

Advantech AE Technical Share Document

Date	2021/2/4	SR#	1-4436556841
Category	<input type="checkbox"/> FAQ <input checked="" type="checkbox"/> SOP	Related OS	N/A
Abstract	How to connect WISE-2410/4610 with Actility through Gemtek gateway?		
Keyword	WISE, LoRaWAN, Actility, Gemtek, WISE-PaaS		
Related Product	WISE-2410, WISE-4610		

■ **Problem Description:**

This document shows that how to connect WISE-2410/4610 with Actility through Gemtek outdoor gateway. In the end of this document, there will be a MQTT client monitoring the WISE-2410/4610 data sent from the Actility.

Limitation: only support EU863~870, US902~928, and AS923 channel plans.

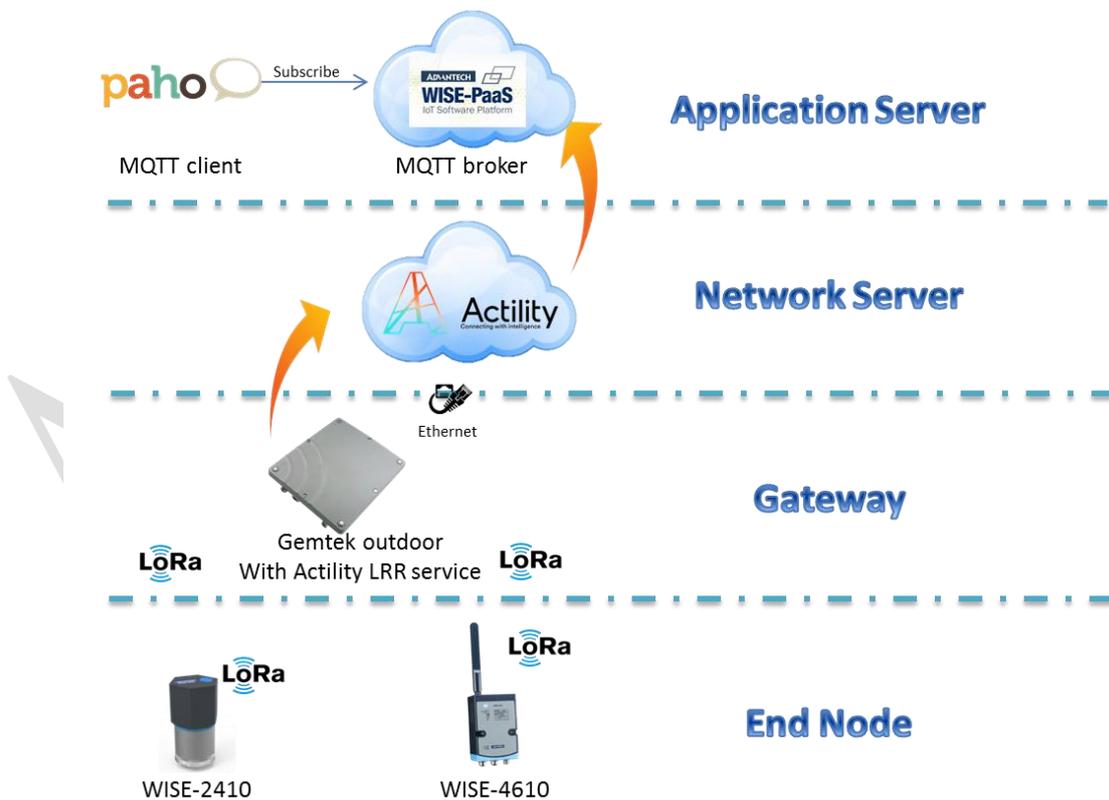


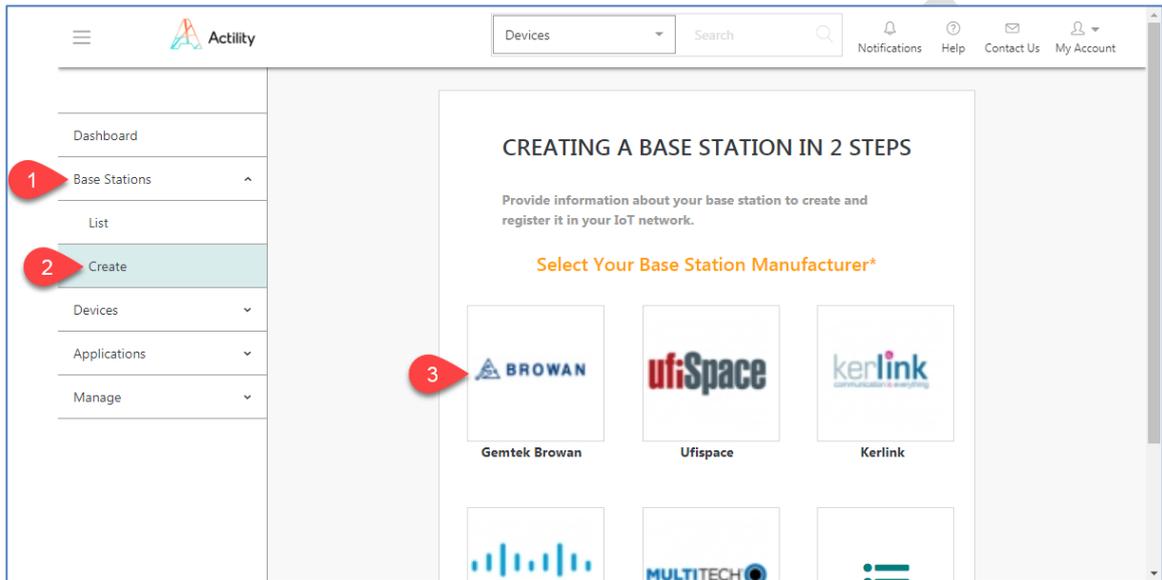
Figure 1. Topology of this document.

■ **Brief Solution - Step by Step:**

Step 1. Log-in ThingParkEnterprise.

<https://thingparkenterprise.au.actility.com/tpe/#/login>

Step 2. Create a base station with “Gemtek Browan”. The parameters shall follow the SOP from Actility manual.



Step 3. Create a device with “Advantech” icon.

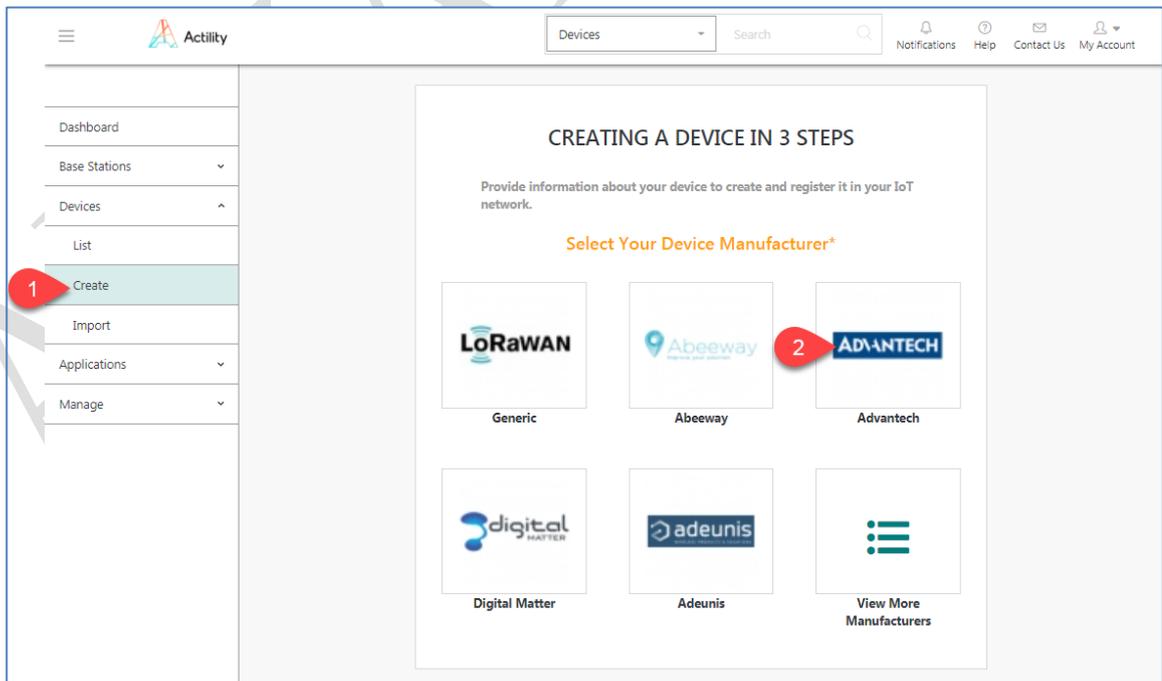
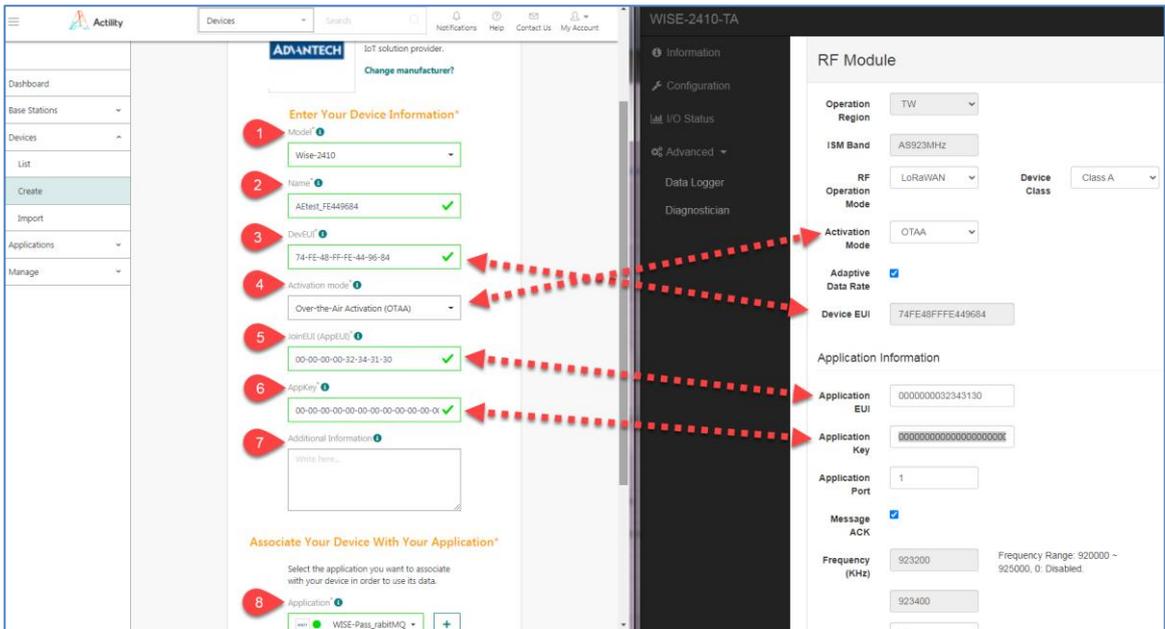
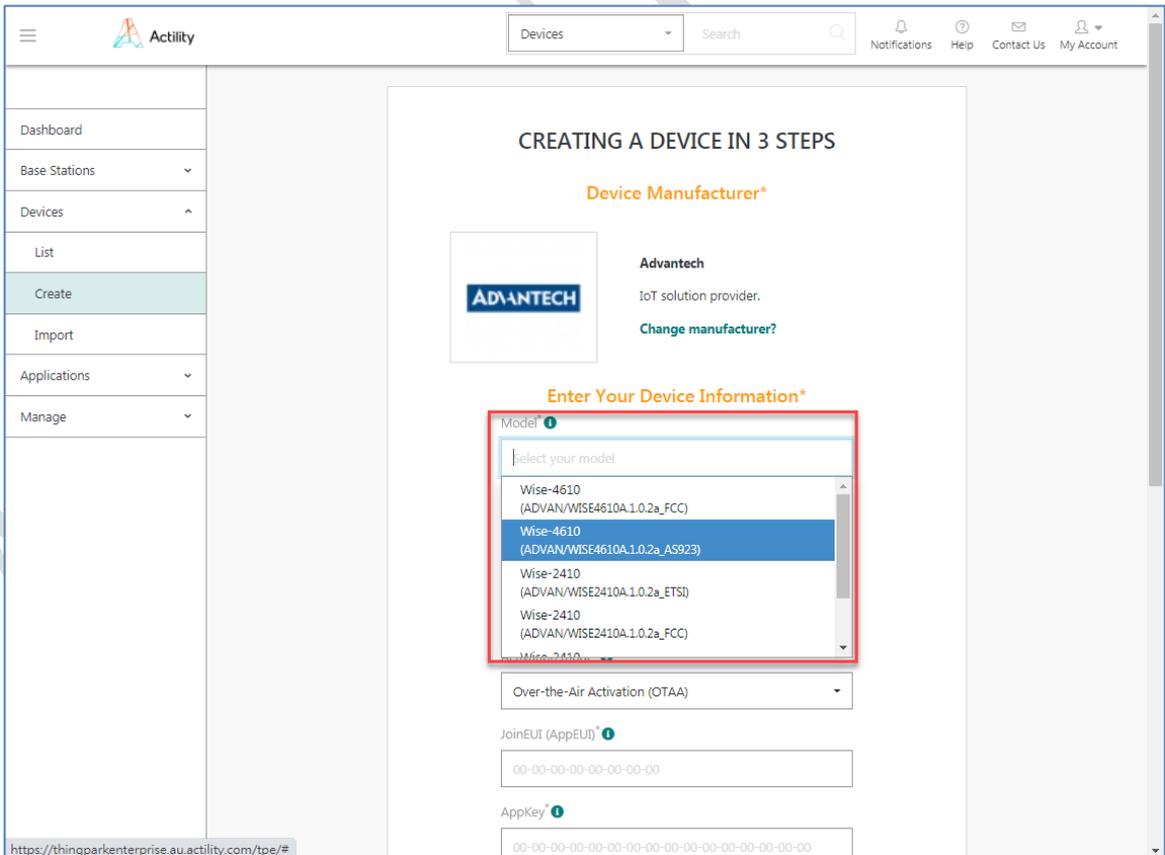


Figure 2. Select “Advantech” type to create a device.

Step 4. Create a device.



1. Model: select node type according to the device model name and the license.
 - FCC: If the WISE-4610/2410 firmware is using NA version.
 - AS923: If the WISE-4610/2410 firmware is using TA version.
 - ETSI: If the WISE-4610/2410 firmware is using EA version.



2. Name: any name is fine as long as it shows green mark on the setting page.
3. DevEUI: copy-paste from WISE Studio RF setting page.
4. Activation mode: set the same mode as end device uses.
5. JoinEUI (AppEUI): copy-paste from WISE Studio RF setting page.

- 6. AppKey: copy-paste from WISE Studio RF setting page.
- 7. Additional Information: any info set by user.
- 8. Application: if already created, choose one of them. If has not create any, leave it blank.

Step 5. Click on “save” after setup all parameters to finish the registration.

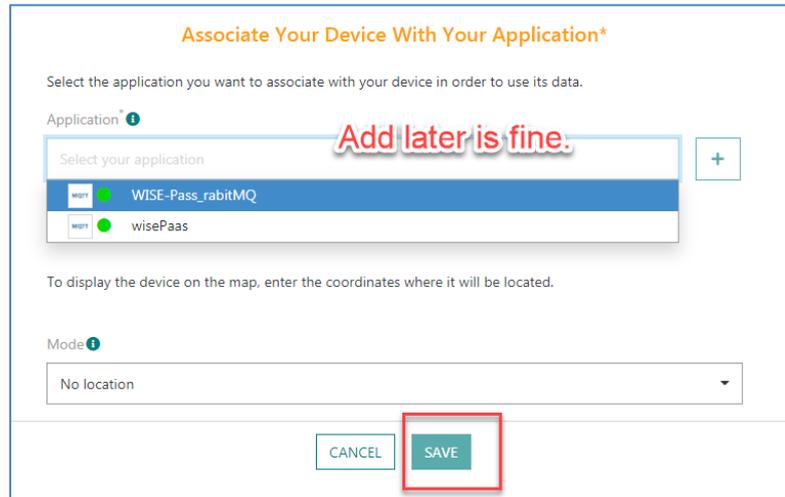
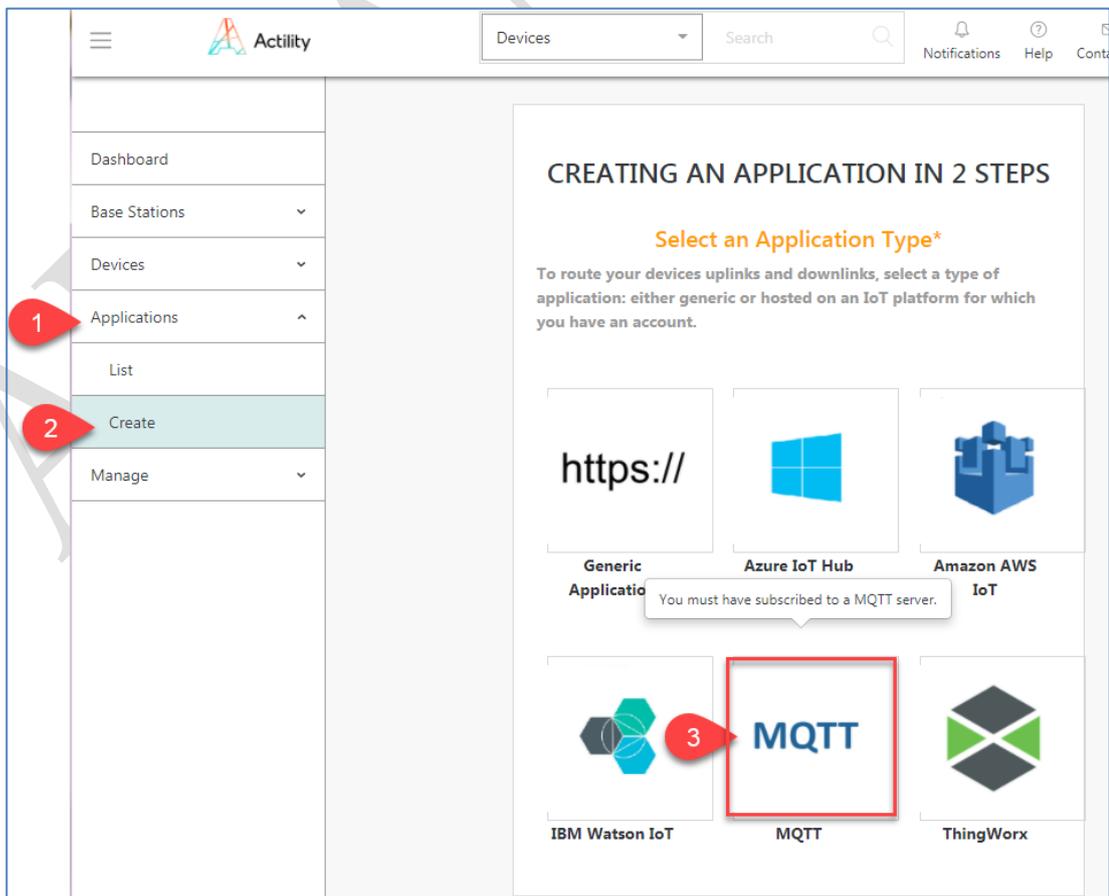
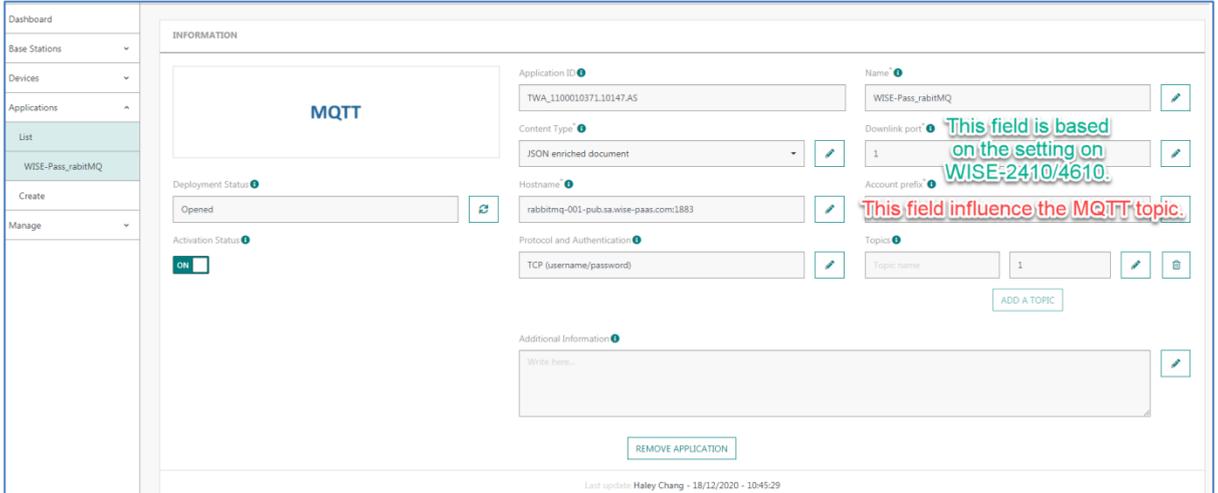


Figure 7. Save the setting.

Step 6. Create an application according the needs. This document uses MQTT application as an example.



Step 7. The example is using WISE-PaaS RabbitMQ as a MQTT broker.



Result:

1. If created a node successfully, the node info will be shown on the “devices/ list”.

Name	DevEUI	DevAddr	Applications	RSSI	SNR	SF	Last Uplink	Last Downlink	Battery	Best LRR
AE module_9684	74-FE-48-FF-FE-44-96-84	04-4E-DA-DE	WISE-Pass_rabbitMQ, wisePaas, DeviceOn80112	-112.4 dBm	4.9 dB	SF7	Today - 143253	Today - 143254	🟢	10-00-11-F4
wise2410_FF190124_CarrieTest	74-FE-48-FF-FF-19-D1-24	05-C9-8E-28	WISE-Pass_rabbitMQ	-122.6 dBm	-13.6 dB	SF10	05/01/21 - 143751	25/12/20 - 174358	🟢	10-00-11-F4
SW test_D133	74-FE-48-FF-FF-19-D1-33	05-0C-65-46	WISE-Pass_rabbitMQ, wisePaas, DeviceOn_dev	-103.2 dBm	9 dB	SF7	27/01/21 - 143320	27/01/21 - 143330	🟢	10-00-11-F4
AE module_9578	74-FE-48-FF-FF-38-95-78	05-D5-82-EA	wisePaas, WISE-Pass_rabbitMQ, DeviceOn_dev	-102.4 dBm	9.45 dB	SF8	Today - 143252	Today - 143253	🟢	10-00-11-F4
AE module_958D	74-FE-48-FF-FF-38-95-8D	05-4C-85-36	WISE-Pass_rabbitMQ, DeviceOn_dev, wisePaas	-99.2 dBm	9.75 dB	SF10	Today - 143300	Today - 143301	🟢	10-00-11-F4
Carrie test_83FF	74-FE-48-FF-FF-40-83-FF	04-4E-13-30	WISE-Pass_rabbitMQ, DeviceOn_dev	-121.4 dBm	-10.2 dB	SF10	22/01/21 - 115054	22/01/21 - 115059	🟢	10-00-11-F4
SW test_D796	74-FE-48-FF-FF-45-D7-96	04-F6-F7-C4	WISE-Pass_rabbitMQ, DeviceOn_dev, wisePaas	-105.8 dBm	8.05 dB	SF10	Today - 143252	Today - 143253	🟢	10-00-11-F4
FW test_D77C_CarrieTest	74-FE-48-FF-FF-45-D7-7C	05-7D-F1-A6	WISE-Pass_rabbitMQ	-97 dBm	8.9 dB	SF7	21/01/21 - 113457	21/01/21 - 113458	🟢	10-00-11-F4

2. If a node is uploading data, the “last uplink” field shows the latest received data. And a user is able to use a MQTT client to subscribe the data from the MQTT broker. The topic is user defined content while creating an application.

