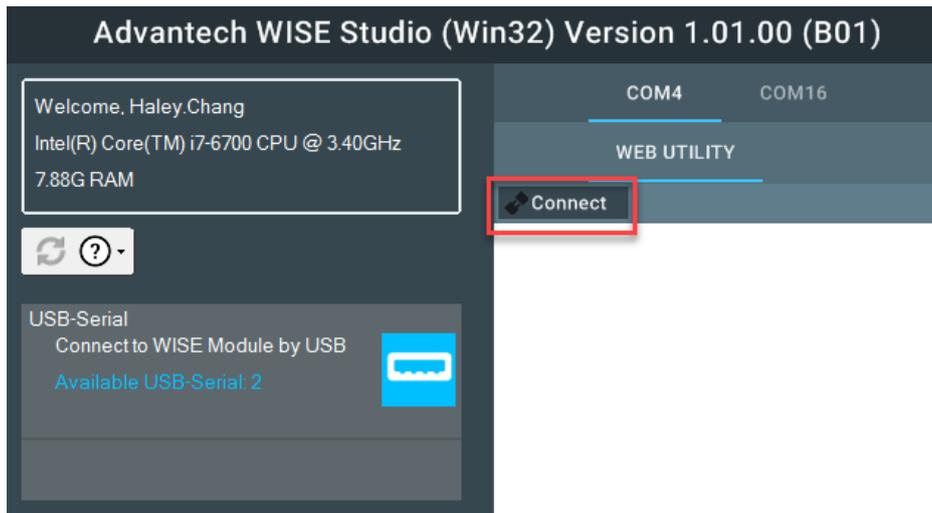

Figure 5. Connect.

Step 4. Check if the firmware version of AP and end nodes are matching (figure 6). If not, please upgrade the firmware to match with each other.
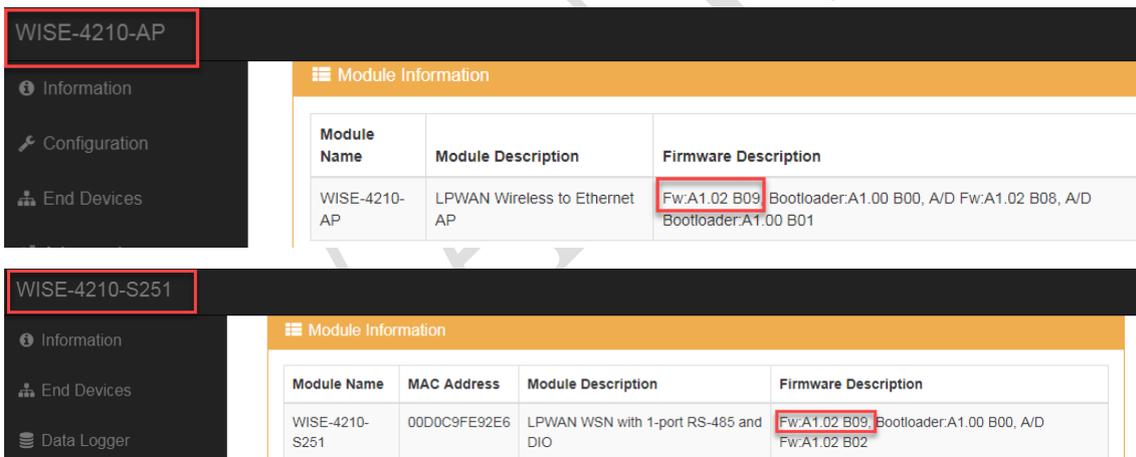

Figure 6. Firmware version.

Step 5. Go to "RF module" tab and set up the frequency, data rate, and based band. AP and end nodes need to set up using the same parameters (figure 7).

Note that the end nodes broadcast data. AP receives them all as defautl setting. If a user want to resist the AP to collect data from some specific end nodes, the setting is in "access control" page (figure 8).
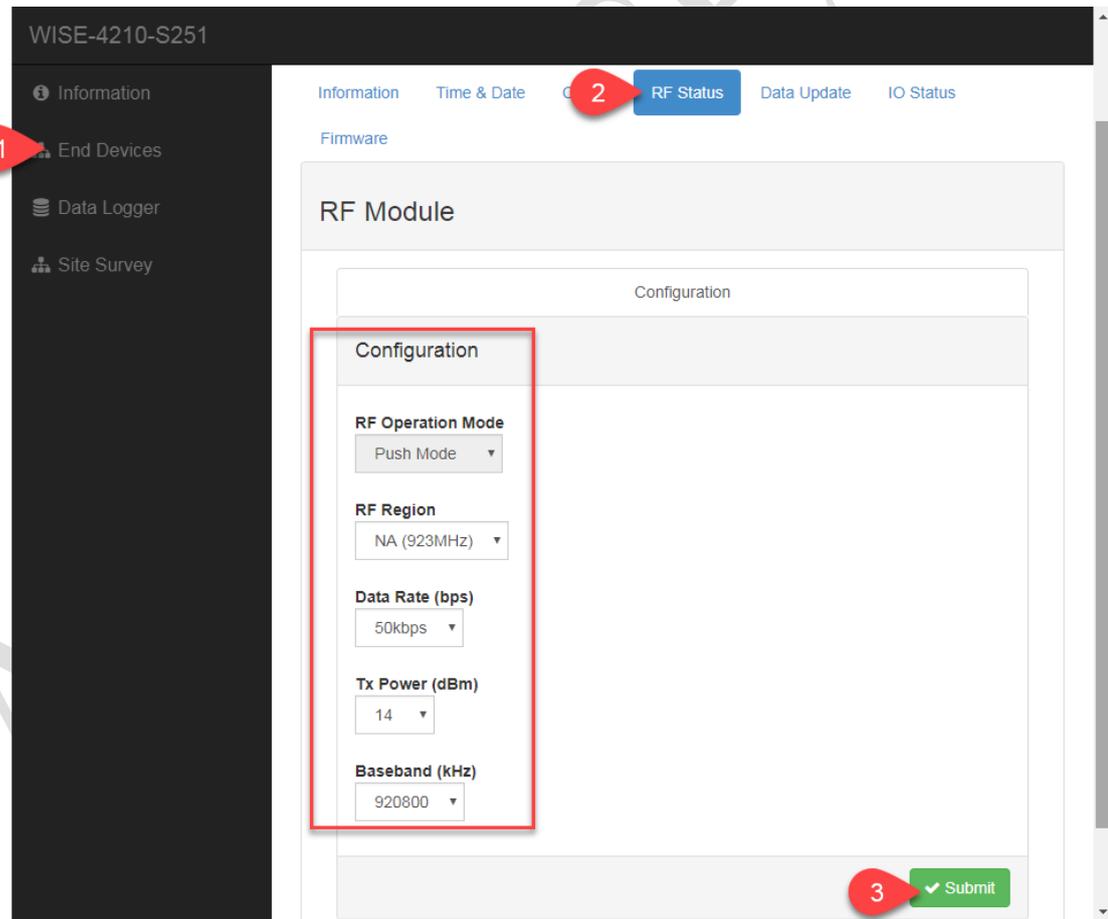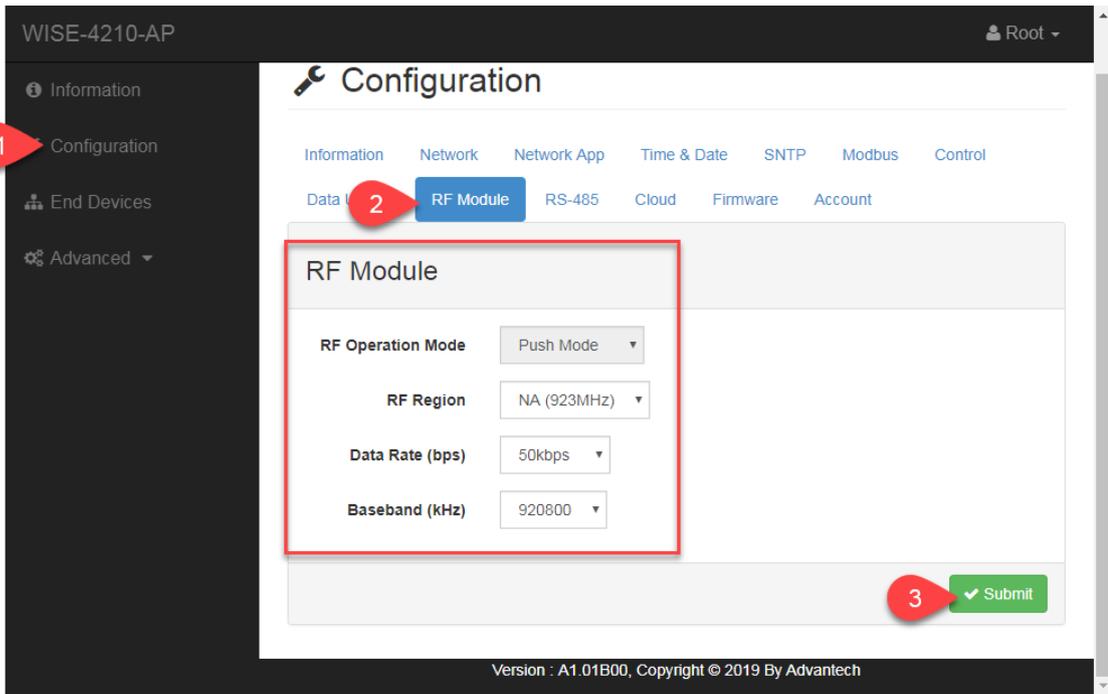
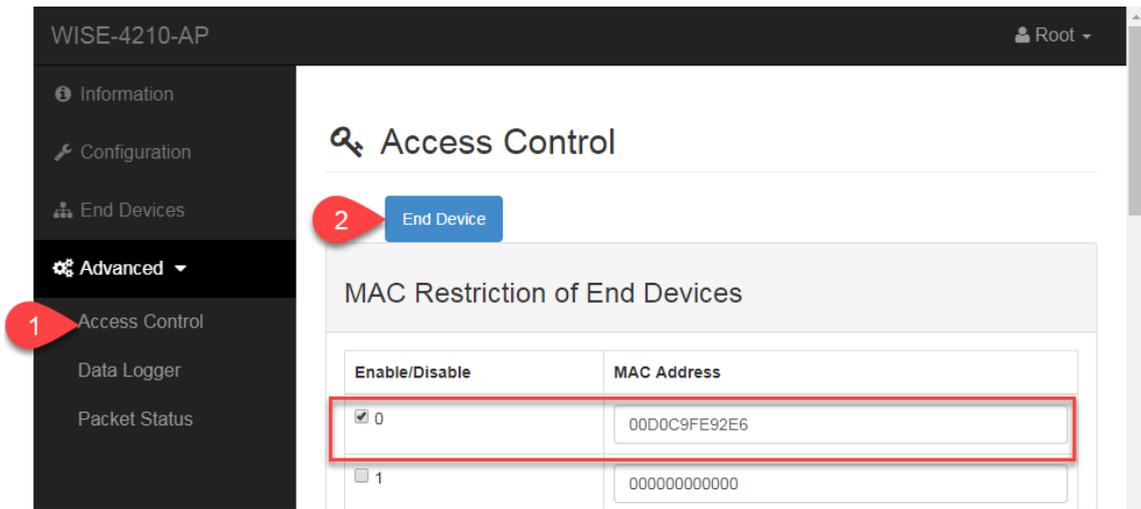Figure 7. The RF module setting page.

Figure 8. Resist the data that AP collects.

Step 6. Data will be broadcasted according to interval setting or change of status.
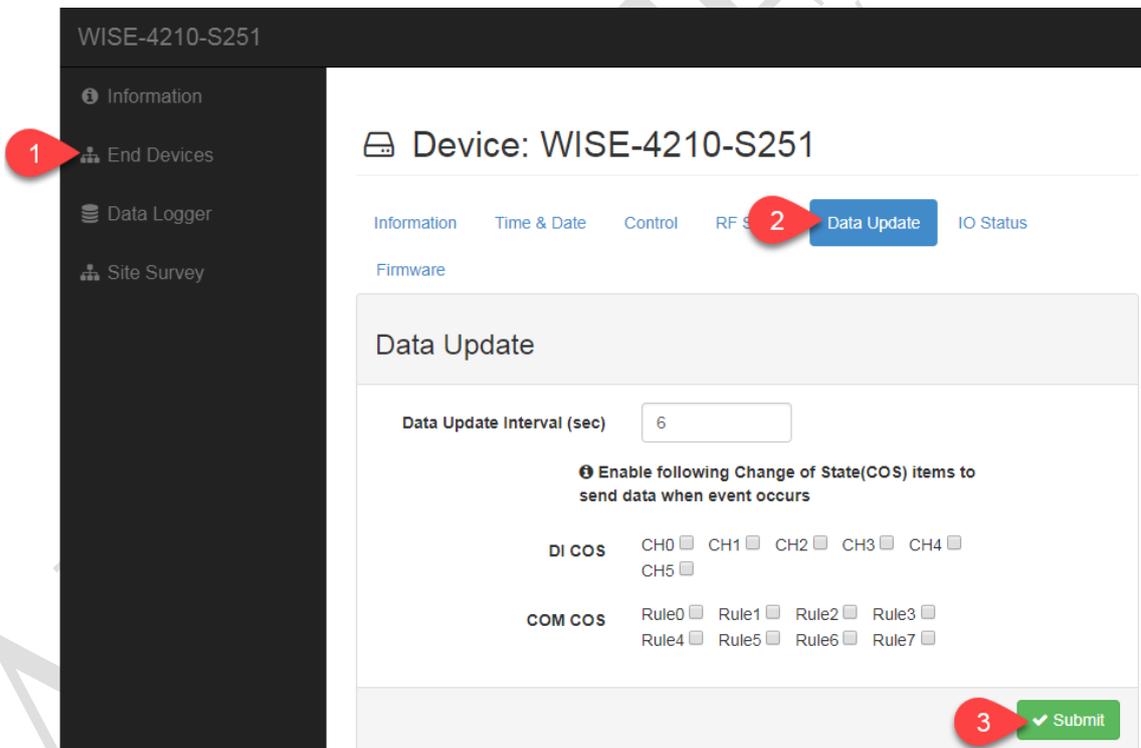

Figure 9. Data update interval.

Results of receiving data.

Monitor the data while WISE-4210-S2xx is pushing data to a WISE-4210-AP.

1. Inactive time.

   On the page of "end device list" on an AP, there is "inactive time" column to show that when is the last time the AP received data from an end device.

– Unit: second

Figure 10. Inactive time.

2. Query.

The WISE-4210-AP module does not store data in local memory. There is only the latest one. Go to "data logger" page, and query the data according to the MAC address.

FAQ: What is the JSON format of I/O log of WISE modules?

https://bit.ly/2U021QN

Figure 11. Query.

6