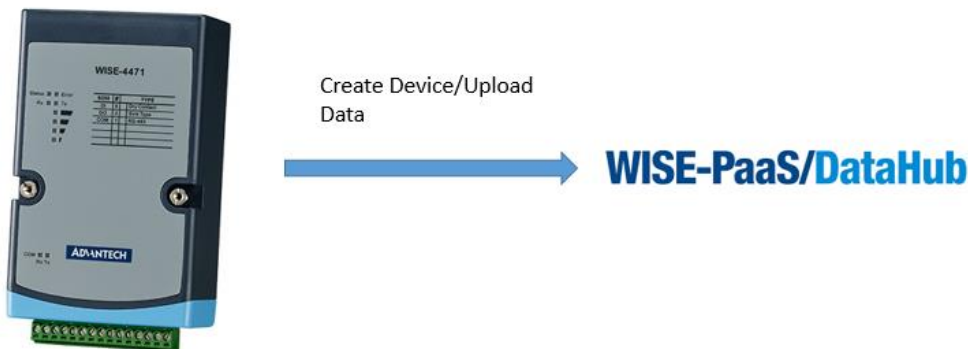


Advantech SE Technical Share Document

Date	2020/6/15	Related Product	WISE-4471/EnSaas 4.0/DataHub	
Category	<input type="checkbox"/> FAQ <input checked="" type="checkbox"/> SOP <input type="checkbox"/> Driver Tech Note			
Abstract	How to upload WISE-4471 data to DataHub of EnSaas 4.0			
Keyword	WISE-4471/EnSaas 4.0/DataHub			
Related OS	Windows Server 2012 / 2016, Win10			
Revision History				
Date	Version	Author	Reviewer	Description
2020/6/15	V1.0	Simon.Chiu	Nick.Liu	EnSaas4.0/WISE-4471 FW A1.01B08/DataHub 2.0.0

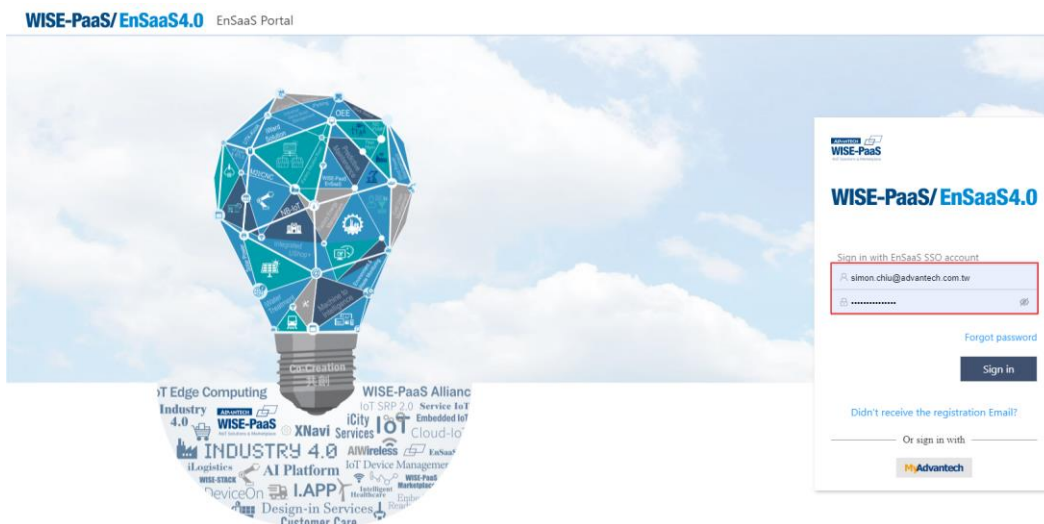
■ Problem Description & Architecture:

How to create device and upload data from WISE-4471 to DataHub of EnSaas 4.0



■ Brief Solution - Step by Step:

1. Please log in into EnSaas 4.0 management portal.



2. Please go to Router Management→Ingress→Link of DataHub

WISE-PaaS/EnSaaS4.0 Subscription Name : 1-1VWJ99V WISE-PaaS-Internal-AG02

Ingress
Ingress exposes HTTP and HTTPS routes from outside the cluster to services within the cluster.

Cluster: ews002 Workspace: mkp1589368010959 Namespace: ems1589368012665

Name	Internal Domain	External Domain	Path
dashboard-ems1589368012665	dashboard.ems1589368012665.ews002.en.internal	dashboard-ems1589368012665-ews002.sa.wise-paas.com	/
datahub-ems1589368012665	portal-datahub.ems1589368012665.ews002.en.internal	portal-datahub-ems1589368012665-ews002.sa.wise-paas.com	/
fems-ems1589368012665-api-srpalert	api-srpalert.ems1589368012665.ews002.en.internal	api-srpalert-ems1589368012665-ews002.sa.wise-paas.com	/
fems-ems1589368012665-ifactory-config	ifactory-config.ems1589368012665.ews002.en.internal	ifactory-config-ems1589368012665-ews002.sa.wise-paas.com	/

3. Please create project node of DataHub

DataHub Device Management

Project List

+ New Project

Project ID	Description	Detail	Delete
0506scada	
0511kel90	
0511SCADA	
Simon4471	
SimonTest	

4. Please create SCADA node of DataHub

DataHub Device Management

Node List

+ New Node

Node Name	Description	Status	Detail	Move to	Delete
Simon4471		●

- Please copy Node ID to notepad, it will be used later on.

Information
Credential

Project ID
Simon4471

Node ID
6bea0249-73d4-459b-a3ac-73dd3e34abff

Node Name
Simon4471

Node Type
Device Group

Description

- Please go back to EnSaas Management Portal and click service as picture shown

WISE-PaaS/EnSaaS4.0
Subscription Name : 1-1VWJ99V WISE-PaaS-Internal-AG02

Services

Home > Global
Cluster: ews001

Hi, simon.chiu...
workspaceOwner
Last: 2020/6/15 13:24:16

Workspace Information

2 Namespaces	5 Pod	5 Service	10 Secret	2 Config Map	0.01 core CPU	428.72 Mi Memory
-----------------	----------	--------------	--------------	-----------------	------------------	---------------------

- Be aware of your space and find Rabbitmq and click Action and Secret Management in the right hand side.

WISE-PaaS/EnSaaS4.0
Subscription Name 1-1VWJ99V WISE-PaaS-Internal-AG02

Service Instances
Users can manage service instances in subscriptions

Status	Instance Name	Instance ID	Service Name	Plan	Creation Time	Action
Active	rabbitmq	0099a81e-6291-11ea-b1de-d 20dfb084846	RabbitMQ	standard	2020/3/10 13:35:51	Secret Management
Active	redis	e9460cd1-58b8-46b8-9069-7 7707e1fdfe9	Redis	Containerized	2020/3/11 01:08:52	

8. In secrte management please find DataHub and click Action and View in the right hand side.

WISE-PaaS/EnSaaS4.0 Subscription Name 1-1VWJ99V WISE-PaaS-Internal-AG02

Secret Management Instance Name : rabbitmq Service Name : RabbitMQ Plan : standard

Search

Secret Name	Cluster	Workspace	Namespace	Creation Time	Action
datahub-adviiotse-secret	ews001	adv-iiot-se	adviiotse	2020/3/11 18:02:02	View Recreate Delete
datahub-all-in-one-secret	ews001	adv-iiot-se	adviiotse	2020/3/10 14:36:30	

9. Copy external hosts link to the same notepad

View

Credentials Parameters

```
{
  "binding_name": "datahub-adviiotse-secret"
  "credentials": {
    "externalHosts": "rabbitmq-001-pub.sa.wise-paas.com"
    "hostname": "rabbitmq-001.sa.wise-paas.com"
    "hostnames": [
      "rabbitmq-001.sa.wise-paas.com"
    ]
    "password": "hNSMgQr2E6XZ5esZjtz0Zr9iS"
  }
}
```

10. Copy port under coap to the same notepad

View

Credentials Parameters

```
{
  "coap": {
    "host": "rabbitmq-001.sa.wise-paas.com"
    "hosts": [
      "rabbitmq-001.sa.wise-paas.com"
    ]
    "password": "hNSMgQr2E6XZ5esZjtz0Zr9iS"
    "port": 5683
    "ssl": false
    "uri":
    "coap://rabbitmq-001-pub.sa.wise-paas.com/ps/0099a81e-6291-11ea-b1de-
```

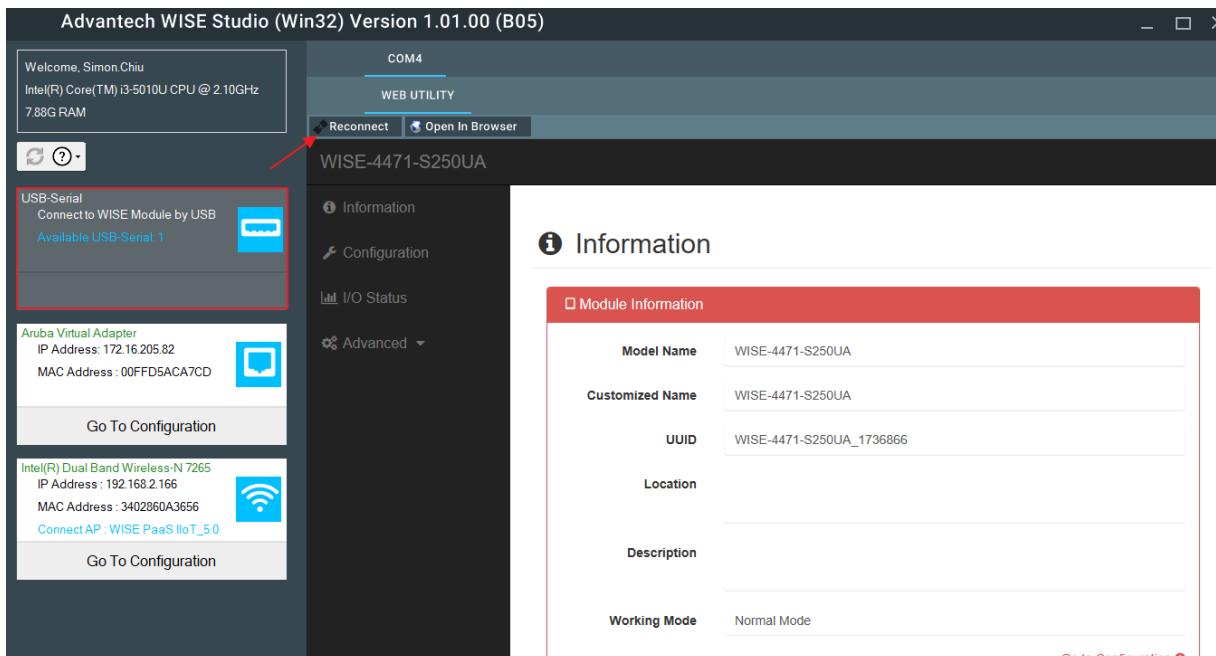

11. Copy uri of coap to the same notepad as picture shown below. It should be **/ps/.....**



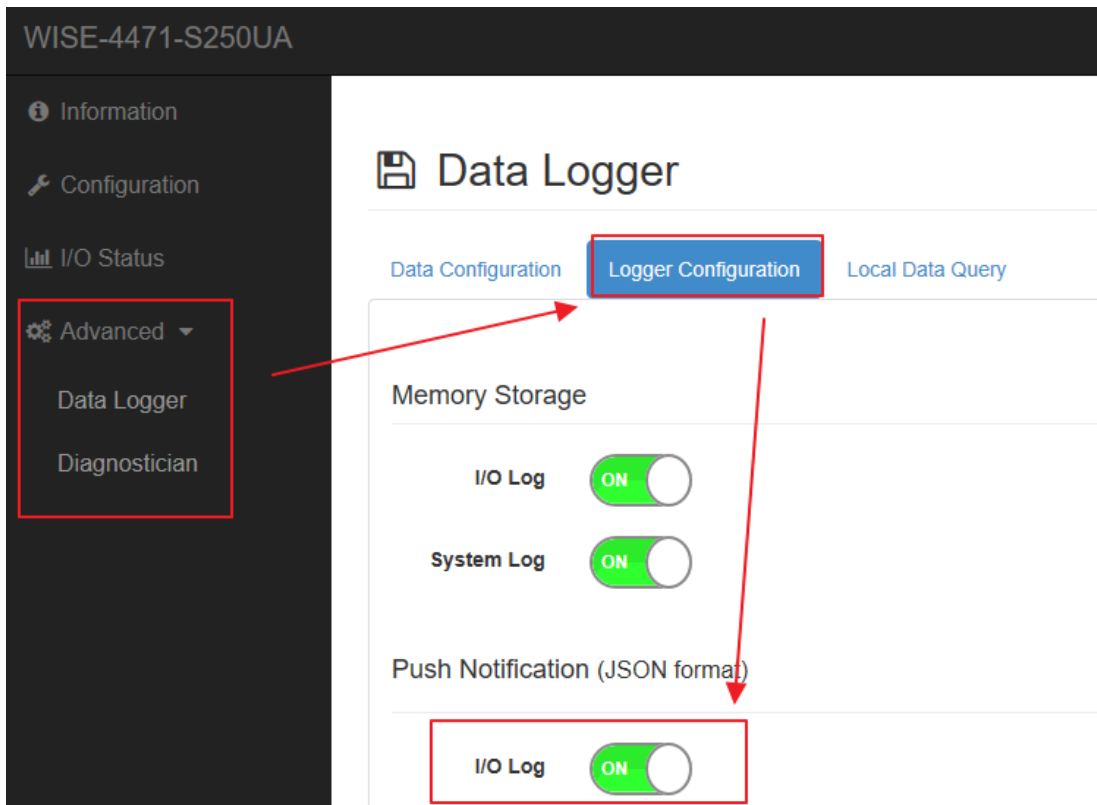
12. Please connect WISE-4471 via USB cable and computer. Then turn on WISE-Studio and choose connect by USB→Click connect

Link of WISE-STUDIO:

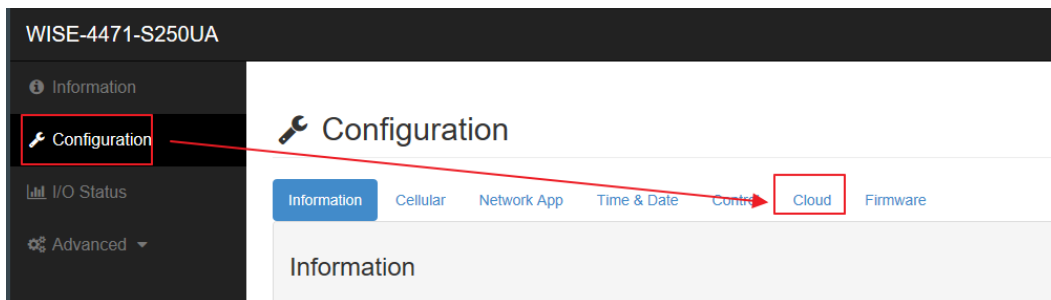
https://support.advantech.com/support/DownloadSRDetail_New.aspx?SR_ID=1-1MJSJKX&Doc_Source=Download



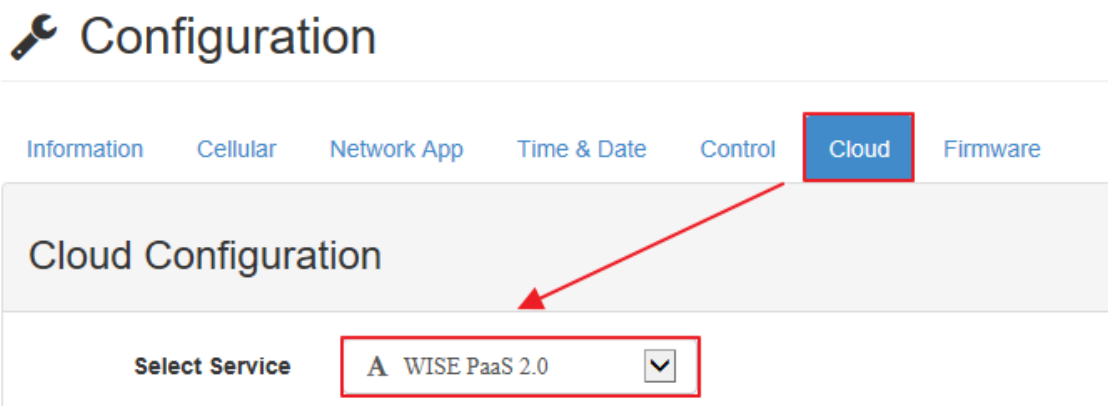
13. Please use WISE-STUDIO and go to Advanced→Data Logger→Logger configuration→Push Notification(JSON Format)→I/O Log turn on(necessary)



14. Please go to configuration→Cloud



15. Please choose service as WISE-PaaS 2.0



16. In the bottom of the page, there are several parameters which need to be typed. Please use the notepad which contains these parameters then copy them one by one. After that please click “submit” and reboot WISE-4471.

IP/Domain Name=[Link of External Hosts](#)

Port of Coap should be **5683**

WISE-PaaS Setting

IP/Domain Name	<input type="text" value="rabbitmq-001-pub.sa.wise-paas"/>	Server Port	<input type="text" value="5683"/>
SCADA Name	<input type="text" value="Simon4471"/>	SCADA ID	<input type="text" value="6bea0249-73d4-459b-a3ac-73c"/>
CoAP URI	<input type="text" value="/ps/0099a81e-6291-11ea-b1de-d20dfb084846/amq"/>		



17. After reboot please go back to the same page and check status of connection between WISE-4471 and WISE-PaaS/DataHub. It should be **“connected”**, click **“refresh”** if it is not.

Configuration

Information Cellular Network App Time & Date Control **Cloud** Firmware


Cloud Configuration

Select Service


Current Status

Connection Status

Error Code



18. Please go back to SCADA node of DataHub and check if status of SCADA node is green.


DataHub

simon.chiu@advantech.com.tw




Device Management Alarm Account System Setting WISE-PaaS Dashboard Notification Service User Guide API Document

Simon4471

+ New Node

Node List



Node Name	Description	Status	Detail	Move to	Delete
Simon4471			...		 >

Prev 1 Next

19. Device of WISE-4471 is also created automatically when entering device page

The screenshot shows the DataHub interface. On the left is a sidebar with navigation options: Device Management, Alarm, Account, System Setting, WISE-PaaS Dashboard, Notification Service, User Guide, and API Document. The main area displays the 'Device List' for 'Simon4471 / Simon4471'. A table lists devices with columns: Device Name, Device Type, Description, Status, Detail, and Delete. One device is listed: WISE-4471-S250UA_1736866, with a green status indicator. A red box highlights the device row.

20. Tag value can be checked through WISE-STUDIO and WISE-PaaS/DataHub

The screenshot shows the configuration page for 'WISE-4471-S250UA'. The left sidebar has options: Information, Configuration, I/O Status, and Advanced. The 'IO Status' section is active, showing a table with columns: Channel, Mode, and Status. The first row shows Channel 0, Mode DO, and a green 'ON' status indicator. A red box highlights the status column.

Tag List

Tag Name	Tag Type	Description	Value
W4471_736866-DI0	Discrete		0
W4471_736866-DI1	Discrete		0
W4471_736866-DI2	Discrete		0
W4471_736866-DI3	Discrete		0
W4471_736866-DI4	Discrete		0
W4471_736866-DI5	Discrete		0
W4471_736866-DO0	Discrete		1
W4471_736866-DO1	Discrete		0

■ **Pin Definition (in case of serial connection):**

■ **Reference:**