Advantech AE Technical Share Document

Date	2021/08/12	**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.

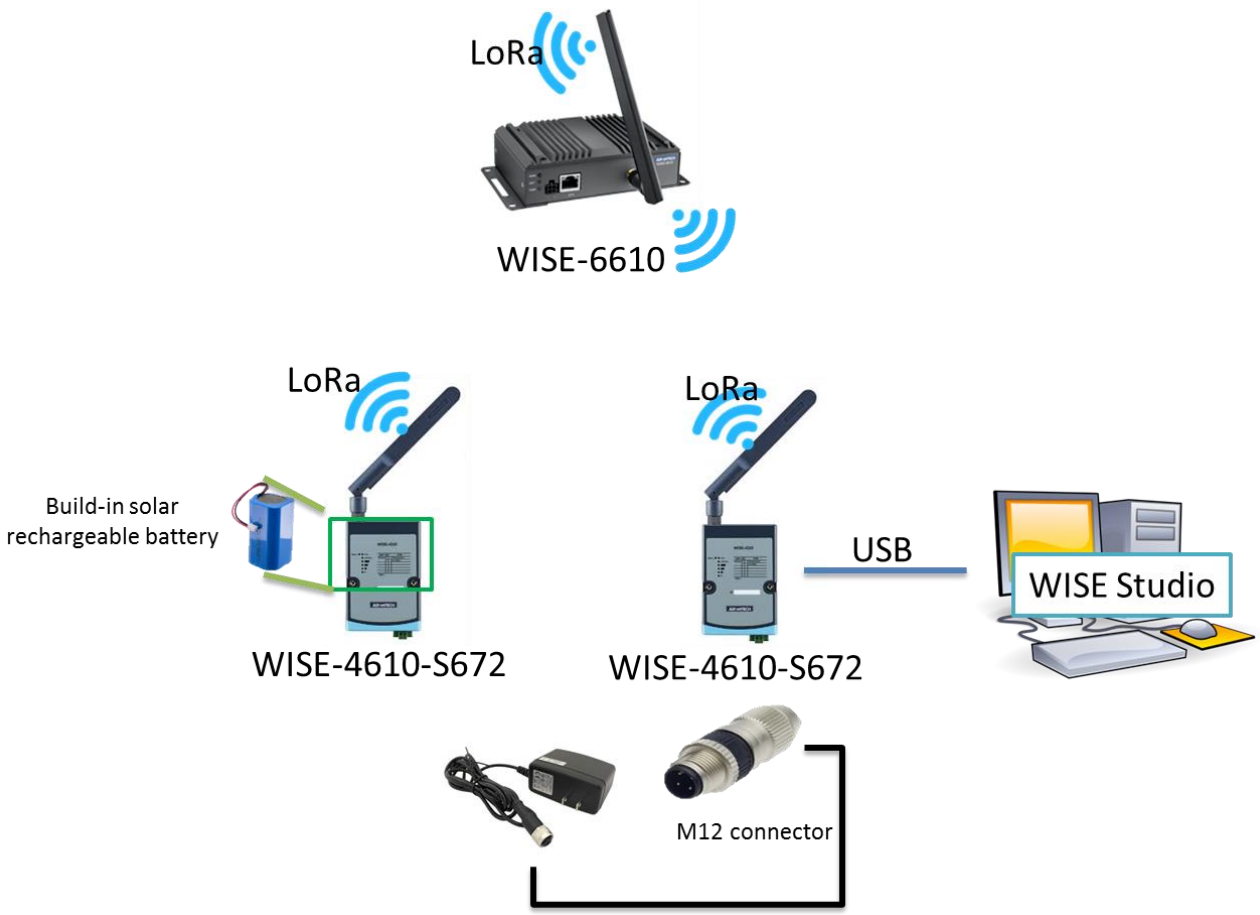


Figure 1. Topology of this scenario.

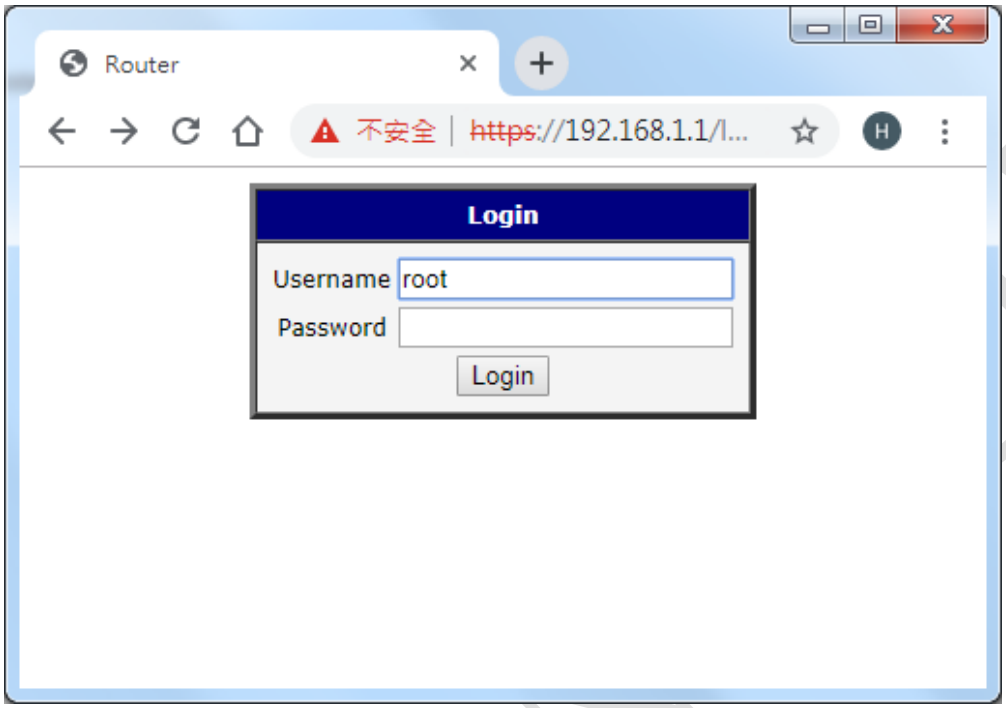
■ **Brief Solution - Step by Step:**

Step 1. Enter the WISE-6610 gateway.

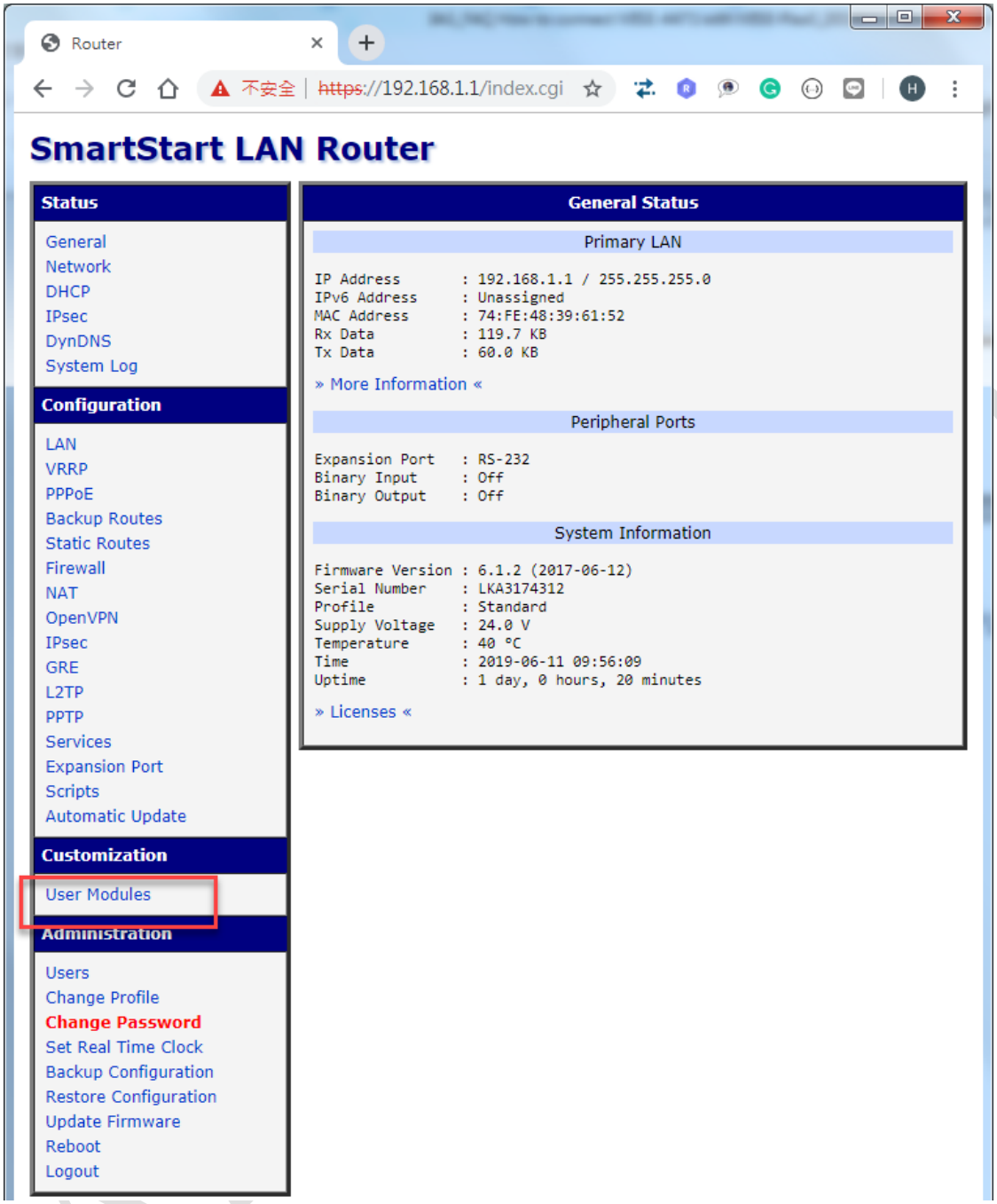
Default IP:192.168.1.1

Account: root

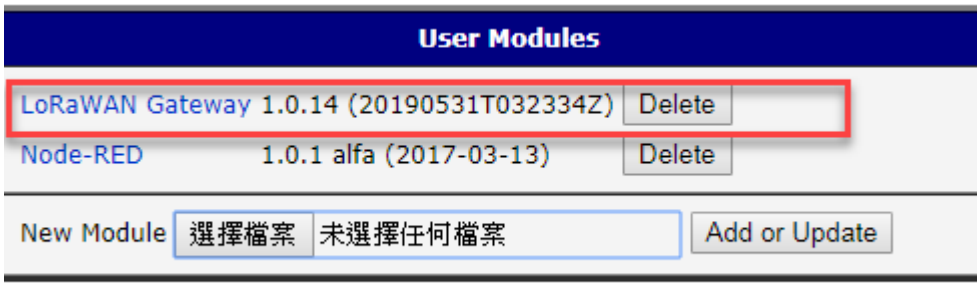
Password: root



Step 2. Go to “user mode”.

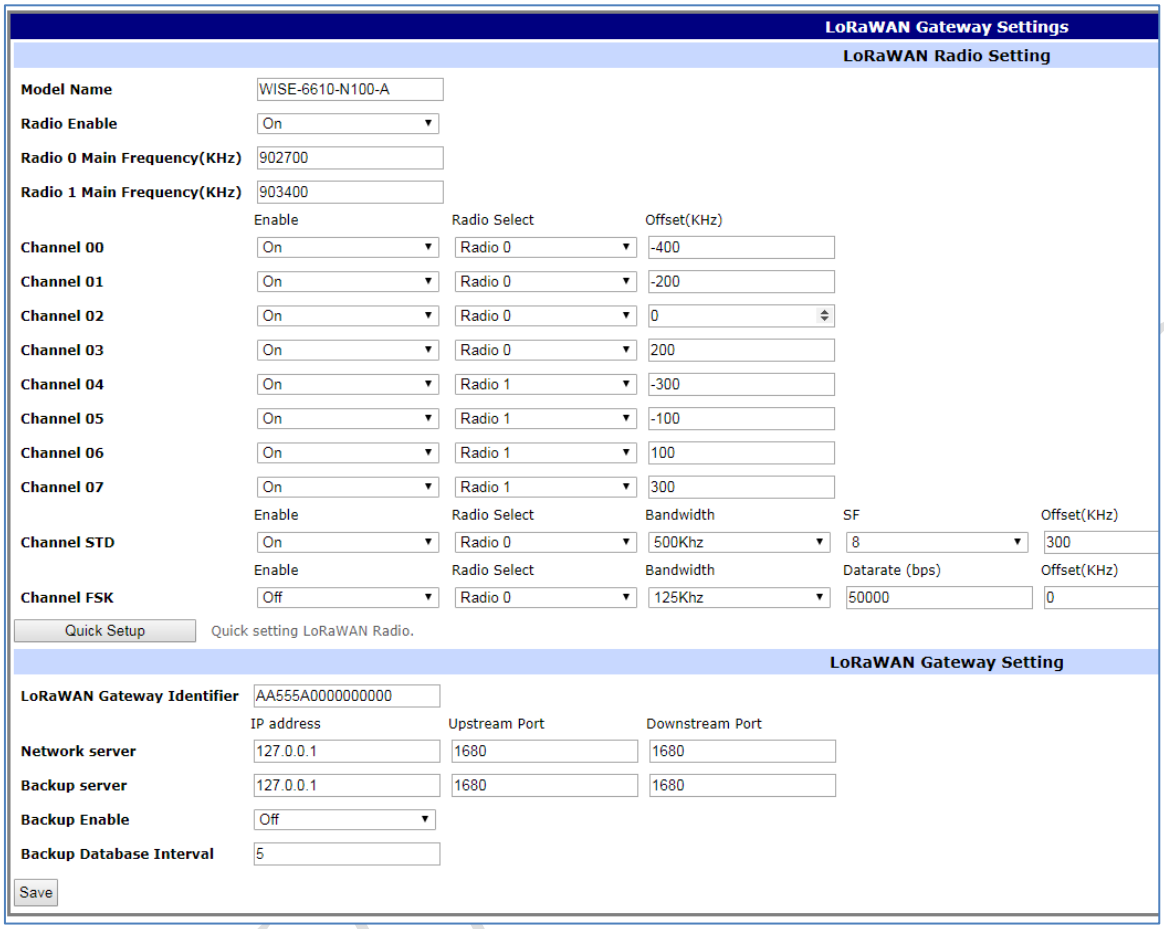


Step 3. If you need to upgrade the “LoRaWAN Gateway” function, **DELETE first**, then upload new file.

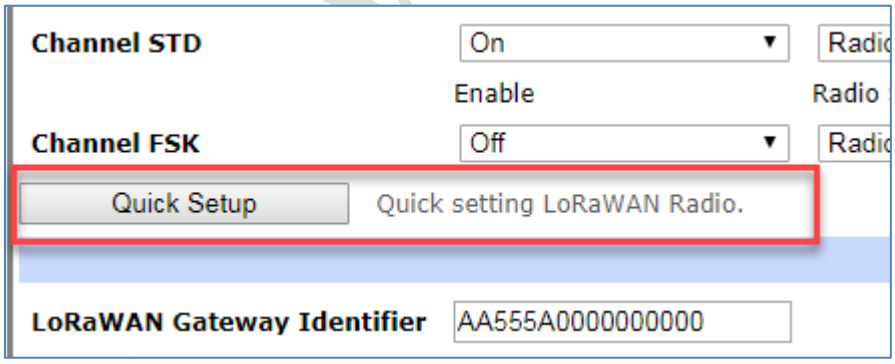


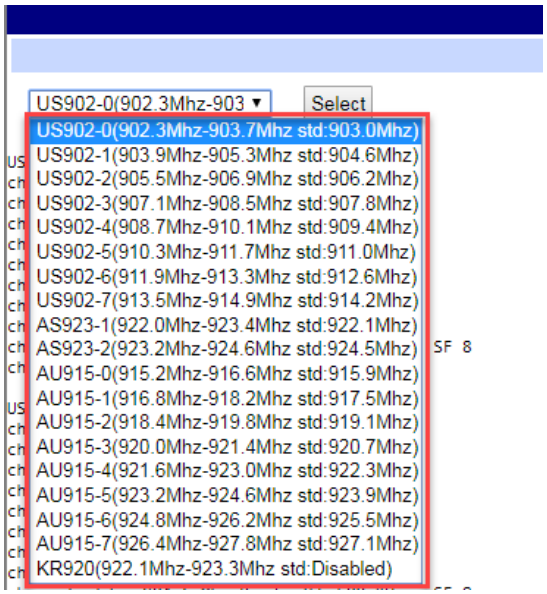
Step 4. Click “LoRaWAN Gateway” to enter the setting page.

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

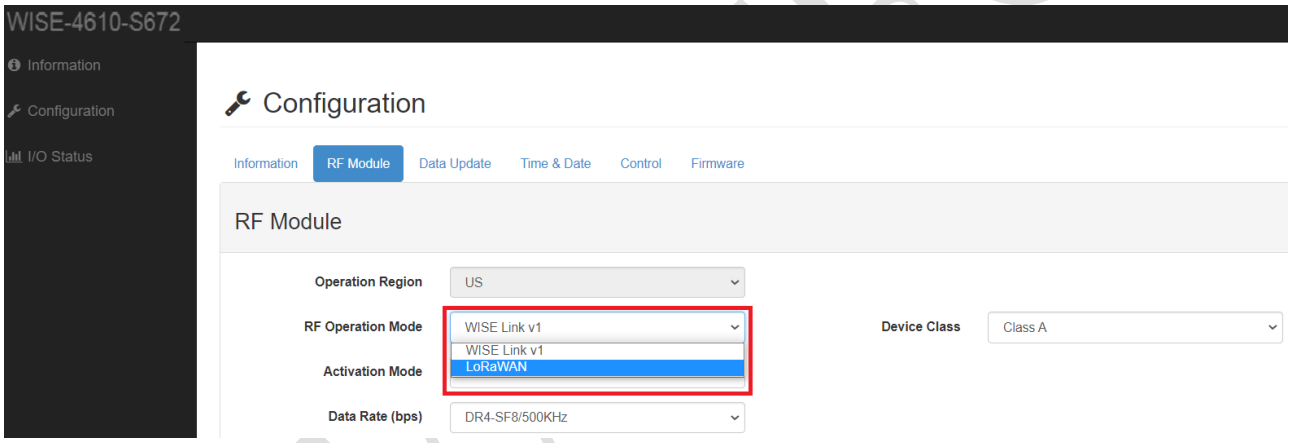


Or click on “quick setup” for default setting.

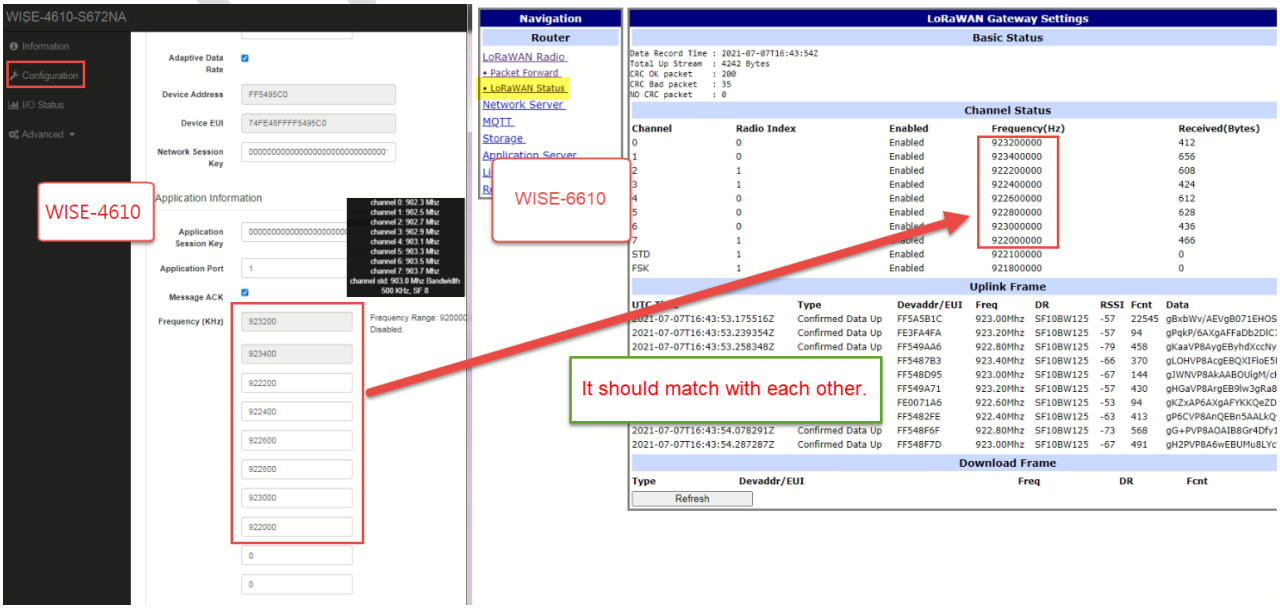




Step 5. Go to “Configuration” of WISE-4610 in WISE-Studio. Select RF Operation Mode as “LoRaWAN”, and Reboot WISE-4610.



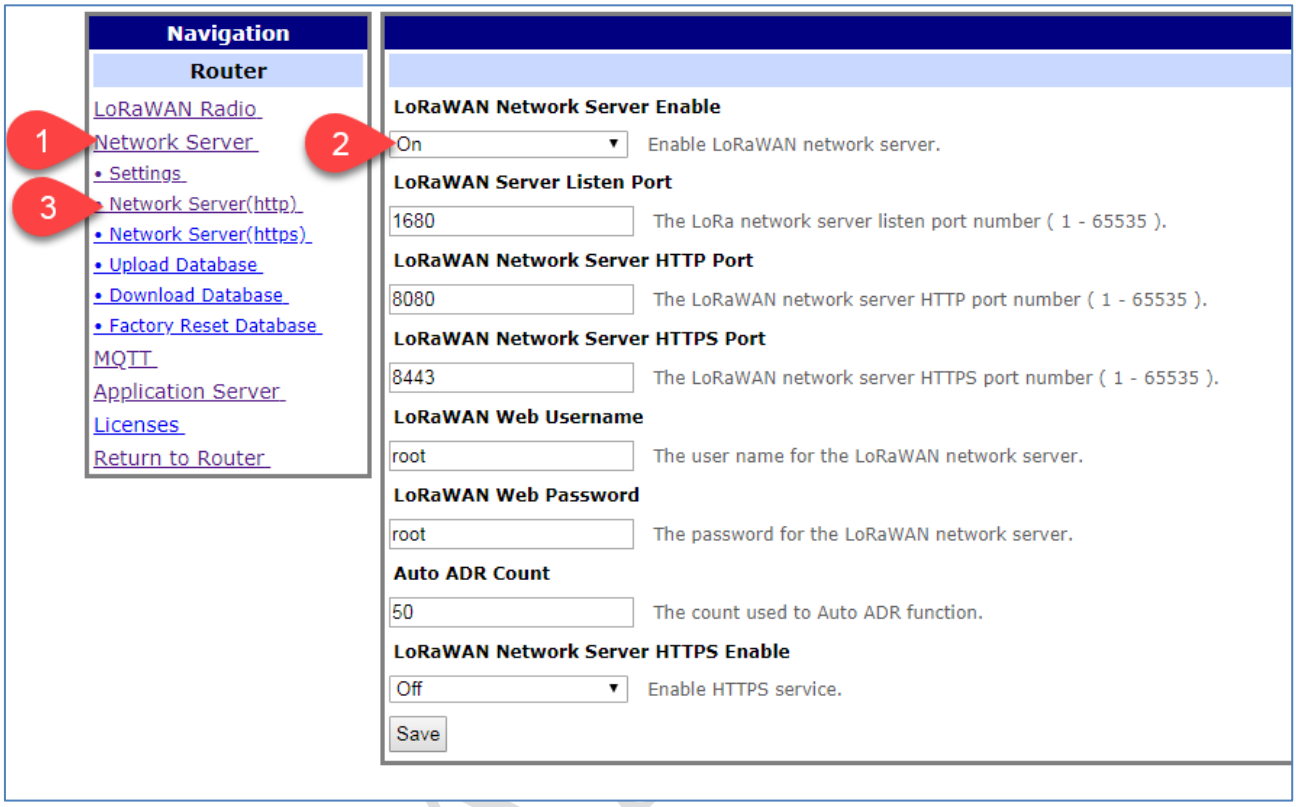
Step 6. Setup the LoRa frequency in WISE-6610, do the the “LoRaWAN Status” and copy-paste the frequency into the “RF” setting page of the WISE-4610.

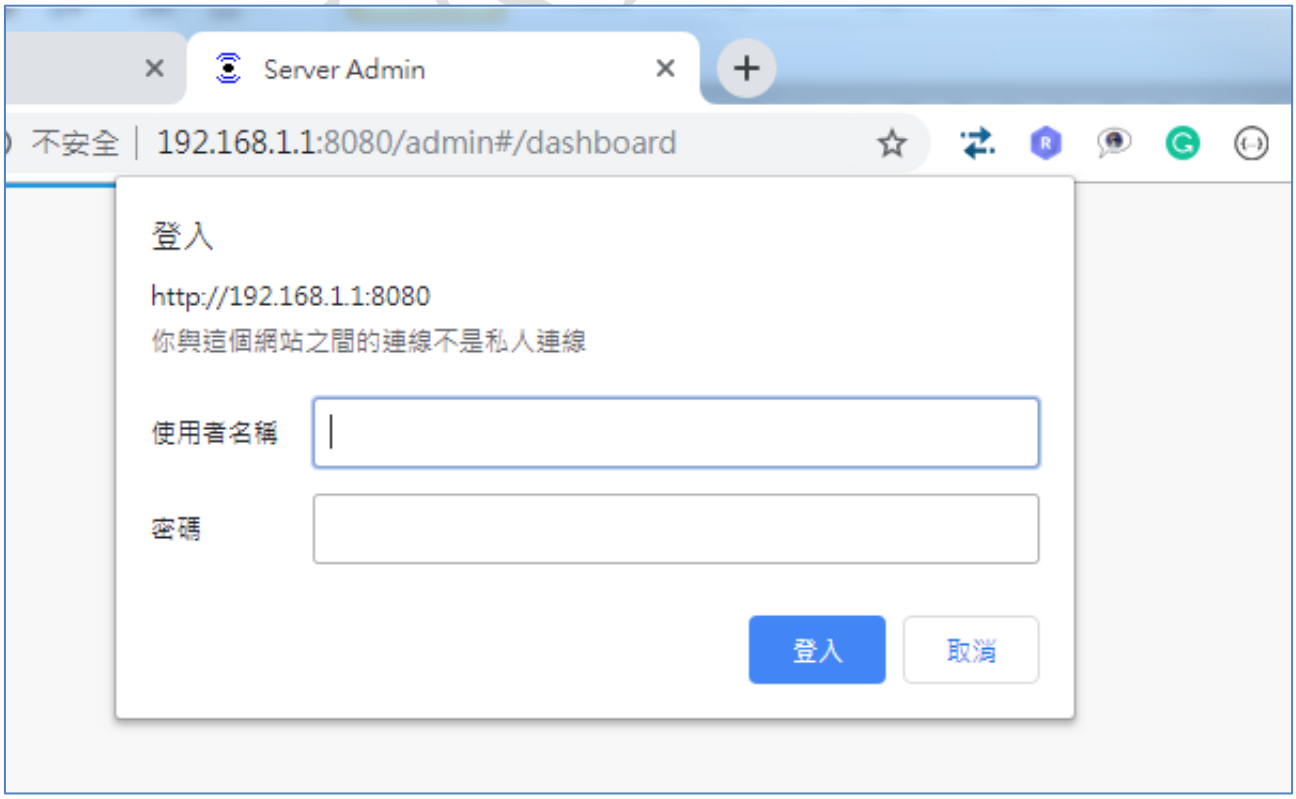


Step 7. A new tab will pop-up after click on “network server” > “enable” > “network server (http)”.

Account: root

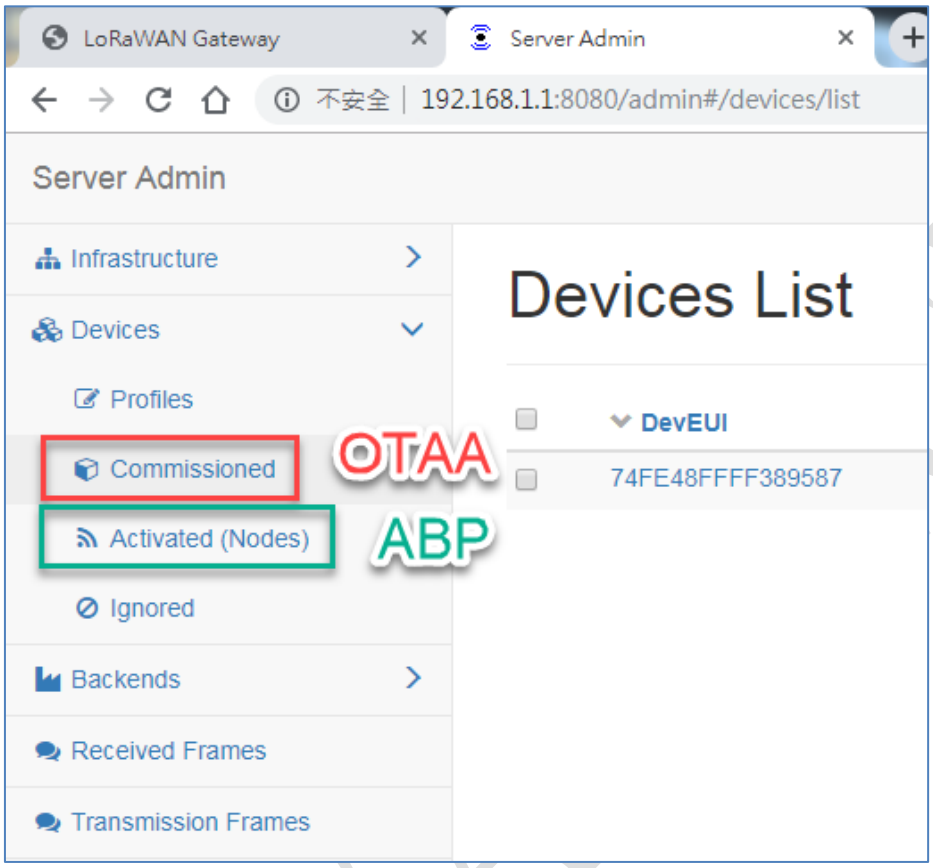
Password: root



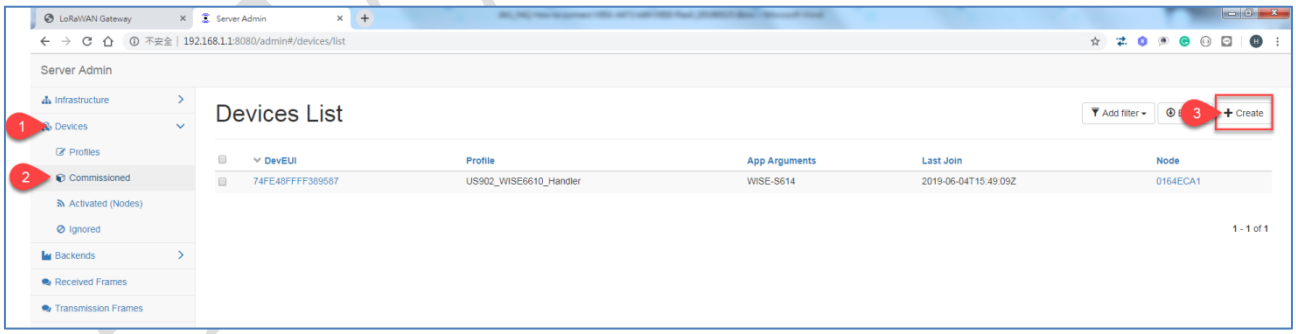


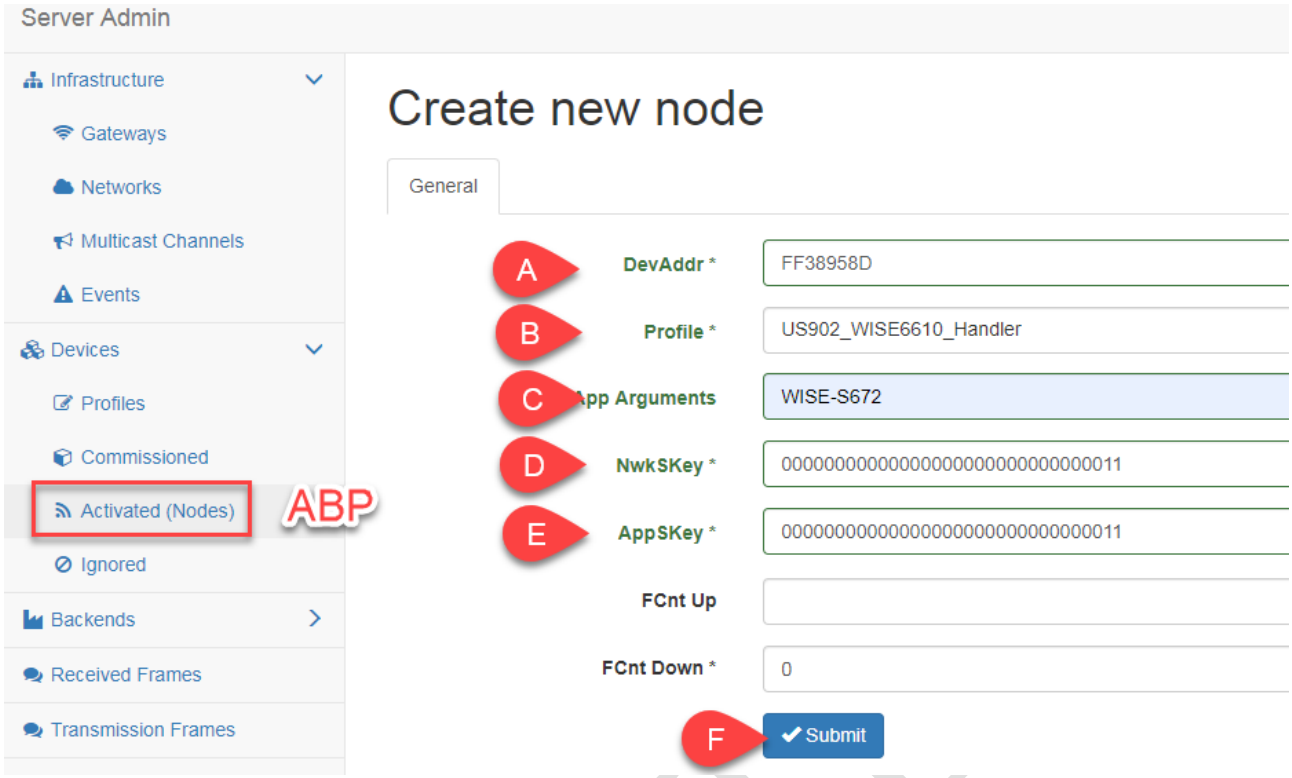
Step 8. Create an end node device.

- 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.



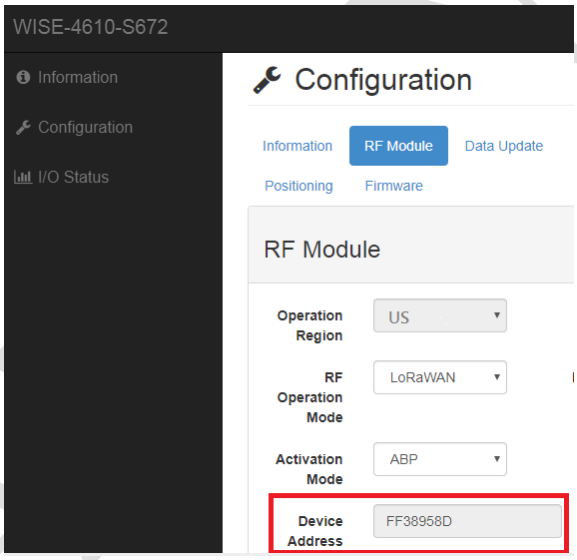
Click on “create” in devices.





A. DevAddr: the device address of an end node.

- Copy-pate from WISE-4610 “RF module” tab.



B. 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.
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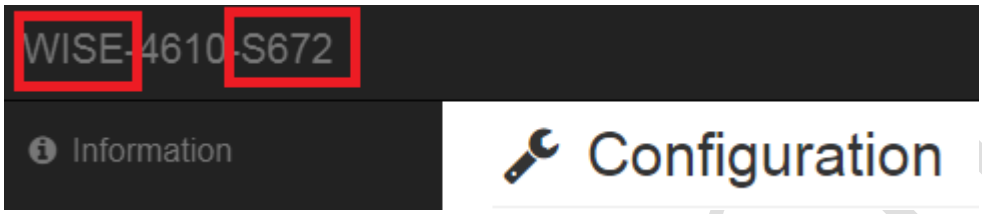
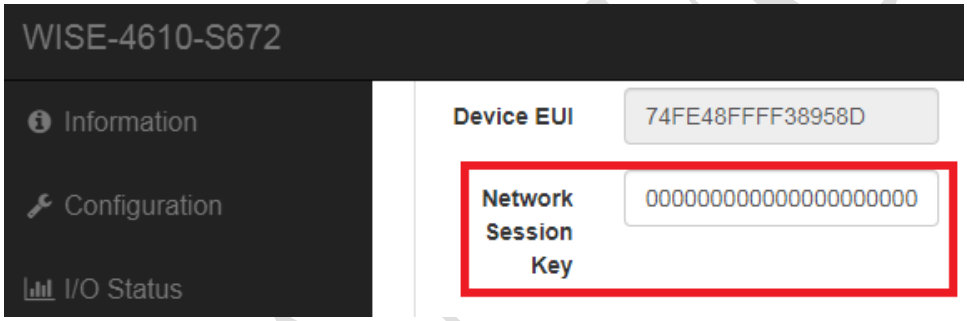
C. App Arguments: the I/O board of the end node.

- In this demo, the name: "**WISE-S672**" is used to connect with WISE-4610.
  ONLY ALL BIG capital letter of name for "**WISE-S672**".
  DO NOT fill **WISE-4610-S672, WISE-4610, WISE-672** and not with small capital.
  (※For example, please fill in "**WISE-S617**" as App Arguments if using **WISE-4610-S617TNA** as node here.)



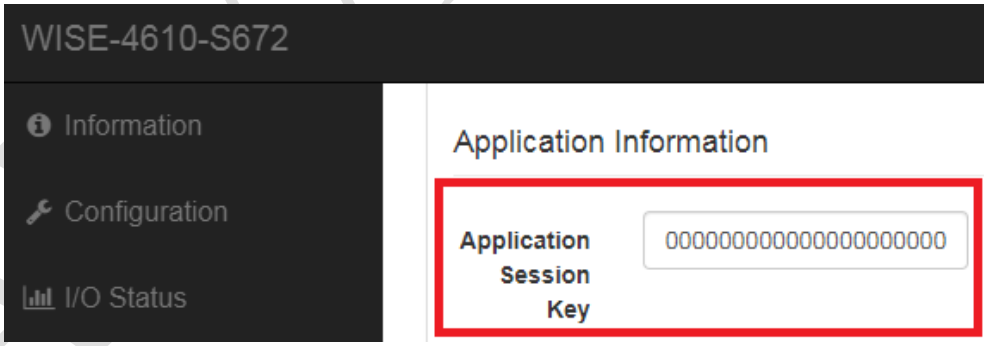
D. NwkSKey: the network service key address of an end node.

- Copy-pate from WISE-4610 "RF module" tab.



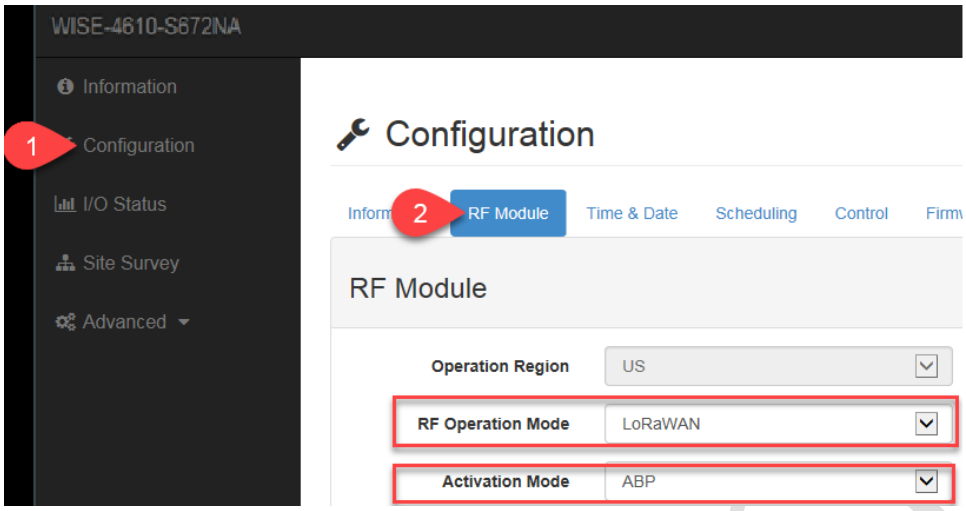
E. AppSKey: the application service key of an end node.

- Copy-pate from WISE-4610 "RF module" tab.

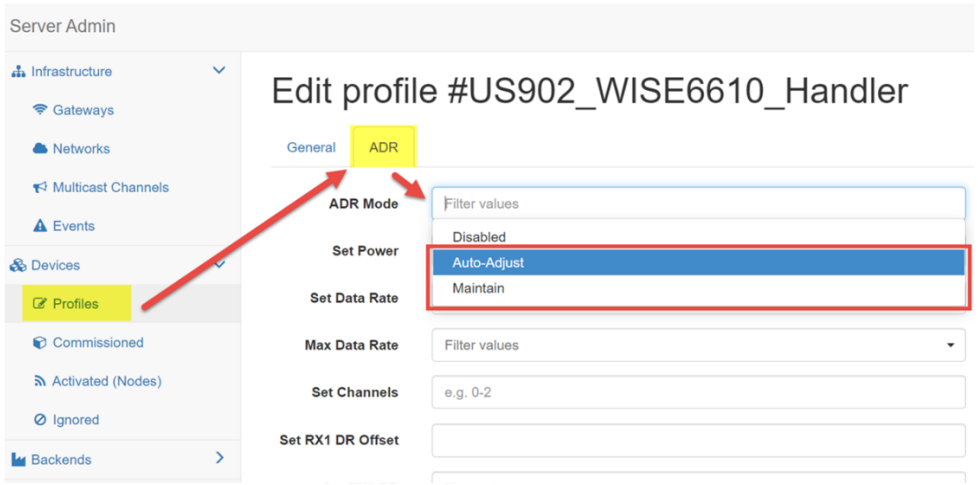


F. Click on "save" to finish the setting.

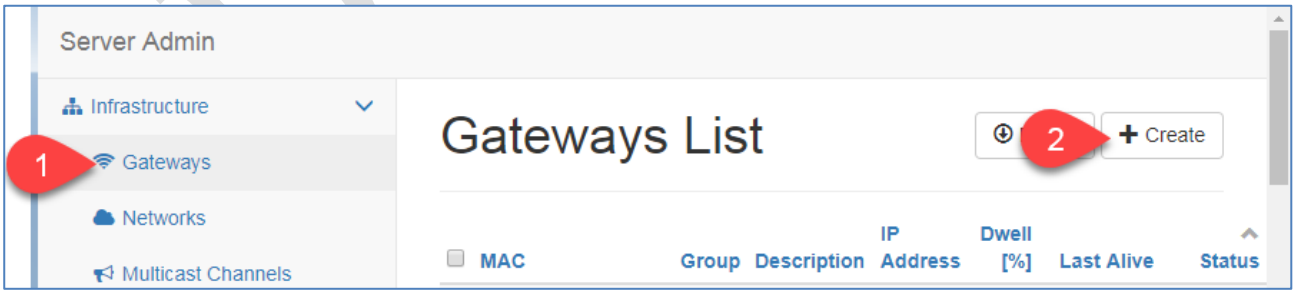
Step 9. Select “LoRaWAN” for RF operation mode setting on WISE-4610.

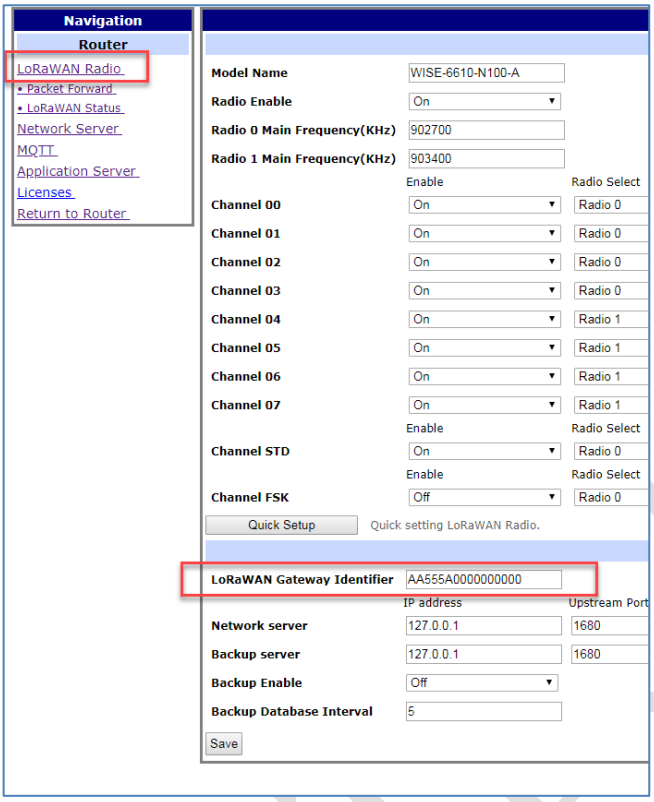


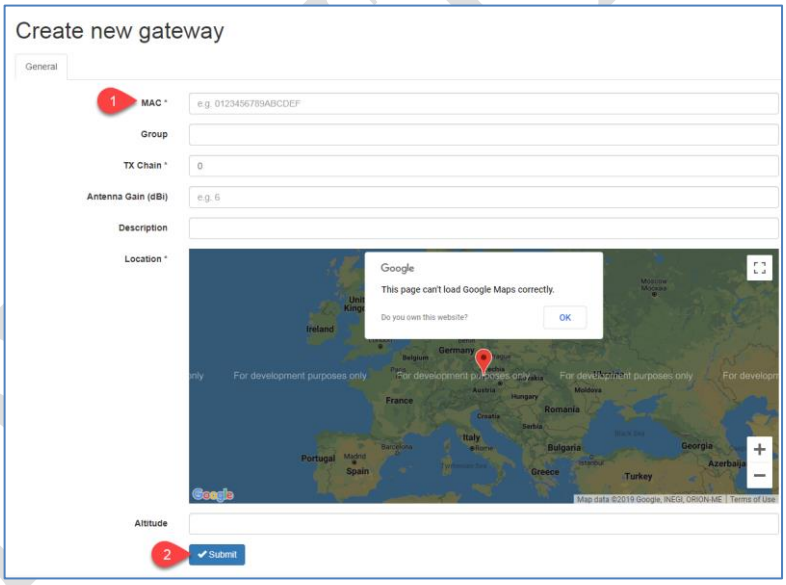
Step 10. Enable “profile ADR” as “auto-adjust”.



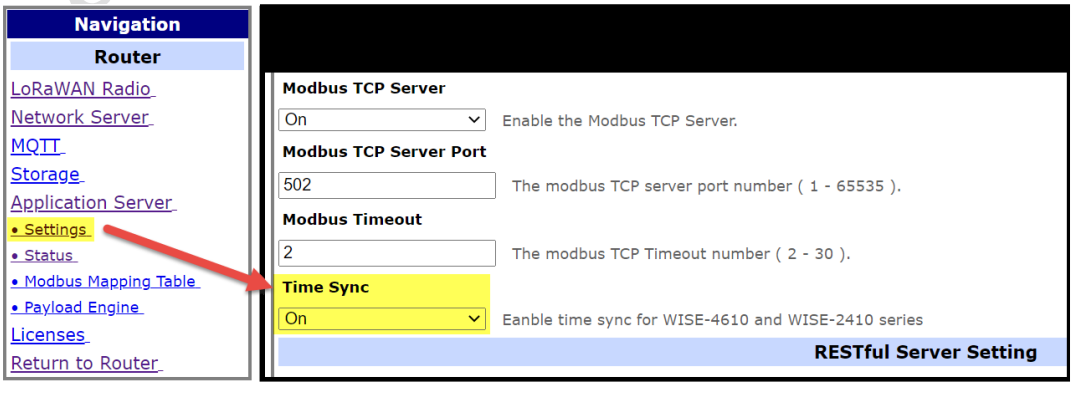
Step 11. Create a “network server” gateway. Copy-paste the MAC address from “LoRaWAN radio” > “LoRaWAN Gateway Identifier”.





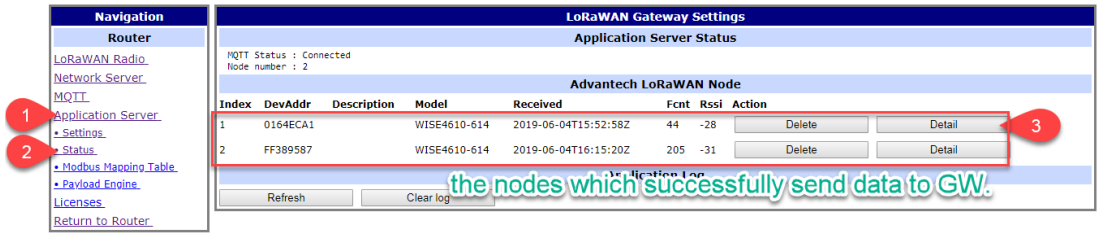


Step 12. Enable “time sync” for WISE-4610 RTC adjusting with WISE-6610 system time

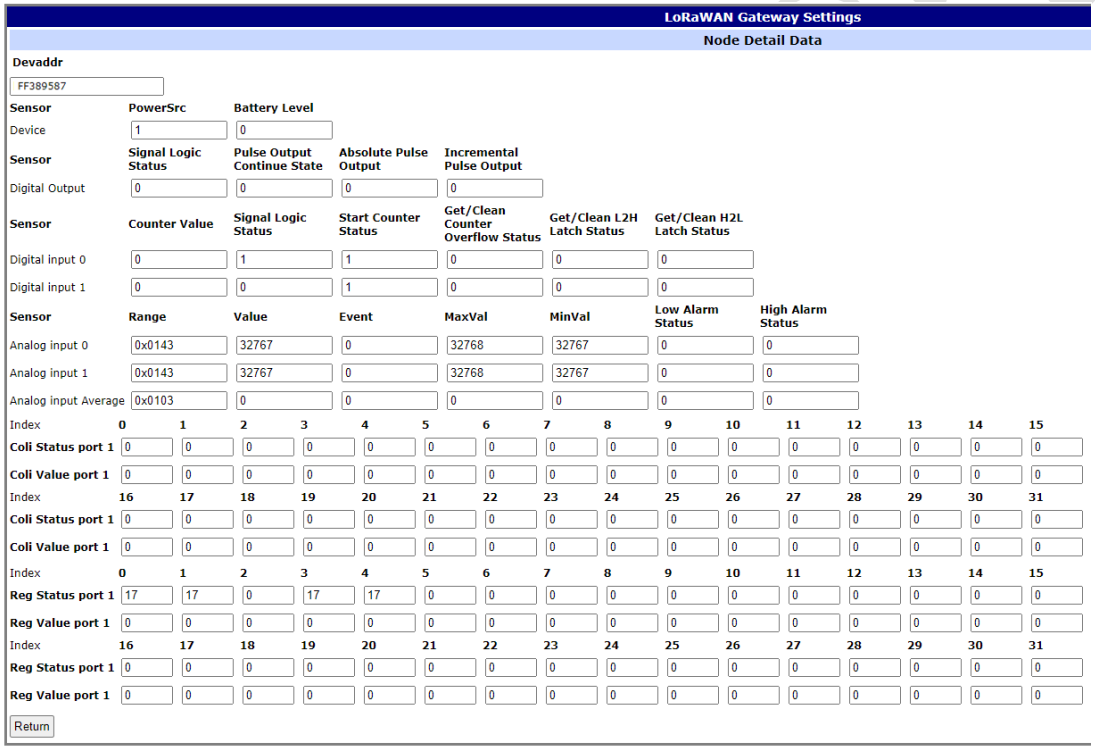


Connection results:

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



2. The gateway will help to pre-parsing the data payload if the “app arguments” input correctly.



3. 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.