

Advantech AE Technical Share Document

Date	2019/5/16	SR#	1-3752738803
Category	■FAQ □SOP	Related OS	N/A
Abstract	How to set up EdgeLink devices with WISE-PaaS		
Keyword	WISE-PaaS, Cloud, Upload, Broker, Resuming Broken Transfer		
Related Product	ADAM-3600, ECU-1152, ECU-1251, ECU-1051		

■ **Problem Description:**

This document explains how to set up EdgeLink to connect with WISE-PaaS through MQTT protocol. After users configure WISE-PaaS Project/SCADA and EdgeLink project for ADAM-3600, the data of the field device can be connected to the WISE-PaaS by ADAM-3600.

■ **Answer:**

This document shows how to setup WISE-PaaS for Cloud and EdgeLink project for iRTU devices.

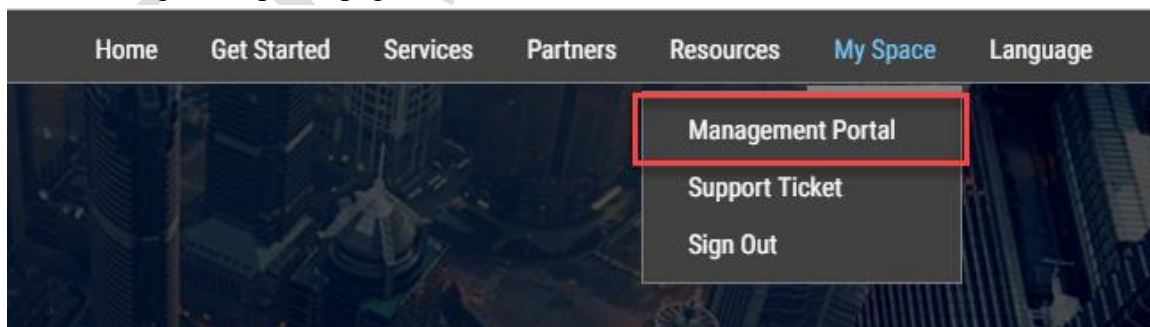
If a user wants to know how to implement Resuming Broken Transfer, please refer to the FAQ document according to the following link.

FAQ: How to setup iRTU devices for resume broken transfer for cloud services

<http://forum.adamcommunity.com/viewthread.php?tid=96547&extra=page%3D1>

WISE-PaaS Broker Setup

1. Contact with WISE-PaaS contact window to apply for account and password. Log in to the homepage of WISE-PaaS. <https://portal-technical.wise-paas.com/index.html>
2. Go to management portal page.



3. Click on “portal-scada” and open the website according to the following figure. The URIs direct to the same portal scada page.

1 Application List Service Instance List Route List Usage

Name	Package State	State
flow-ide-f164530e	STAGED	●
<input checked="" type="radio"/> portal-scada-1.3.23	STAGED	●
saas-composer-1.1.6	STAGED	●
scada-dataworker-1.3.16	STAGED	●

2

3

Routes Environment Variables

Application Routes

- ☐ [saas-composer-1-1-6-advlotsense-demo-0422-0423level-i.wise-paas.com](#)
- ☒ [portal-scada-AdvIoT Sense-Demo-0422-0423Level-I.wise-paas.com](#)
- ☐ [portal-scada-1-3-23-AdvIoT Sense-Demo-0422-0423Level-I.wise-paas.com](#)

4. In Device Management, create New Project on the top right.

Project List

1 + New Project

2 Project ID: ADAM3600 Description: AE demo

3

5. Create New Scada. Copy the Scada Id.

1 ADAM3600

2 + New SCADA

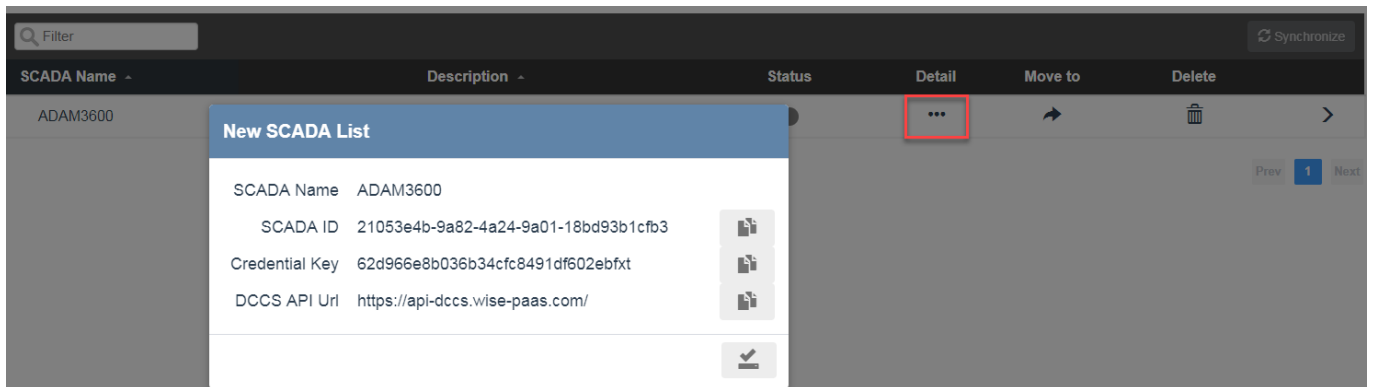
3 SCADA Name: ADAM3600 Description: Haley

4

6. iRTU devices have implemented “Plug&Play” function, there is no need to add any device. Once the device is online, the SCADA would create a new device. Users could click the

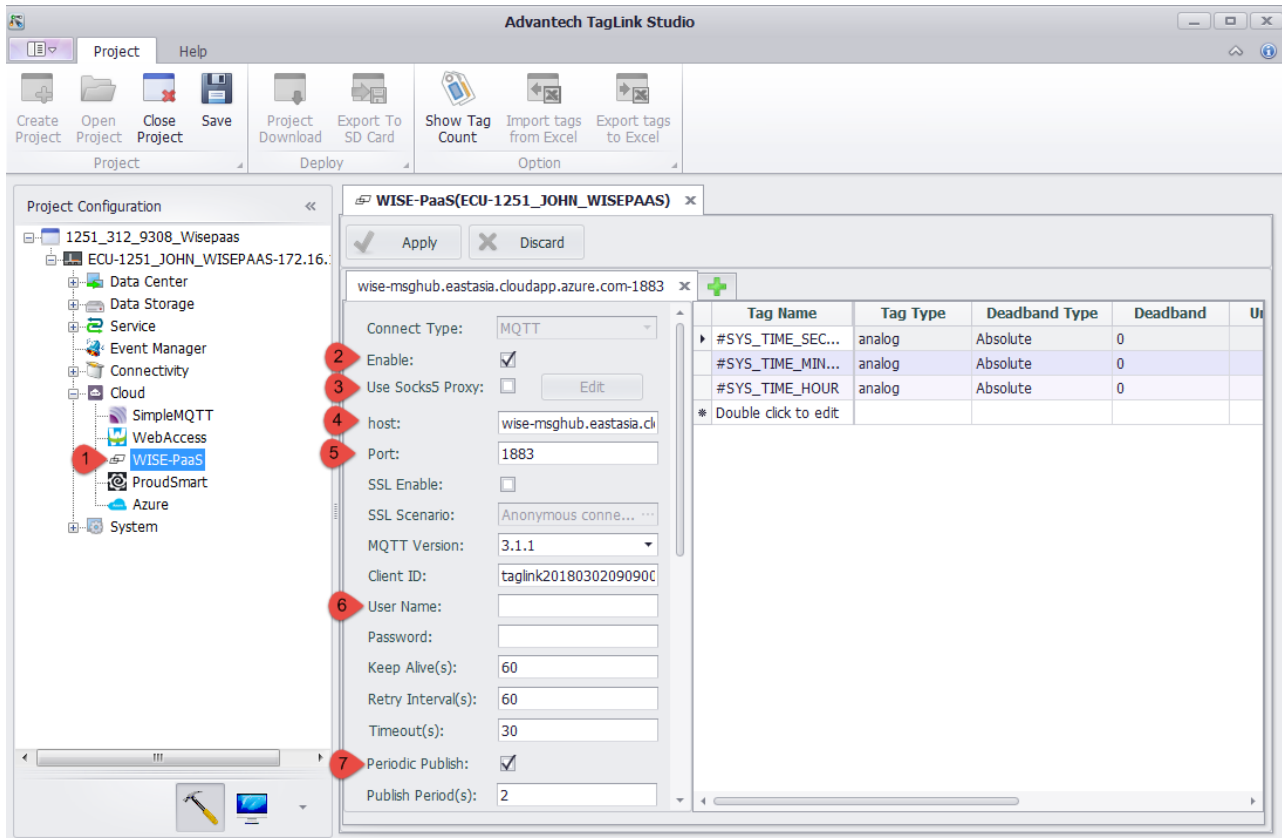
SCADA name to monitor devices.

7. Keep the information after a SCADA is created, or click on “detail” for further tracking.

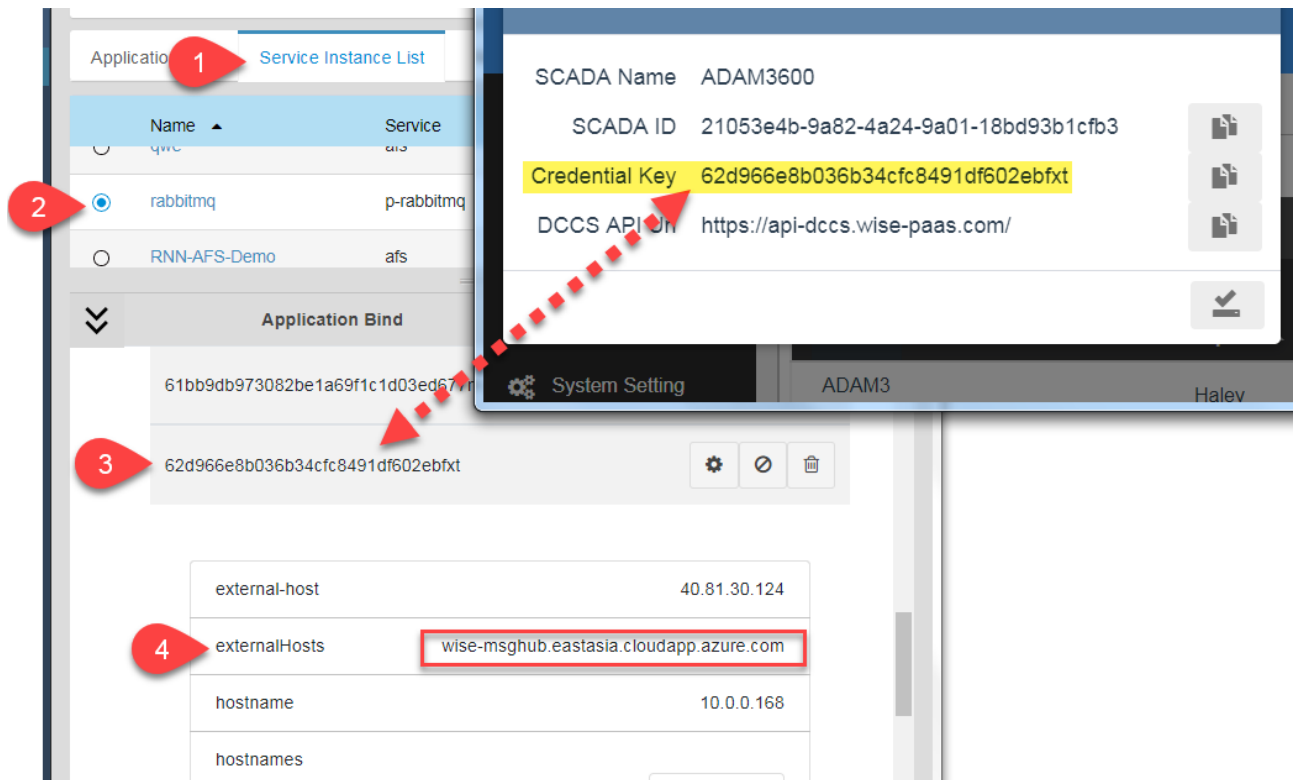


iRTU Devices TagLink Project Setup

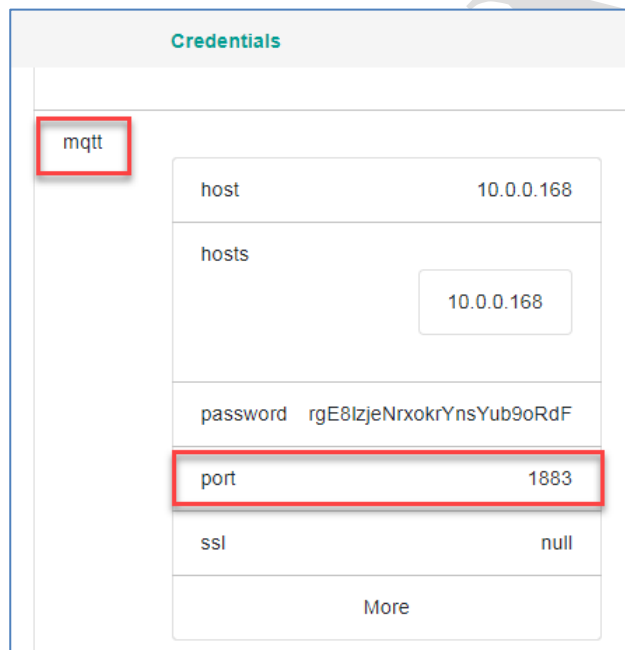
8. Set up TagLink project for iRTU devices.



- 8.1 Choose "WISE-PaaS" in the categories of Cloud service.
- 8.2 In EdgeLink Cloud setting, enable WISE-PaaS Cloud.
- 8.3 Leave it disabled as default if you don't use SOCKS5 proxy server. If user wants to enable it, click the Enable selection box and click the "Edit" button to set the SOCKS server information in the pop-up box, including the server IP address, port number, user name and password information.
- 8.4 Set the "external host" from WISE-PaaS according to the credential key of the SCADA.



8.5 Set the port number according to the protocol used. In this demo, “Port” is set as 1883 .



8.6 No need to fill in “Username” and “Password”.

8.7 Enable “Periodic Publish” to upload the tag’s information regularly. Set up “Publish Period” as 2 seconds.

Project Configuration

Module_handsOn.acproj

ADAM3600_Haley-10.0.0.30

Data Center

Data Storage

Service

Event Manager

KW Settings

Connectivity

Cloud

SimpleMQTT

WebAccess

WISE-PaaS

ProudSmart

AWS

Inspur

WLTX

T-System

OpenIOT

RootCloud

Azure

LWM2M

System

Network Setting

LED Setting

Time Sync Setting

GPS Setting

SMTP Setting

Firewall

Project Configuration

Online Device

ADAM3600_Haley

Network Setting(ADAM3600_Haley)

WISE-PaaS(ADAM3600_Haley)*

Apply

Discard

Note: When enabling SSL, please ensure that the device time is consistent with the server time!

iot.advantech.com-1883

MQTT Version: 3.1.1

Client ID: edgelink201905161226

User Name:

Password:

Keep Alive(s): 60

Retry Interval(s): 60

Timeout(s): 30

Periodic Publish: ☒ Check

Publish Period(s): 60

Diff Publish: ☐ Check

Detection Cycle(s): 1

Diff Type: ☒ Value Change ☐ Quality Change ☐ Timestamp Change

Topic/Payload Schema: WISE-PaaS

Data Worker: SCADA v1.0.16

DCCS API Url: https://api-dccs.wise-pa

Credential Key: 62d966e8b036b34cfc8

Verify Peer: Yes

Verify Hostname: Yes

SCADA ID: 21053e4b-9a82-4a24-9

Device ID: edgelink

Heart Beat Period(s): 10

Tags per Message: 100

Publish Ctrl: None

Timestamp: UTC Time

Tag Name	Alias	Tag Type	Dead
Double click to edit			

8.8 “Diff Publish” is another option of uploading conditions. The client can choose to upload information when the tag changes. It checks the Tag status (value, communication quality, and timestamp) every Detection Cycle. Two uploading conditions can be selected at the same time.

8.9 Chose higher “data worker” version for data resume.

8.10 “DCCS API Url” is filled according to the SCADA setting

Filter

Synchronize

SCADA Name	Description	Status	Detail	Move to	Delete
ADAM3600			...		

New SCADA List

SCADA Name ADAM3600

SCADA ID 21053e4b-9a82-4a24-9a01-18bd93b1cfb3

Credential Key 62d966e8b036b34cfc8491df602ebfxt

DCCS API Url https://api-dccs.wise-paas.com/

Prev 1 Next

8.11 “*Credential key*” is filled according to the SCADA setting.

The screenshot shows a web interface for SCADA configuration. A table lists SCADA devices, with 'ADAM3600' selected. A 'New SCADA List' dialog box is open, displaying the following fields:

New SCADA List	
SCADA Name	ADAM3600
SCADA ID	21053e4b-9a82-4a24-9a01-18bd93b1cfb3
Credential Key	62d966e8b036b34cfc8491df602ebfxt
DCCS API Url	https://api-dccs.wise-paas.com/

The 'Credential Key' field is highlighted with a red box. The background interface includes a search bar, a table with columns 'SCADA Name', 'Description', 'Status', 'Detail', 'Move to', and 'Delete', and a 'Synchronize' button.

8.12 “*SCADA ID*” is filled according to the SCADA setting.

The screenshot shows the same web interface as above. The 'New SCADA List' dialog box is open, displaying the following fields:

New SCADA List	
SCADA Name	ADAM3600
SCADA ID	21053e4b-9a82-4a24-9a01-18bd93b1cfb3
Credential Key	62d966e8b036b34cfc8491df602ebfxt
DCCS API Url	https://api-dccs.wise-paas.com/

The 'SCADA Name' field is highlighted with a red box. The background interface includes a search bar, a table with columns 'SCADA Name', 'Description', 'Status', 'Detail', 'Move to', and 'Delete', and a 'Synchronize' button.

8.13 “*Device ID*”: Use specific ID for recognizing in WISE-PaaS. User needs to be **unique** Device ID under the same SCADA.

8.14 “*Timestamp*”: Choose the published message contains timestamp with UTC or local time.

8.15 Click **Apply** for saving the setting.