

# Advantech SE Technical Share Document

<b>Date</b>	2019 / 01 / 09	<b>Related Product</b>		
<b>Category</b>	<input type="checkbox"/> FAQ <input checked="" type="checkbox"/> SOP <input type="checkbox"/> Driver Tech Note			
<b>Abstract</b>	Using Variables function to achieve Indirect Address			
<b>Keyword</b>	WebAccess/SCADA, Local WISE-PaaS Dashboard, Variable			
<b>Related OS</b>	Win7, Windows Server 2008 / 2012 / 2016, Win10			
Revision History				
Date	Version	Author	Reviewer	Description
2020/01/09	V1.0	Alger Tan		WebAccess/SCADA V8.4.3 Dashboard: V1.3.44
2020/3/13	V1.0		Nick Liu	

■ **Problem Description & Architecture:**

Local WISE-PaaS Dashboard “variables” function allows user to achieve SCADA “Indirect Address” function. AS you may see from following image, a drop-down pump menu allows user to change display tags in Graph panel.

When selecting pump1, Graph panel displays pump1 related tag values

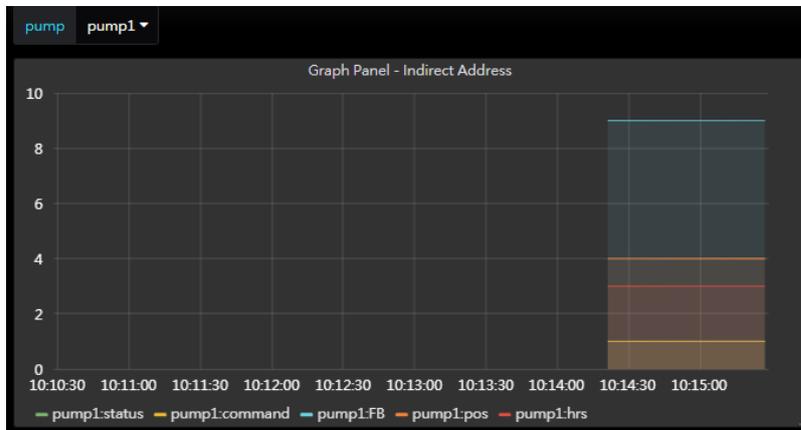
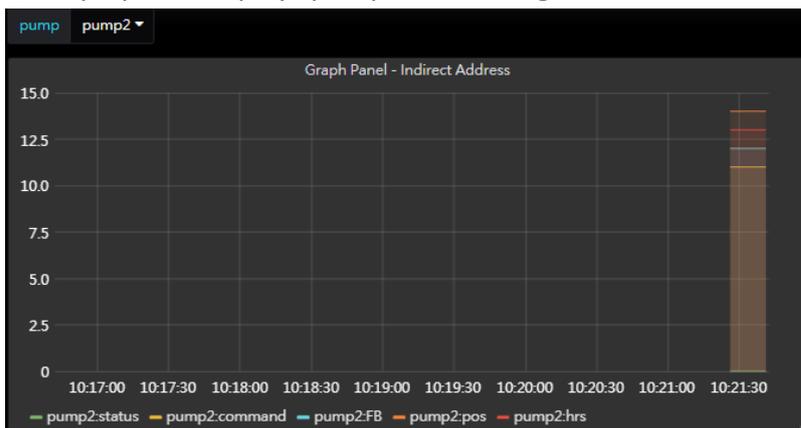


Figure 1: select pump1 in drop-down menu

When selecting pump2, Graph panel displays pump2 related tag values.





- Click "Save Dashboard" and name it "variables\_pump"

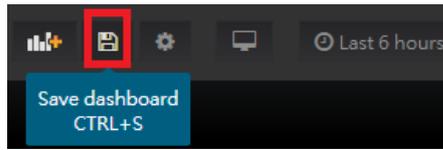


Figure 7: Save Dashboard

- Click "Settings" to create a variable in Variables function

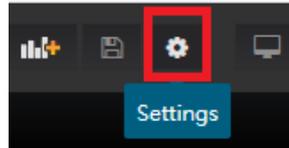


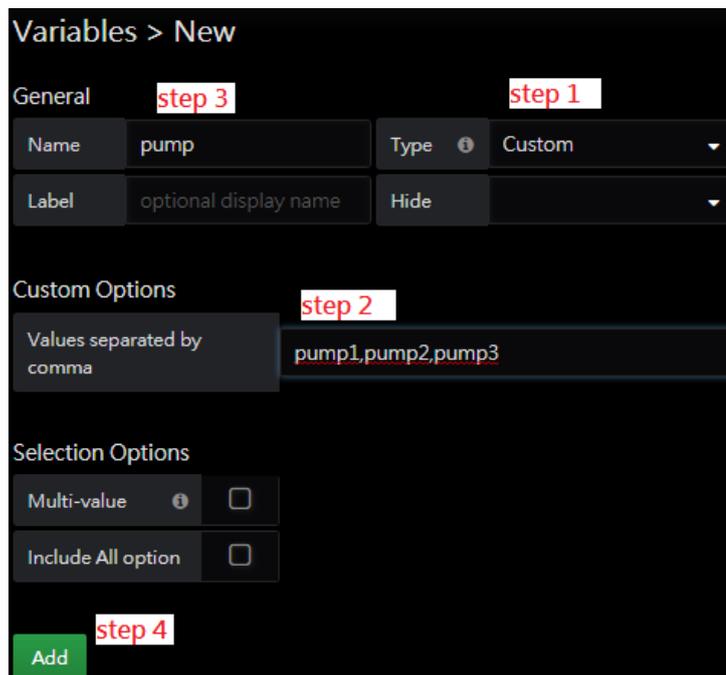
Figure 8: Settings for adding variables

Settings -> Variables -> Add variable



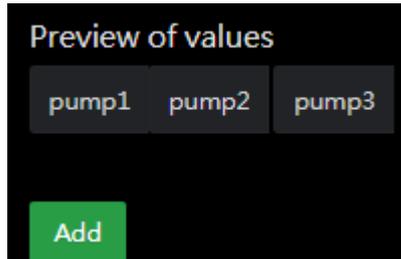
Figure 9: add a variable

- Add a new variable
  - Step 1: change Type to "Custom"
  - Step 2: enter "pump1,pump2,pump3" in Custom Options  
Note: **we use variable to replace Block name**
  - Step 3: enter a Name, e.g. "pump" in this FAQ
  - Step 4: click "Add"



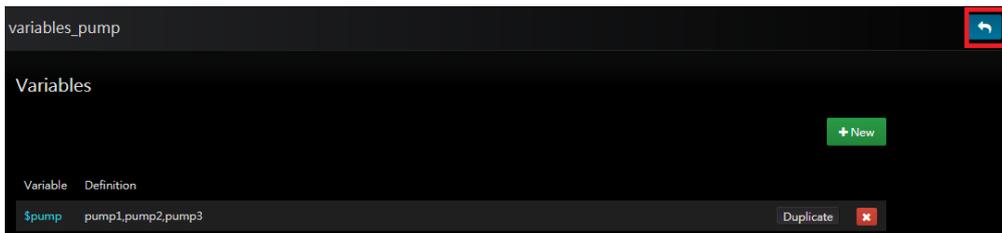
**Figure 10:** add a variable with Custom type

7. Preview of Values appears for user to confirm his configuration, click “Add” button to continue.



**Figure 11:** Preview

8. A new variable “\$pump” is add and then click “Back to Dashboard” button



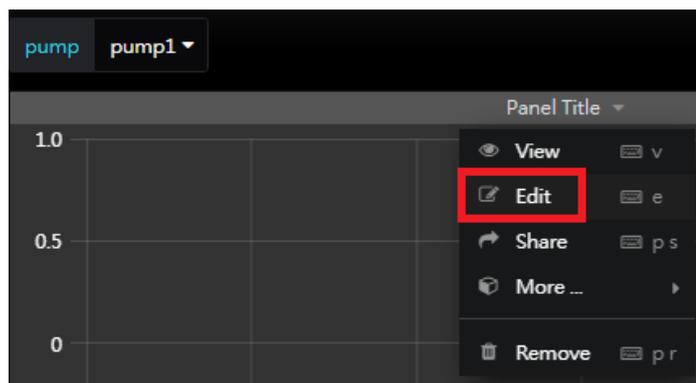
**Figure 12:** back to Dashboard

9. Drop-down menu will appears in the top of the page



**Figure 13:** pump drop-down menu

10. Now user has to bundle pump variable with Graph panel  
Click “Edit” in Graph Panel



**Figure 14:** Edit Graph Panel

11. Click “Metrics” tab and add five queries (use \$variable to replace Block name)
  - Timeserie; realtime trend; \$pump:status
  - Timeserie; realtime trend; \$pump:command
  - Timeserie; realtime trend; \$pump:FB
  - Timeserie; realtime trend; \$pump:pos
  - Timeserie; realtime trend; \$pump:hrs

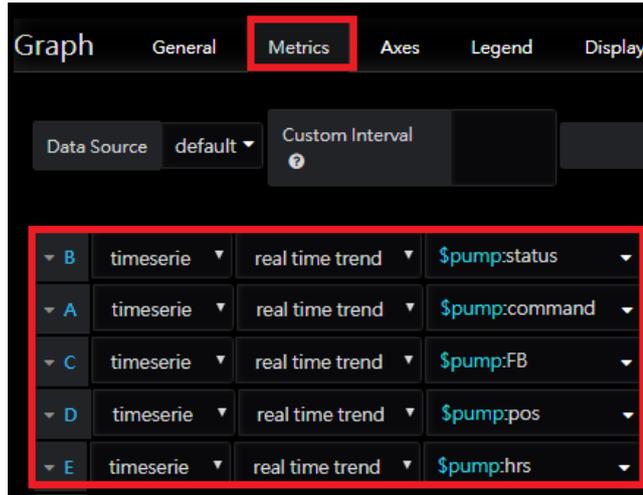


Figure 15: Metrics property

- Click "General" tab and change Title to "Graph Panel – Indirect Address"

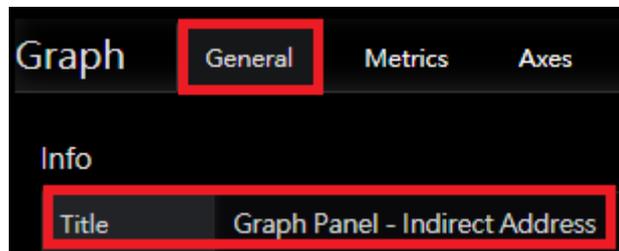


Figure 16: General property

- Modify time range and save Dashboard

- Step 1: click to modify monitor time range
- Step 2: change range based on need, e.g. "Last 5 minutes"
- Step 3: change Refreshing Every based on need, e.g. 5s (5 seconds)
- Step 4: click "Apply" button
- Step 5: save Dashboard page

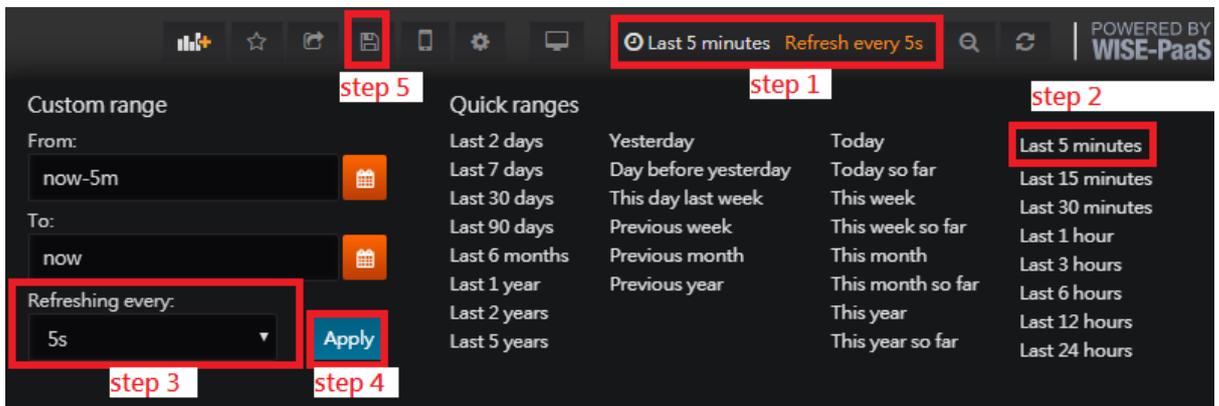
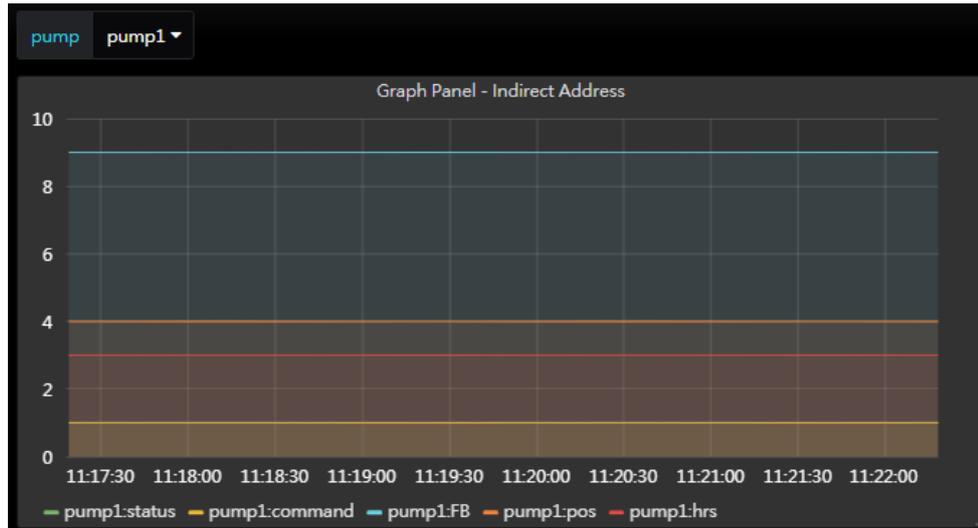
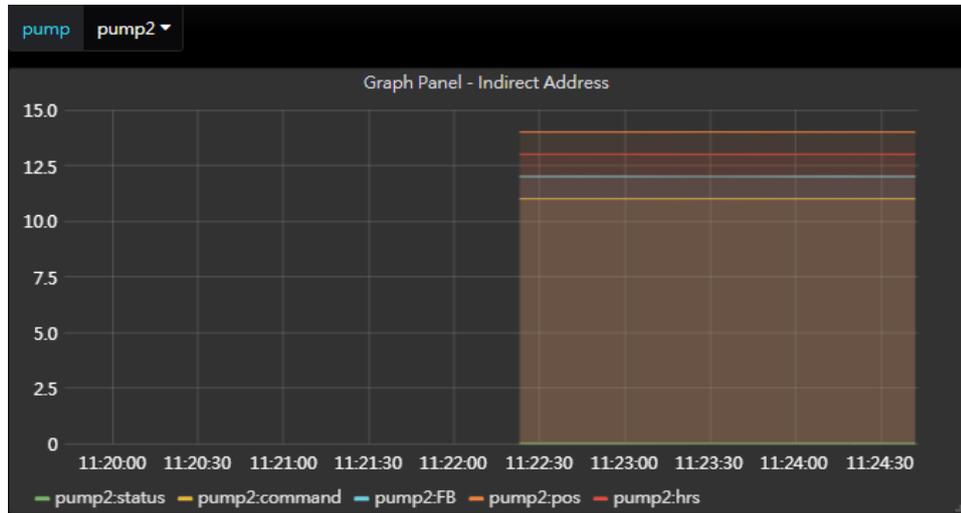


Figure 17: Time Range

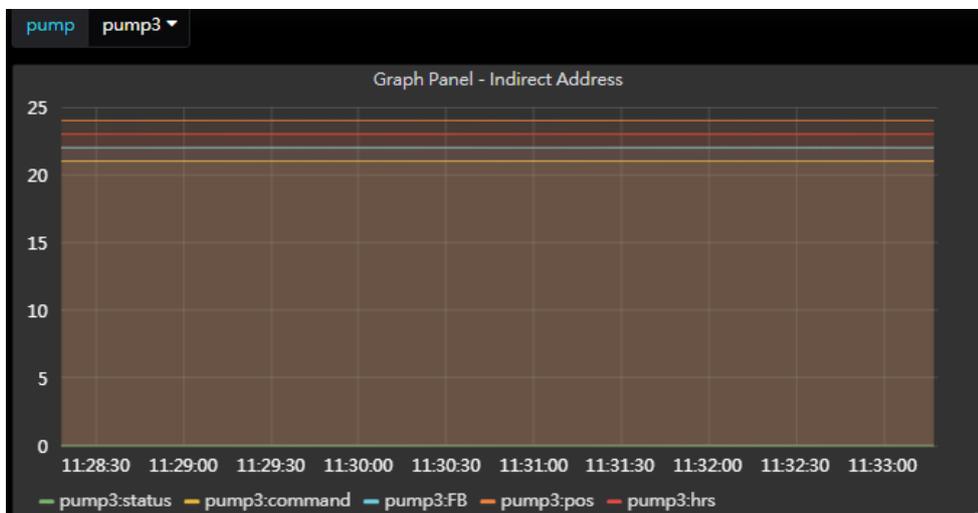
## 14. Result of clicking pump1 in drop-down menu

**Figure 18:** result of showing pump1

## Result of clicking pump2 in drop-down menu

**Figure 19:** result of showing pump2

## Result of clicking pump3 in drop-down menu

**Figure 20:** result of showing pump3

- **Pin Definition (in case of serial connection):**
  
- **Reference:**