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Category	■FAQ □SOP	Related OS	N/A
Abstract	How to set up iRTU devices with WISE-PaaS		
Keyword	WISE-PaaS, Cloud, Upload, Broker, Resuming Broken Transfer		
Related Product	ADAM-3600, ECU-1152, ECU-1251		

■ **Problem Description:**

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

■ **Answer:**

The setup procedure can be divided into 2 parts,WISE-PaaS for Cloud and TagLink project for iRTU devices (ADAM-3600/ECU-1152).
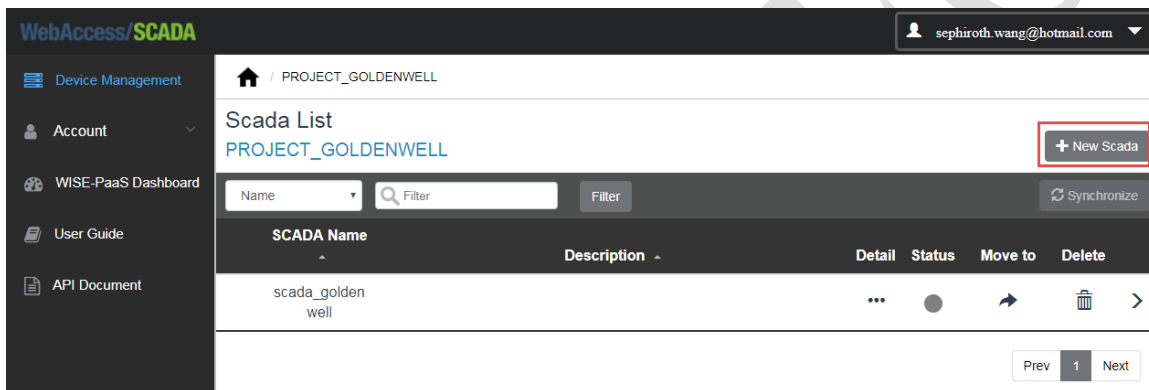
WISE-PaaS Broker Setup

1. Contact with WISE-PaaS contact window to apply for account and password. Log in to the homepage of WISE-PaaS. https://portal-scada-1-2-4-develop.wise-paas.com

2. In Device Management, create New Project on the top right.
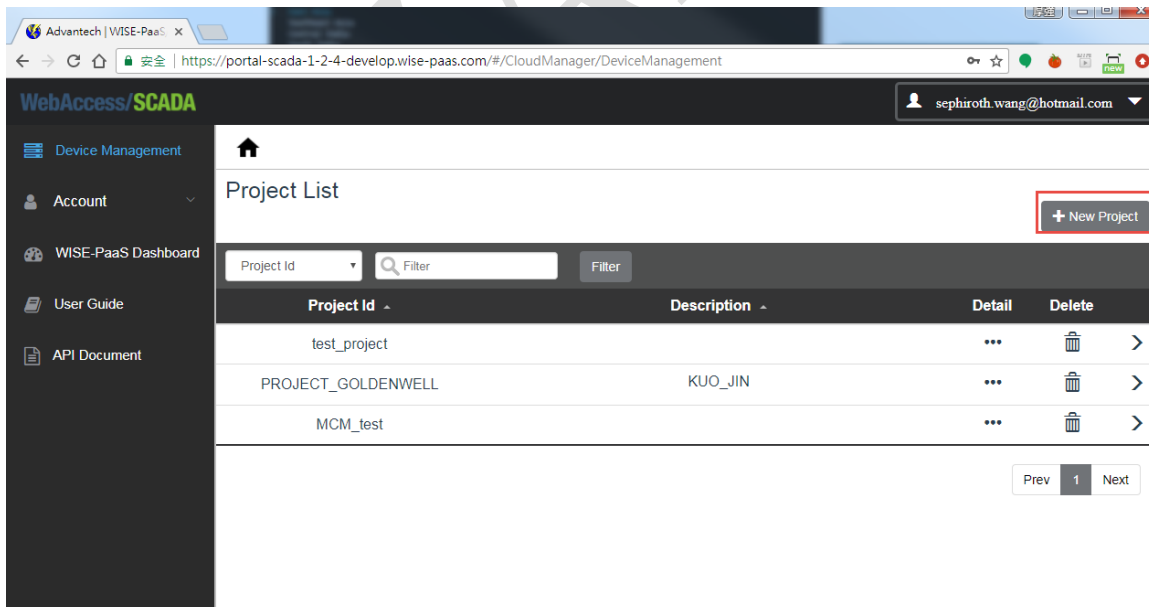
3. After you create a new project, you may click Project Name to another Scada List page.
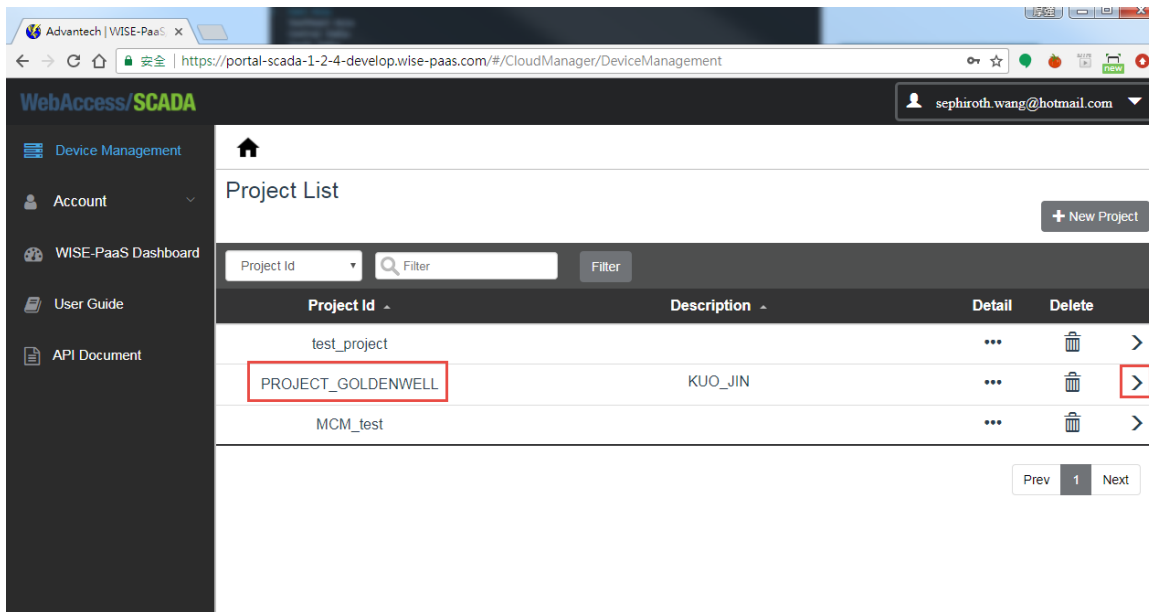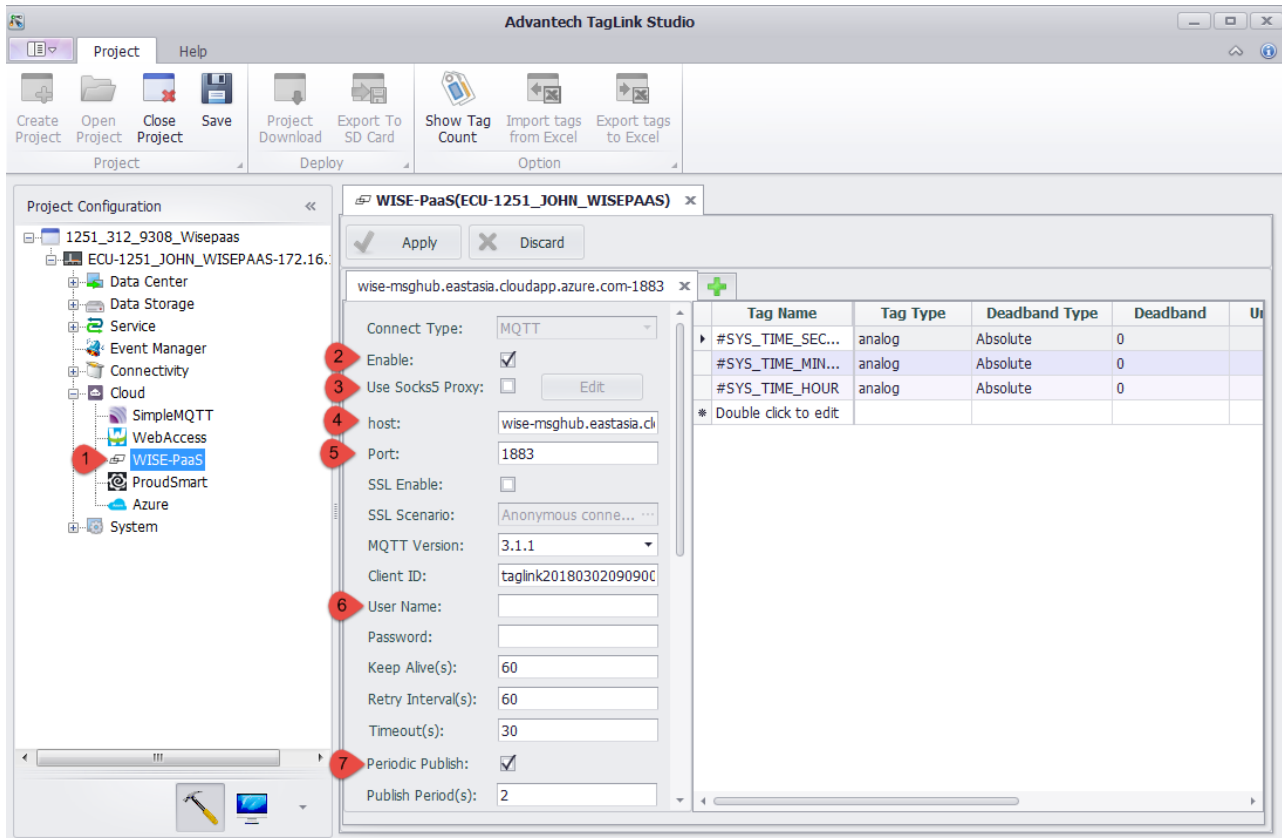
4. Create New Scada. Copy the Scada Id.

5. Because 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.

iRTU Devices TagLink Project Setup

6. Set up TagLink project for iRTU devices.

6.1   Choose "WISE-PaaS" in the categories of Cloud service.

6.2   In TagLink Cloud setting, enable WISE-PaaS Cloud.

6.3   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.

6.4   We set "wise-msghub.eastasia.cloudapp.azure.com" in *"host"* for demonstration.

6.5   We set the port number 1883 in *"Port"* following WISE-PaaS port in this demo.

6.6   No need to fill in "*Username*" and "*Password*".

6.7   Enable "*Periodic Publish*" to upload the tag's information regularly. Set up *"Publish Period"* as 2 seconds.
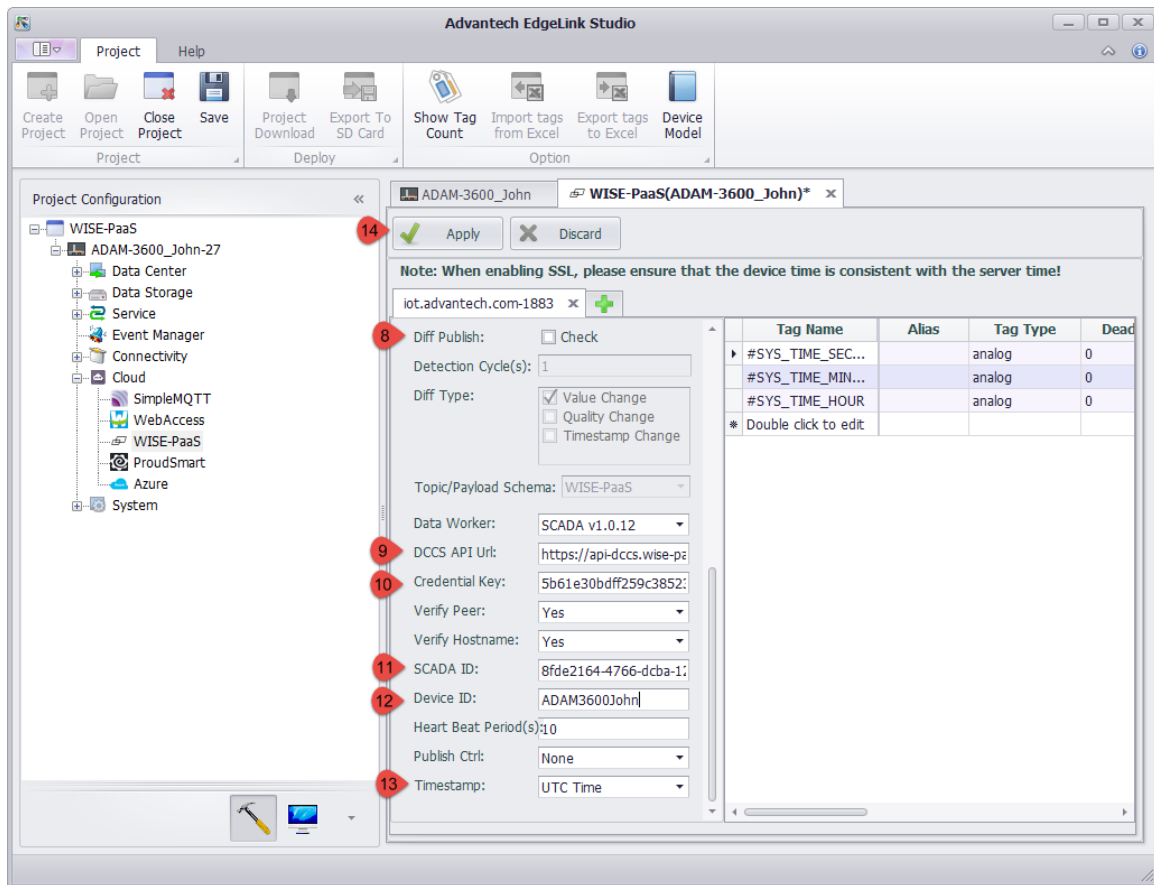
6.8 *"Diff Publish"* is another option of uploading conditions. The client can choose to upload information when the tag changes. It checks the Tag status (value, communication quality, and timestamp) every Detection Cycle. Two uploading conditions can be selected at the same time.

6.9 *"DCCS API URL"*: Following WISE-PaaS instruction, use "https://api-dccs.wise-paas.com/v1/serviceCredentials" for global area. (Use " https://api-dccs.wise-paas.com.cn/v1/serviceCredentials " for China area.)

6.10 *"Credential Key"*: Following WISE-PaaS instruction, we use "5b61e30bdff259c38523………….".

6.11 *"SCADA ID"*: Following WISE-PaaS instruction to fill in SCADA ID.

6.12 *"Device ID"*: Use specific ID for recognizing in WISE-PaaS. User needs to use unique Device ID under the same SCADA.

6.13 *"Timestamp"*: Choose the published message contains timestamp with UTC or local time.

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

7. If you want to use Resuming Broken Transfer, please enable Data Logger and plug in SD card.
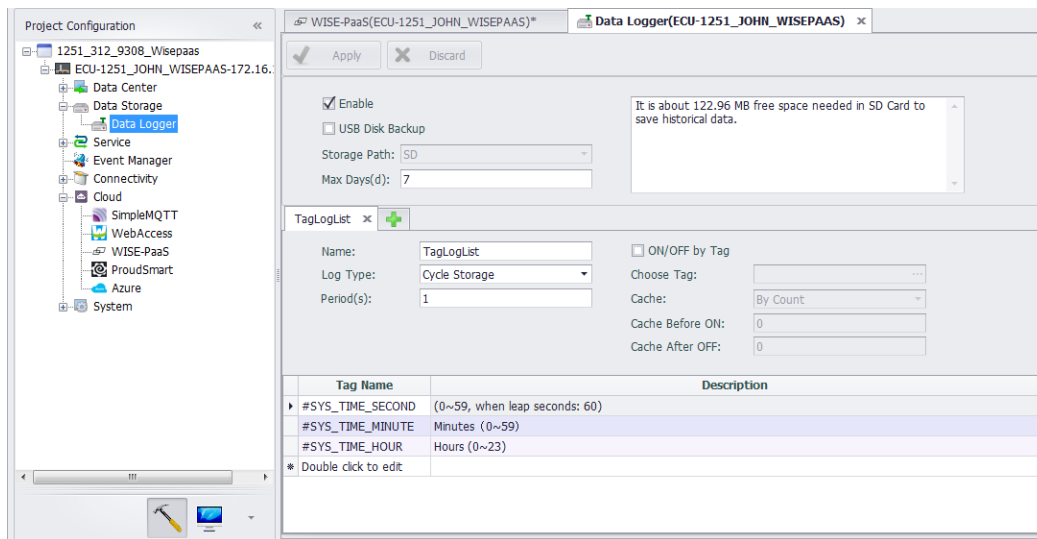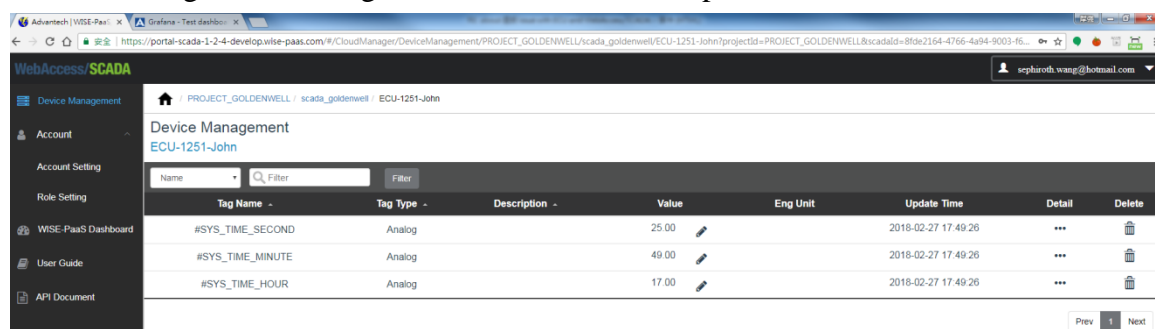

8. It is better to set up NTP Time Synchronization for correcting iRTU device time in System -> Time Sync Setting.
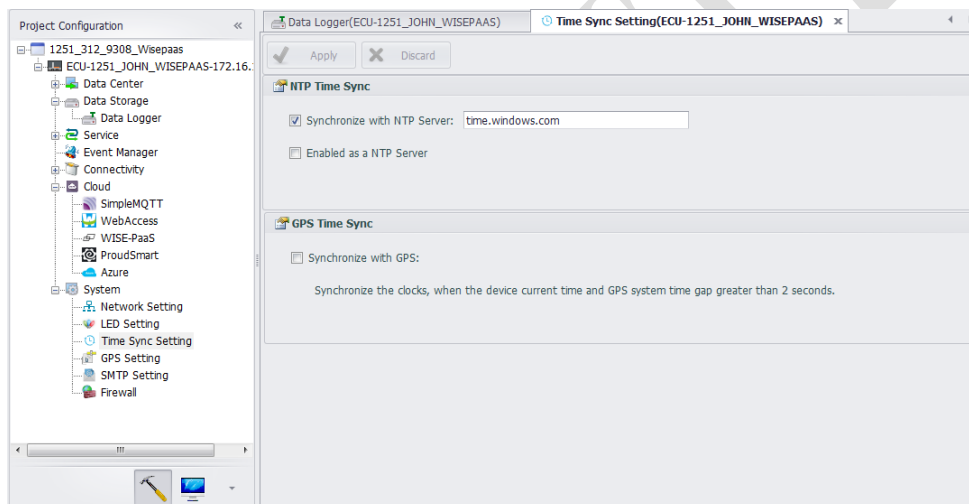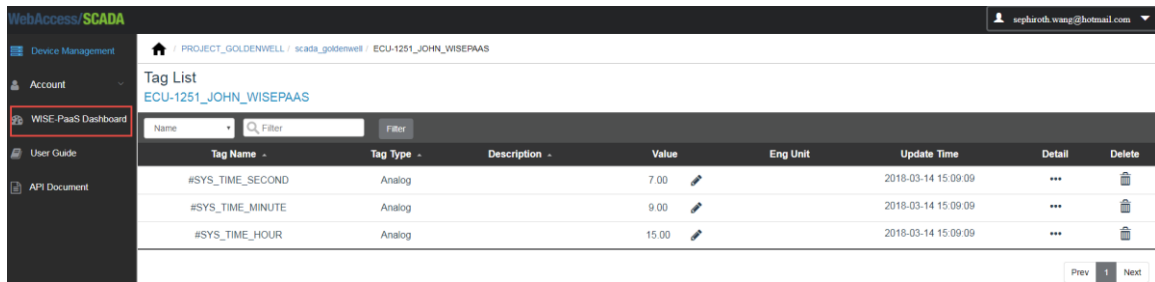

9. Download the project to your iRTU device. After downloading, the MQTT service would restart automatically.

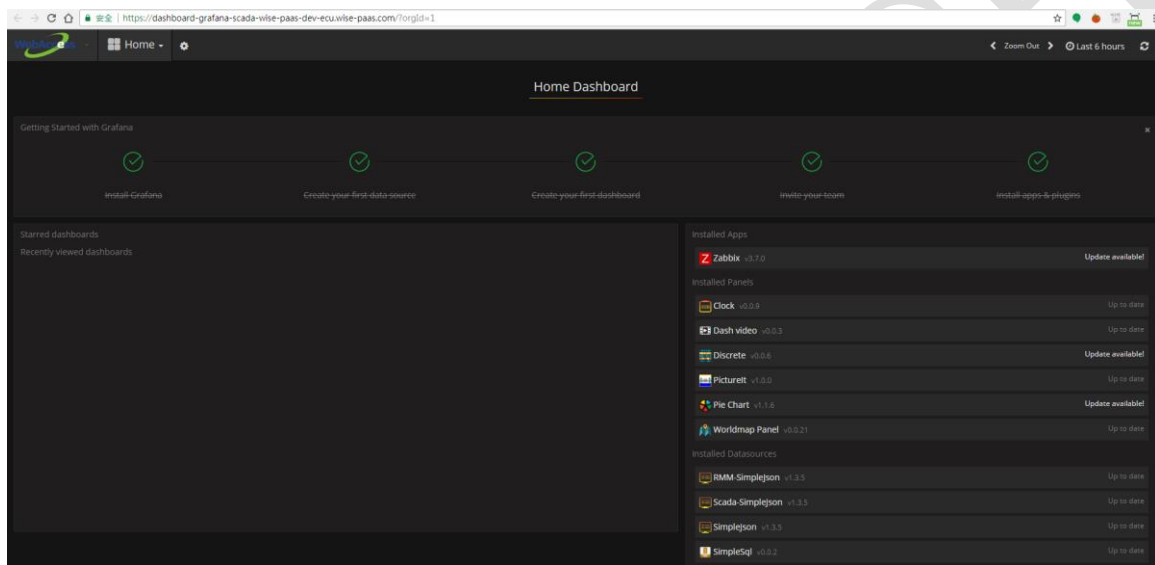   After finishing above settings, the iRTU device could publish to WISE-PaaS.

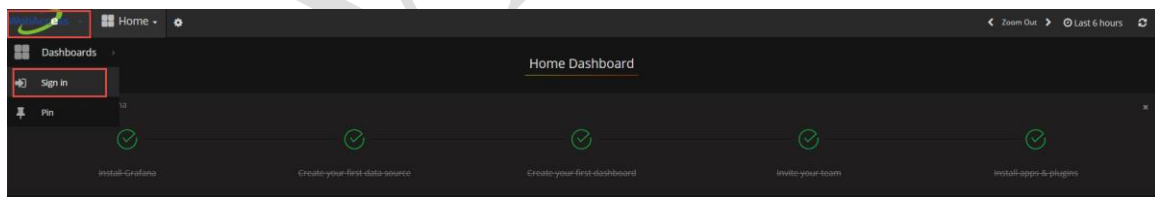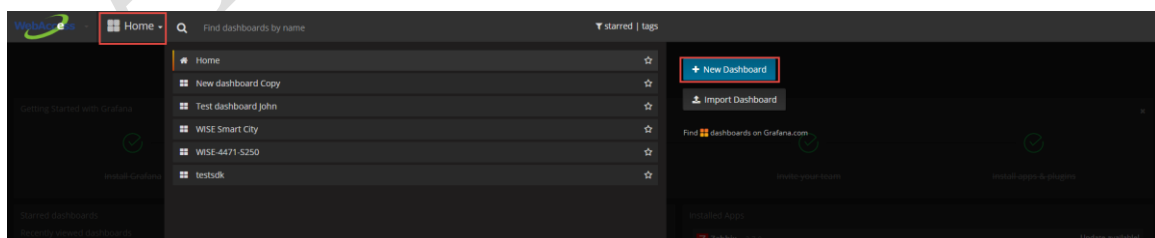Below steps describe how to monitor on WISE-PaaS Dashboard.

10. Click "WISE-PaaS Dashboard."

11. It will pop out a new homepage of WISE-PaaS Dashboard.

12. Click on the WebAccess button, and choose Sign in.

13. Click on the Home button, and choose New Dashboard.

14. Choose Graph.
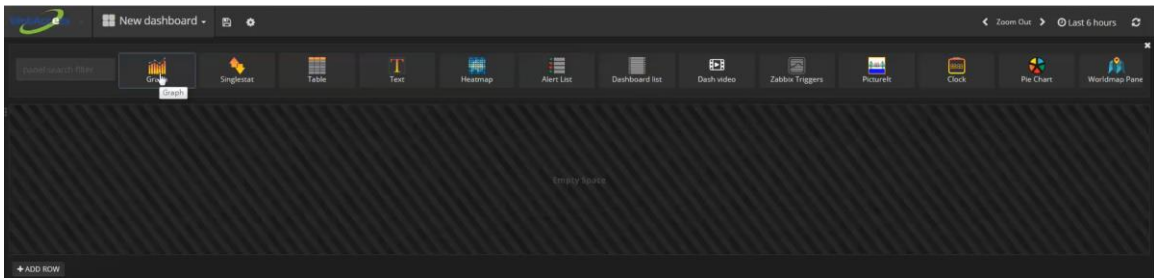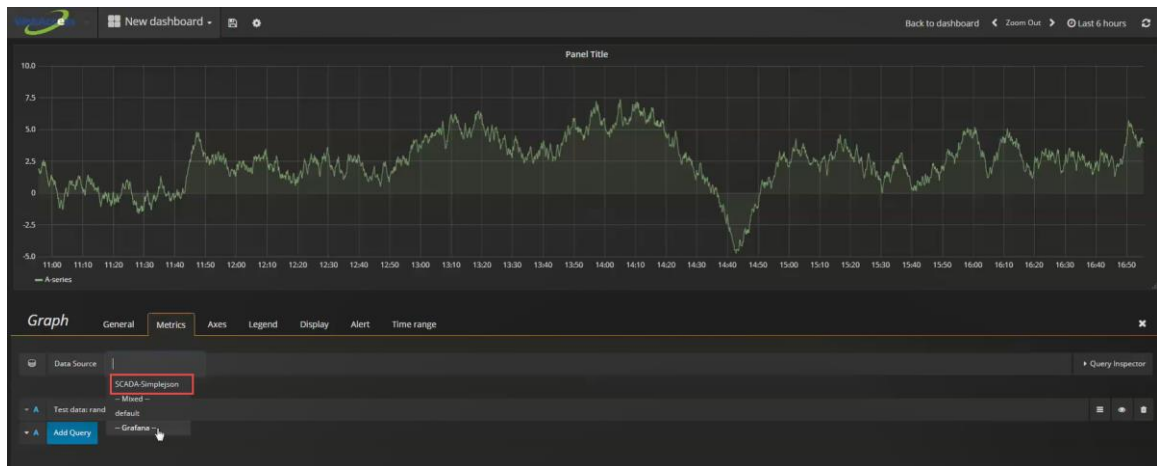

15. One new graph with random value would be created.
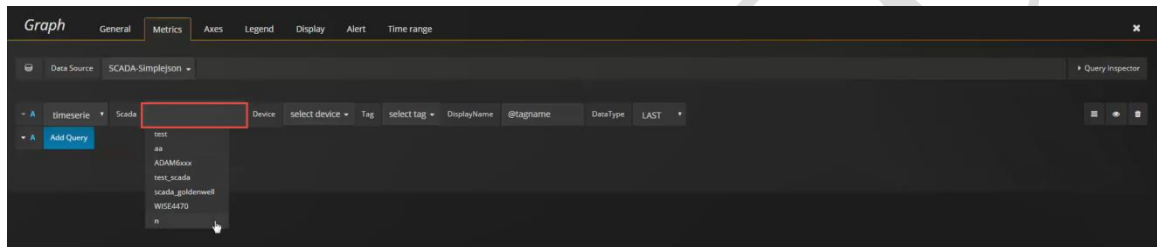

16. Click "Panel Title", and choose "Edit."
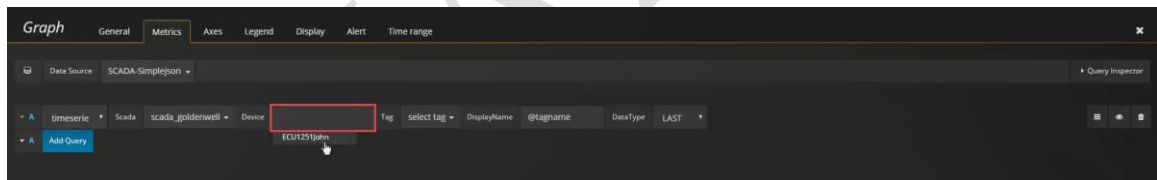

17. The graph information would be showed at the bottom.
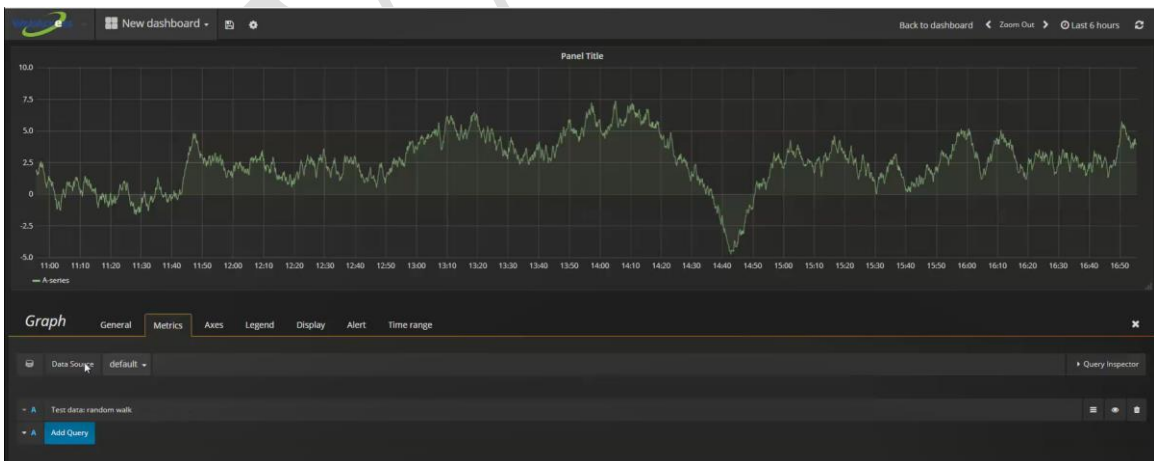
18. Change the **Data Source** from "default" to "**SCADA-Simplejson**."

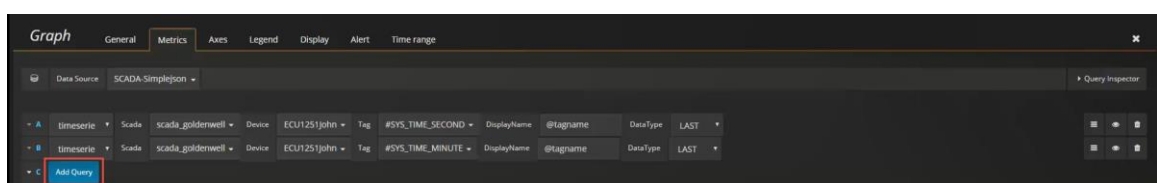

19. Select the SCADA you created.

20. Select the Device you created.
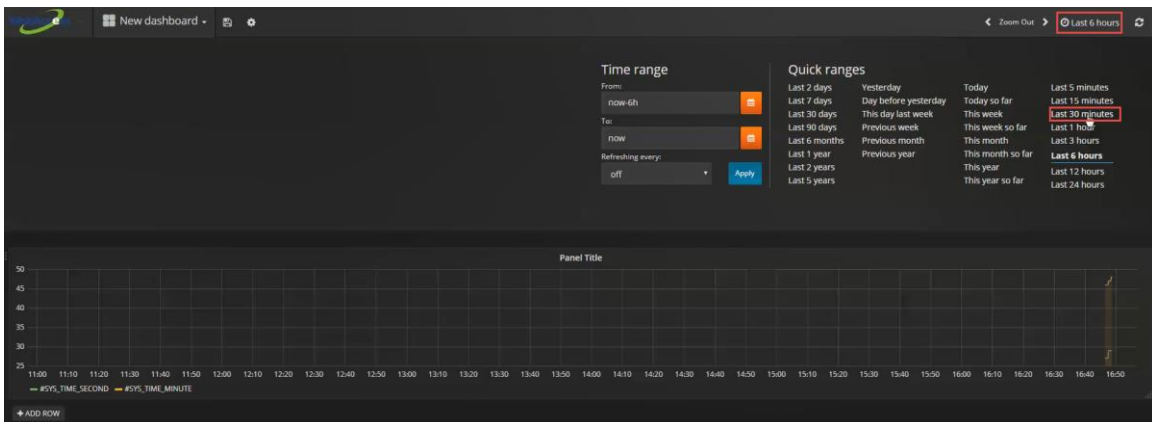

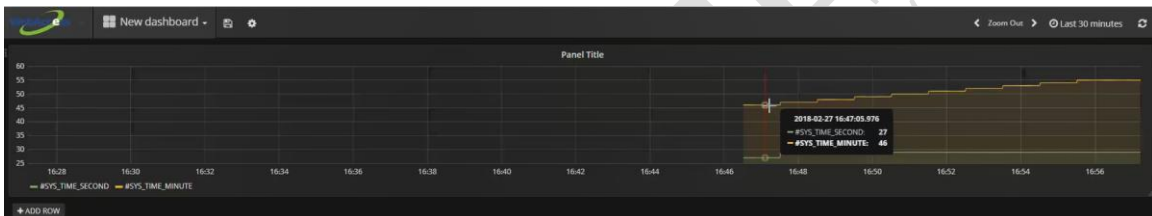21. Select the tag you want to monitor.
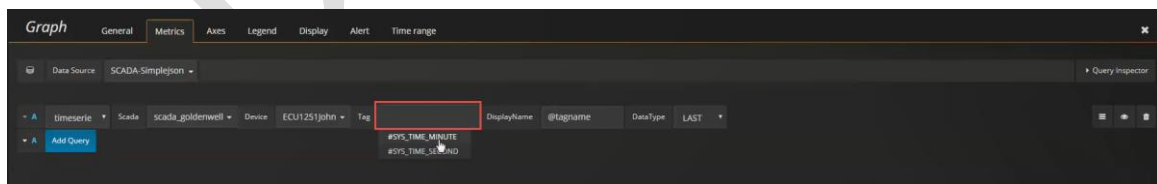
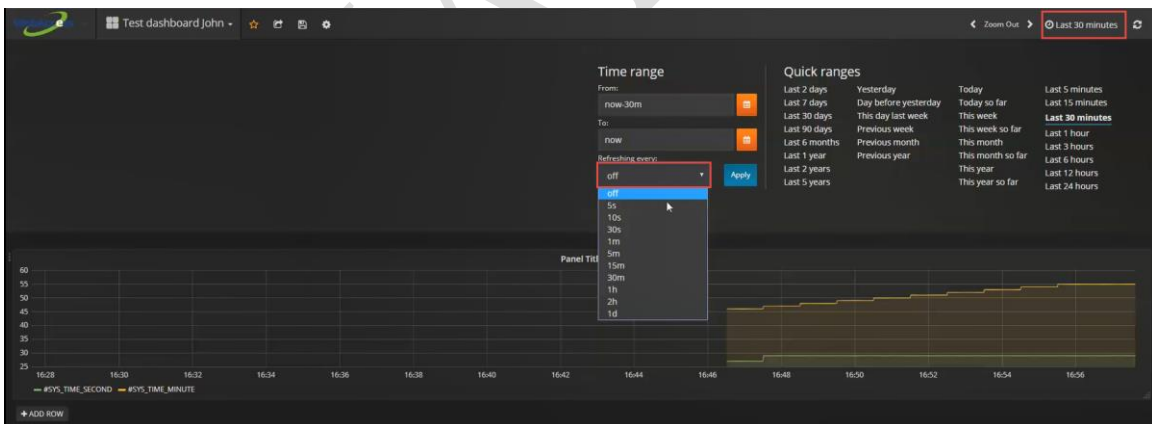22. Add Query to add another tag.

23. The latest value of tags would be shown on the graph immediately after you selected the monitored tags. You may change the shown period from "Last 6 hours" to "Last 30 minutes" to observe.
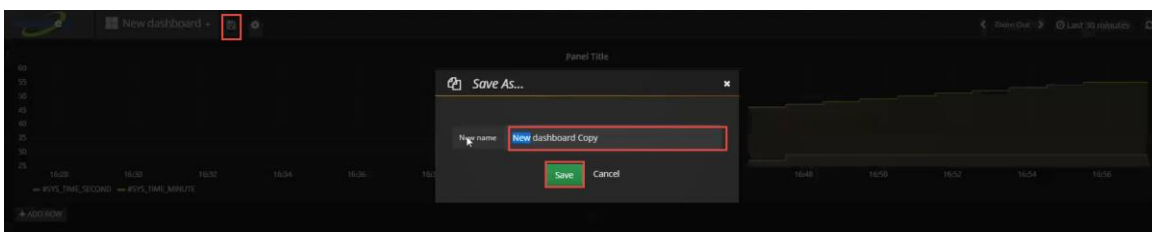

24. Move your mouse on the graph to observe each value at different timestamps.

25. Change the refreshing time to every 5 seconds.

26. Save your dashboard and name it.

Some testing results of Resuming Broken Transfer are described as below.

27. The dashboard shows the real-time result. If we plug out the network line to make the communication failed, there is no real-time value anymore.

28. After we reconnected the network line to recover the connection, the real-time value would be shown in the dashboard.

29. The Resuming Broken Transfer function would recover the values which were missing during the period of broken communication after a while.

[Trouble Shooting]

You may need to modify the Span high and Span low for the value range if your value exceed the default range (0~1000).

11