Advantech AE Technical Share Document

Date	2019/11/28	SR#	1-3775490501
Category	□FAQ ■SOP	Related OS	N/A
Abstract	How to connect WISE-4610 with WISE-6610?		
Keyword	WISE, LoRaWAN		
Related Product	WISE-4610 series, WISE-6610		

■ **Problem Description:**

This document shows that how to connect WISE-4610 with WISE-6610, and receive data result.
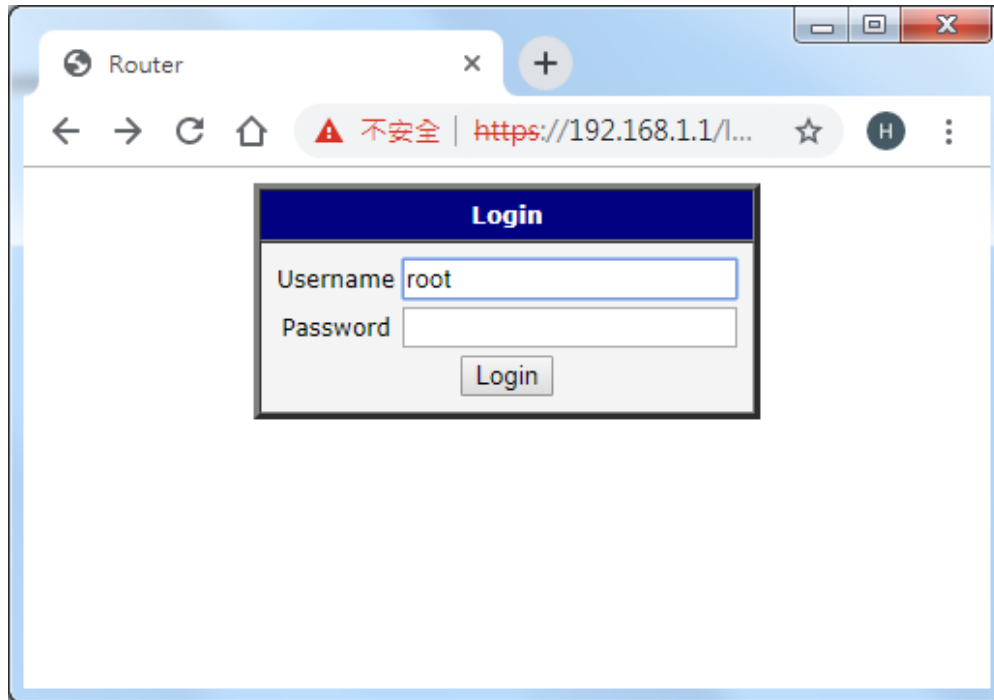

Figure 1. Topology of this scenario.

■ <u>**Brief Solution - Step by Step:**</u>

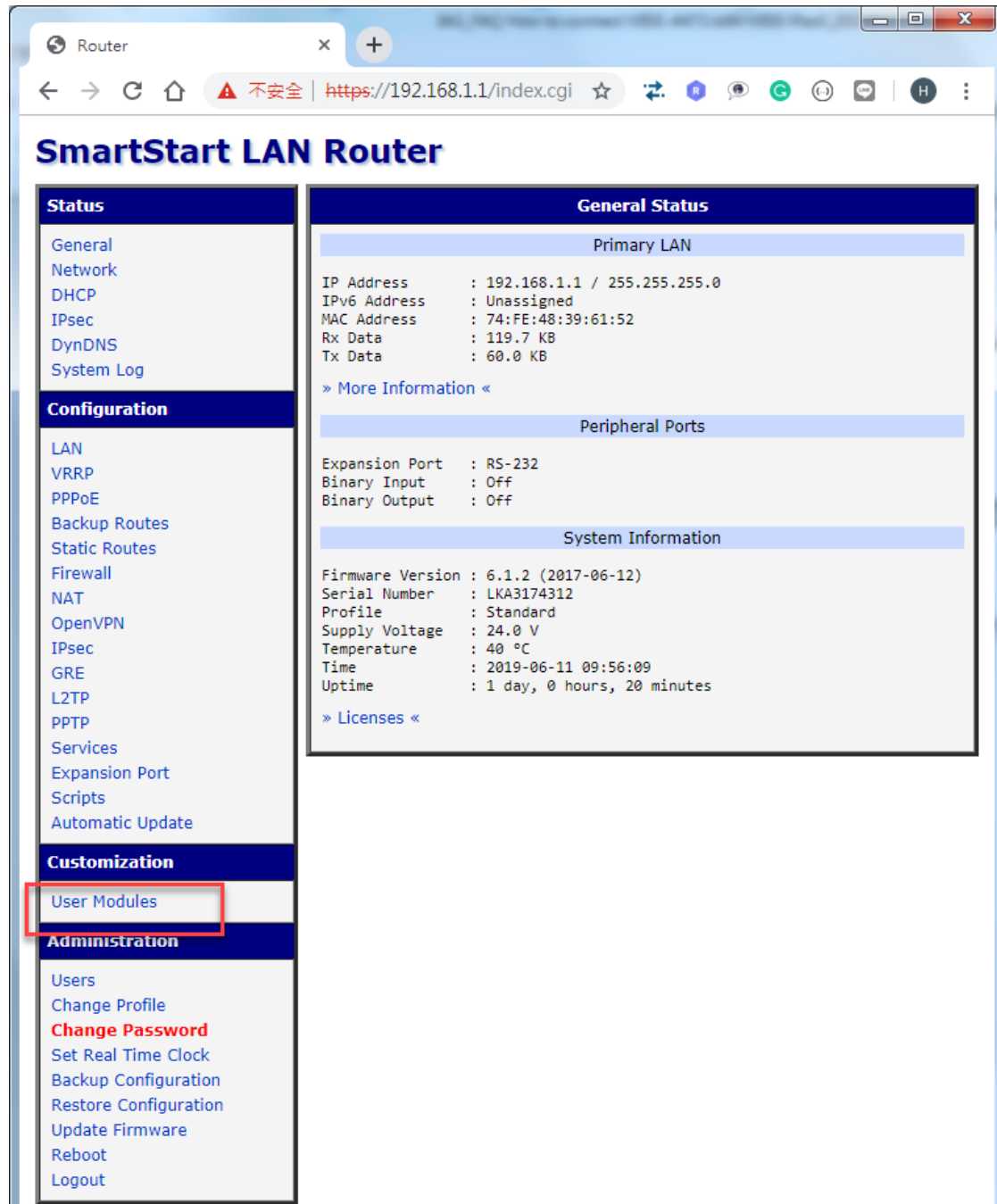Step 1.   Enter the WISE-6610 gateway.

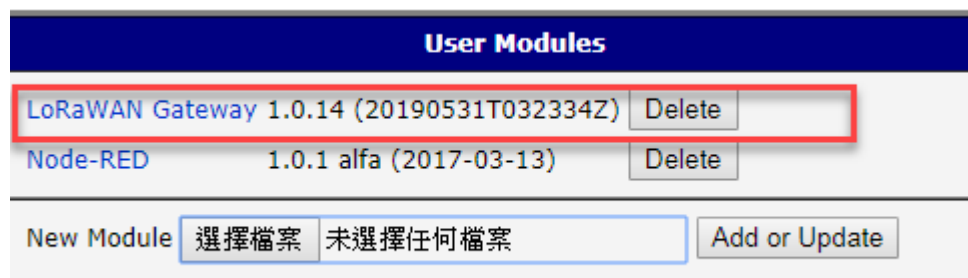Default IP:192.168.1.1

Account: root

Password: root

Step 2.   Go to "user mode".

Step 3.   If you need to upgrade the "LoRaWAN Gateway" function, DELETE first, then upload new file.
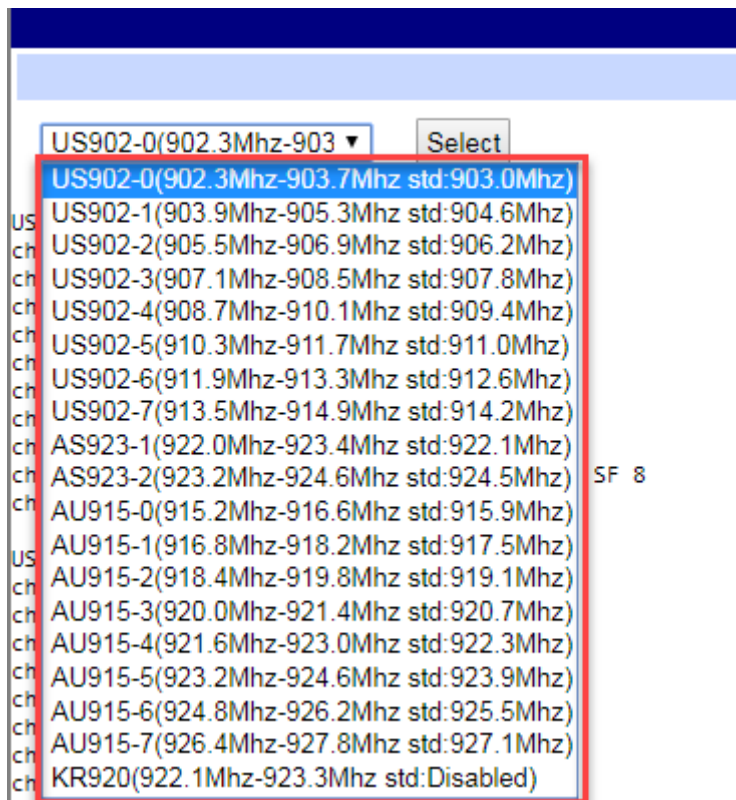
Step 4.   Click "LoRaWAN Gateway" to enter the setting page.

Make sure all of these parameters are matching with the "RF module" setting on WISE-4610-Sxxx.
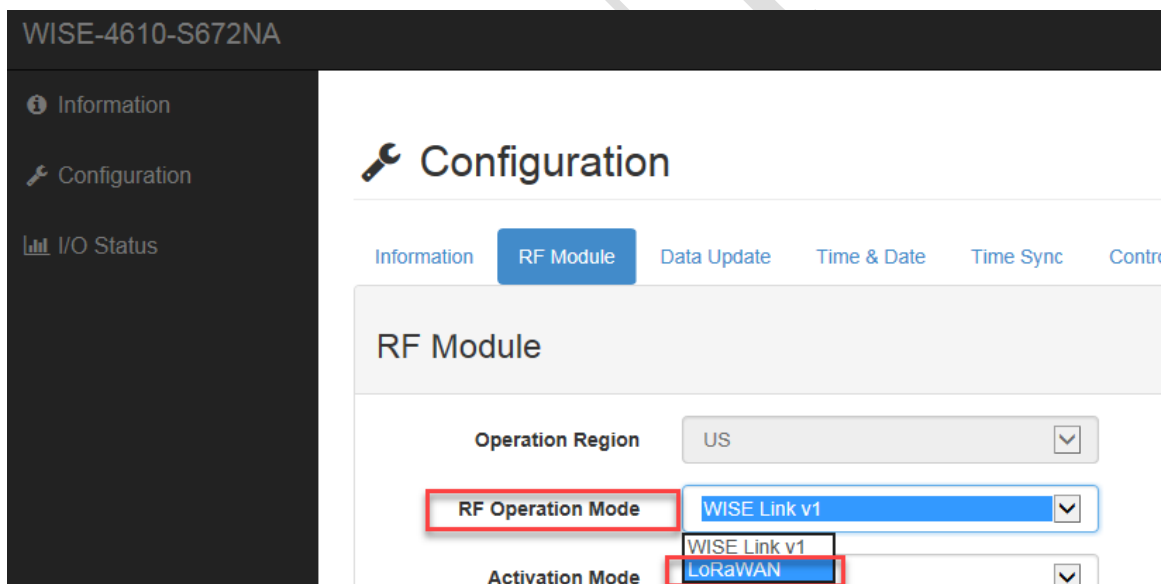

Or click on "quick setup" for default setting.

US902-0(902.3Mhz-903 ▼   Select

- US902-0(902.3Mhz-903.7Mhz std:903.0Mhz)
- US902-1(903.9Mhz-905.3Mhz std:904.6Mhz)
- US902-2(905.5Mhz-906.9Mhz std:906.2Mhz)
- US902-3(907.1Mhz-908.5Mhz std:907.8Mhz)
- US902-4(908.7Mhz-910.1Mhz std:909.4Mhz)
- US902-5(910.3Mhz-911.7Mhz std:911.0Mhz)
- US902-6(911.9Mhz-913.3Mhz std:912.6Mhz)
- US902-7(913.5Mhz-914.9Mhz std:914.2Mhz)
- AS923-1(922.0Mhz-923.4Mhz std:922.1Mhz)
- AS923-2(923.2Mhz-924.6Mhz std:924.5Mhz)
- AU915-0(915.2Mhz-916.6Mhz std:915.9Mhz)
- AU915-1(916.8Mhz-918.2Mhz std:917.5Mhz)
- AU915-2(918.4Mhz-919.8Mhz std:919.1Mhz)
- AU915-3(920.0Mhz-921.4Mhz std:920.7Mhz)
- AU915-4(921.6Mhz-923.0Mhz std:922.3Mhz)
- AU915-5(923.2Mhz-924.6Mhz std:923.9Mhz)
- AU915-6(924.8Mhz-926.2Mhz std:925.5Mhz)
- AU915-7(926.4Mhz-927.8Mhz std:927.1Mhz)
- KR920(922.1Mhz-923.3Mhz std:Disabled)

Step 5.   Select "LoRaWAN" for RF operation mode setting on WISE-4610.

Step 6.   A new tab will pop-up after click on "network server" > "enable" > "network server (http)".

Account: root

Password: root

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Navigation	
Router	

LoRaWAN Radio
Network Server
• Settings
• Network Server(http)
• Network Server(https)
• Upload Database
• Download Database
• Factory Reset Database
MQTT
Application Server
Licenses
Return to Router

LoRaWAN Network Server Enable
On ▼   Enable LoRaWAN network server.

LoRaWAN Server Listen Port
1680   The LoRa network server listen port number (1 - 65535).

LoRaWAN Network Server HTTP Port
8080   The LoRaWAN network server HTTP port number (1 - 65535).

LoRaWAN Network Server HTTPS Port
8443   The LoRaWAN network server HTTPS port number (1 - 65535).

LoRaWAN Web Username
root   The user name for the LoRaWAN network server.

LoRaWAN Web Password
root   The password for the LoRaWAN network server.

Auto ADR Count
50   The count used to Auto ADR function.

LoRaWAN Network Server HTTPS Enable
Off ▼   Enable HTTPS service.

Save

× 🖲 Server Admin × +

不安全 | 192.168.1.1:8080/admin#/dashboard ☆
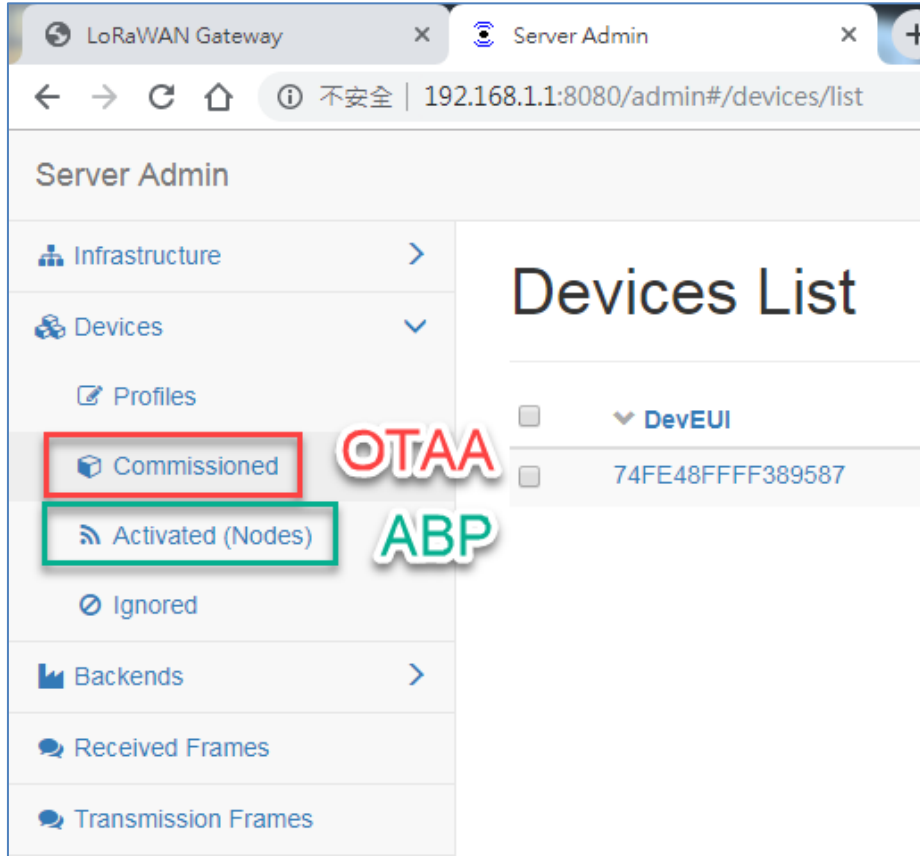
登入

http://192.168.1.1:8080
你與這個網站之間的連線不是私人連線

使用者名稱

密碼

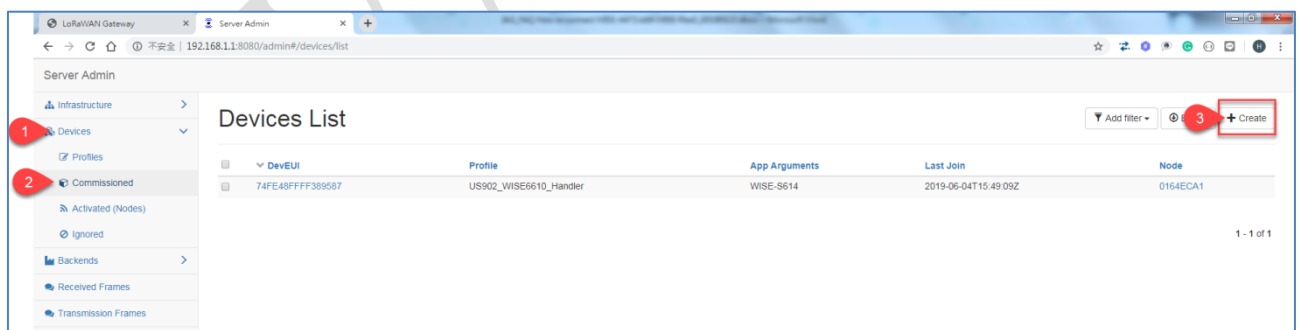登入   取消

Step 7.   Create an end node device.

- If select "commissioned", which means the node will use OTAA mode for connecting with a gateway.
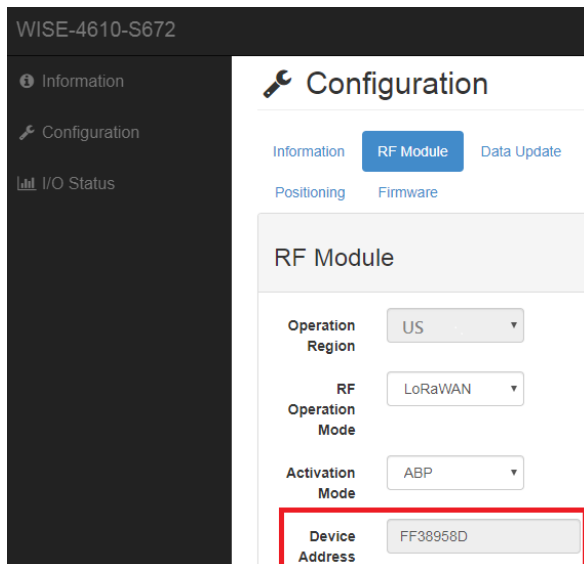- If select "active nodes", which means the node will use ABP mode for connecting with a gateway.

Click on "create" in devices.

1. DevAddr: the device address of an end node.
    - Copy-pate from WISE-4610 "RF module" tab.

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2. Profile: select the model name of the WISE-6610 which used for Network Server role.
   - In this demo, a US version is used to connect with WISE-4610NA version.
   -

3. App Arguments: the I/O board of the end node.
   - In this demo, a WISE-S672 is used to connect with WISE-4610.
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4. NwkSKey: the network service key address of an end node.
   - Copy-pate from WISE-4610 "RF module" tab.
   -

5. AppSKey: the application service key of an end node.
   - Copy-pate from WISE-4610 "RF module" tab.

6. Click on "save" to finish the setting.

Step 8.   Create a "network server" gateway. Copy-paste the MAC address from "LoRaWAN radio" > "LoRaWAN Gateway Identifier".

Results:

1. Click "application server" > "status". Here shows the end nodes if packets are received by gateway from an end node.

2. Received frames page shows the received results. The "FCnt" shows the frame sequence. If this sequence is in-continuously, means some of the packets were lost, did not received.