

Advantech SE Technical Share Document

Date	2019 / 10 / 05	Related Product	WebAccess V8.4.1 and later versions	
Category	<input checked="" type="checkbox"/> FAQ <input type="checkbox"/> SOP <input type="checkbox"/> Driver Tech Note			
Abstract	How to display WebAccess/SCADA tag value in WISE-PaaS SaaS Composer 3D page			
Keyword	WebAccess/SCADA, WISE-PaaS SaaS Composer			
Related OS	Win7, Windows Server 2008 / 2012 / 2016, Win10			
Revision History				
Date	Version	Author	Reviewer	Description
2019/10/05	V1.0	Alger Tan		
2019/12/06	V1.0		Nick Liu	

■ Problem Description & Architecture:

To display WebAccess/SCADA IO tag value in WISE-PaaS SaaS Composer page.

Structure:

PLC – WebAccess/SCADA – WAN – WISE-PaaS SCADA – WISE-PaaS SaaS Composer

Expecting Result:

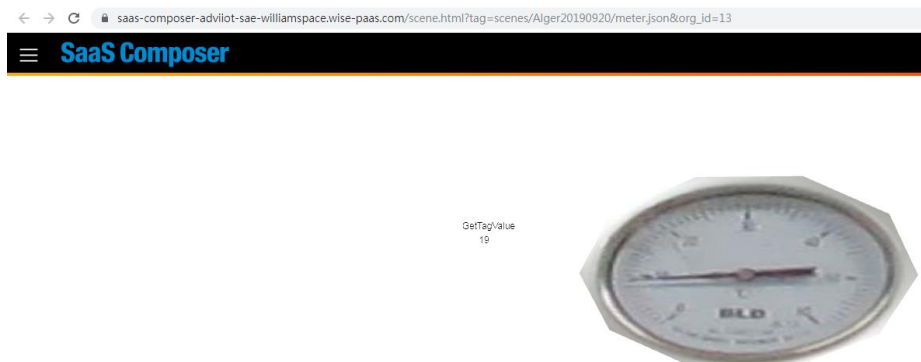


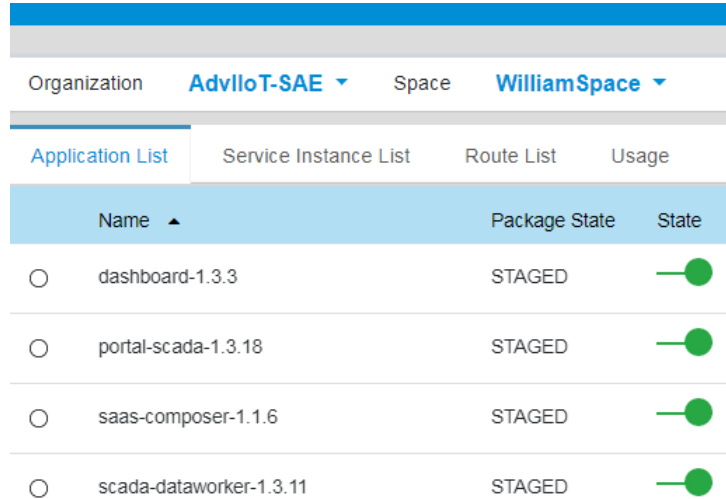
Figure 1: SaaS Composer 3D page

■ Brief Solution - Step by Step:

1. Create an Organization and a Space

Here we will use following Organization and Space for practice, all users should have their own Organizations and Spaces

- Org: AdvIoT-SAE
- Space: WilliamSpace



Organization AdvIoT-SAE Space WilliamSpace		
Application List Service Instance List Route List Usage		
Name	Package State	State
○ dashboard-1.3.3	STAGED	—●
○ portal-scada-1.3.18	STAGED	—●
○ saas-composer-1.1.6	STAGED	—●
○ scada-dataworker-1.3.11	STAGED	—●

Figure 2: Org and Space

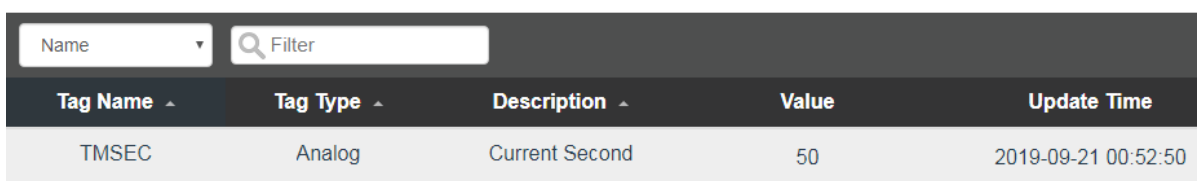
2. Make sure WISE-PaaS SCADA is able to read a tag from WebAccess/SCADA

e.g.

- Project: Alger20190919
- SCADA: scada
- Device: SystemPoint
- Tag: TMSEC

🏠 / Alger20190919 / scada / SystemPoint

Tag List



Tag Name	Tag Type	Description	Value	Update Time
TMSEC	Analog	Current Second	50	2019-09-21 00:52:50

Figure 3: WISE-PaaS SCADA

3. Go to SaaS-Composer

Select “SaaS-Composer-1.1.6” and then click

“saas-composer-adviiot-sae-williamspace.wise-paas.com”



● saas-composer-1.1.6	STAGED	—●	1 (Total) Usage
Routes Environment Variables User Provided			
Application Routes			
○	saas-composer-adviiot-sae-williamspace.wise-paas.com		

Figure 4: WISE-PaaS SaaS Composer

4. Click “+ New Org” button

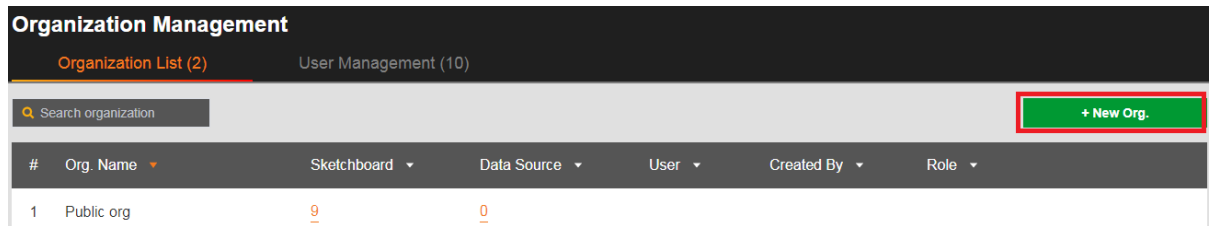


Figure 5: Add a New Org

5. Input Org Name and click “Save” e.g. Alger20190906

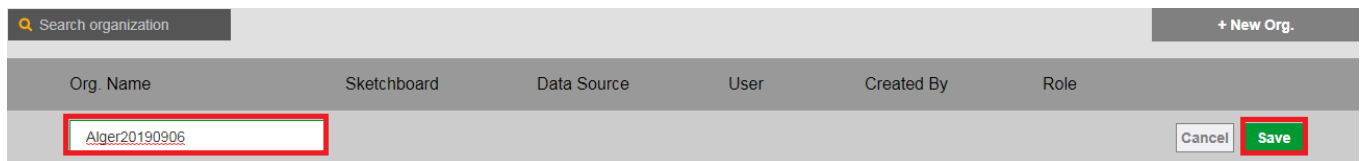


Figure 6: Enter New Org Name

6. Create the Data Source

This is for creating a connection between SaaS Composer and WISE-PaaS SCADA. Click zero under Data Source.

#	Org. Name	Sketchboard	Data Source	User	Created By	Role
1	Public org	9	0			
2	Alger20190906	0	0	1	Alger	Admin

Figure 7: Add a Data Source

7. Click edit to modify Alger20190906 content

#	Data Source Name	Data Source
1	Alger20190906	scada-simple-json-datasource-sso

Figure 8: Edit Data Source

8. Data Source

- Data source: scada-simple-json-datasource-sso
- URL: <https://portal-scada-adviiot-sae-williamspace.wise-paas.com/api/simplejsons>
- Access: direct
- Enable “with Credentials”

Note: URL is portal scada url “portal-scada-adviiot-sae-williamspace.wise-paas.com” with adding “/api/simplejsons” in the end.

Figure 9: Edit Data Source

9. To display tag value, we have to create a symbol in 2D because 3D can't create symbol. The symbol in 2D can be seen in 3D.

10. Go to Sketchboard and then click "+New Sketchboard"



Figure 10: Add a new 2D Sketchboard

11. Add a new folder in Symbols

Click "Symbols" -> click right button of mouse -> click "New Folder"

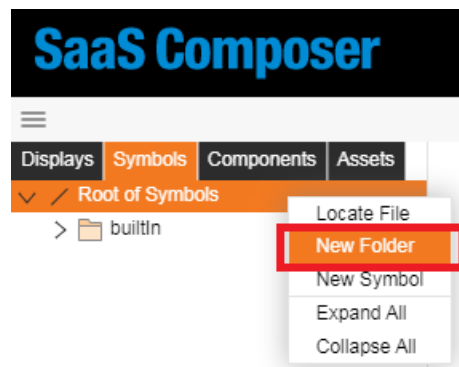


Figure 11: Symbols

12. Enter a name, e.g. Alger201909

Figure 12: New Symbol Name

13. The folder "Alger201909" is created

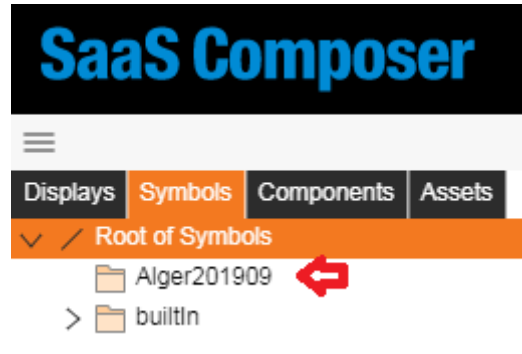


Figure 13: Symbol folder is created

14. Add a new symbol

Move mouse cursor over Alger201909 folder -> click right button of mouse -> New Symbol

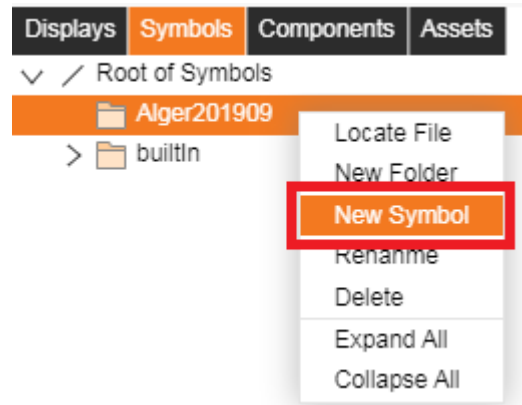


Figure 14: Create a new Symbol

15. Enter the name for this new symbol, e.g. GetTagValue



Figure 15: New Symbol Name

16. We will use text to create a static text and a dynamic text

Static text: simply display GetTagValue static text

Dynamic text: xxxxxxxx for display TMSEC tag value

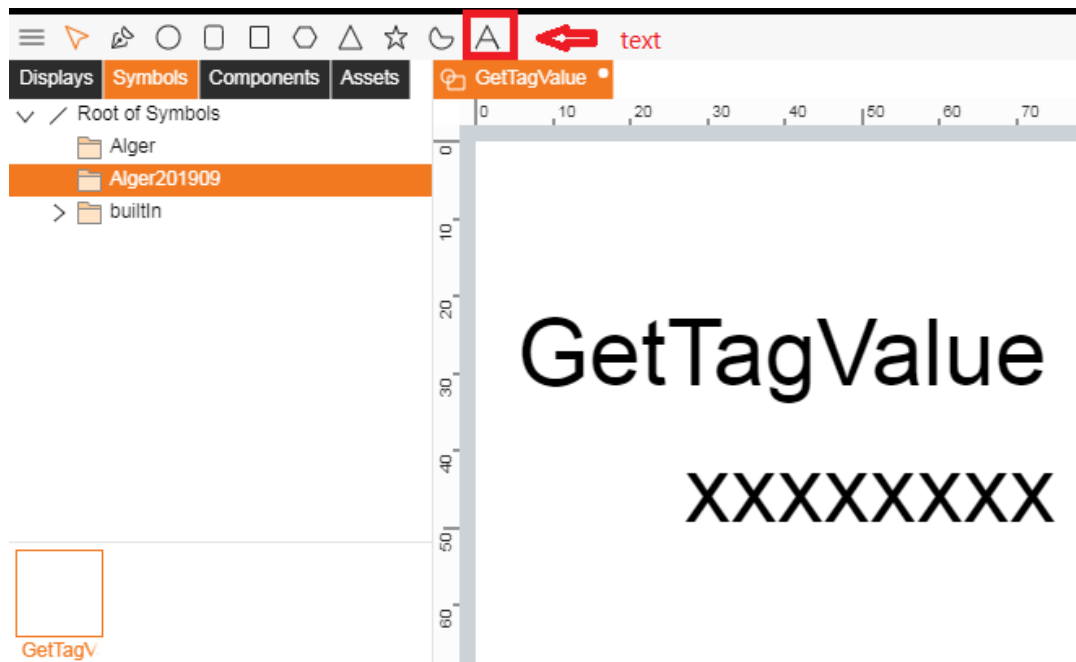


Figure 16: Add Text Objects

17. Add Data Binding for the symbol property

Symbol property -> click "Add" button in Data Binding and a new row added -> click "Attr" end enter "GetTagValue" -> click "Default Value" and enters 00 (or any text user prefers)

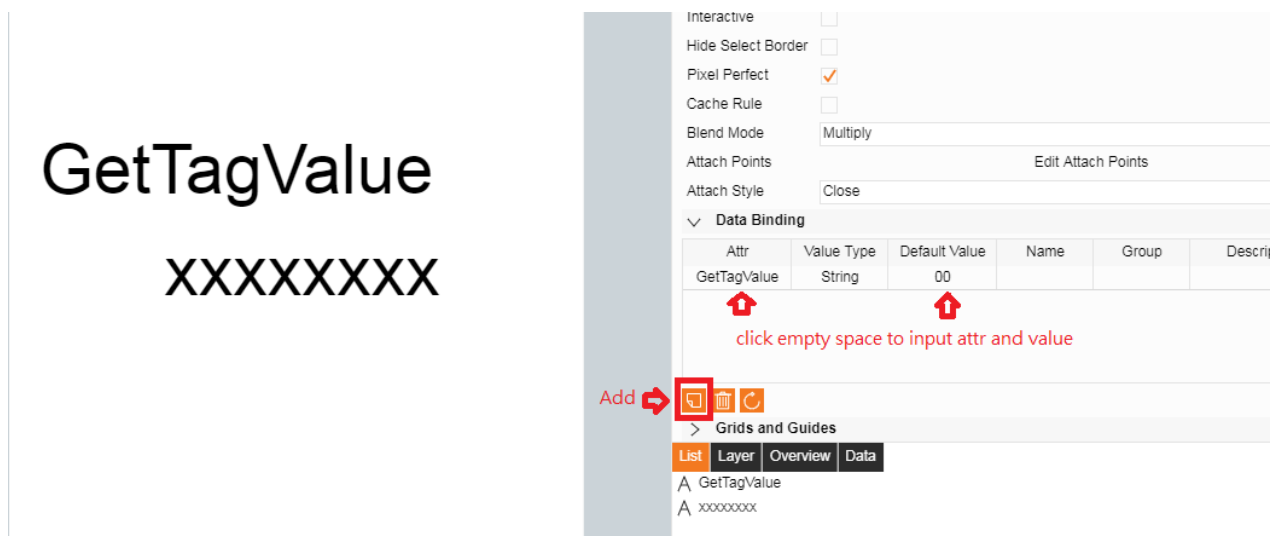


Figure 17: Data Binding

18. Edit "xxxxxxxx" text object property:

Click "xxxxxxxx" -> Text -> Text -> click "text: {func:...}" -> Type is **func** -> enter "return data.a("getTagValue");" -> click "OK"

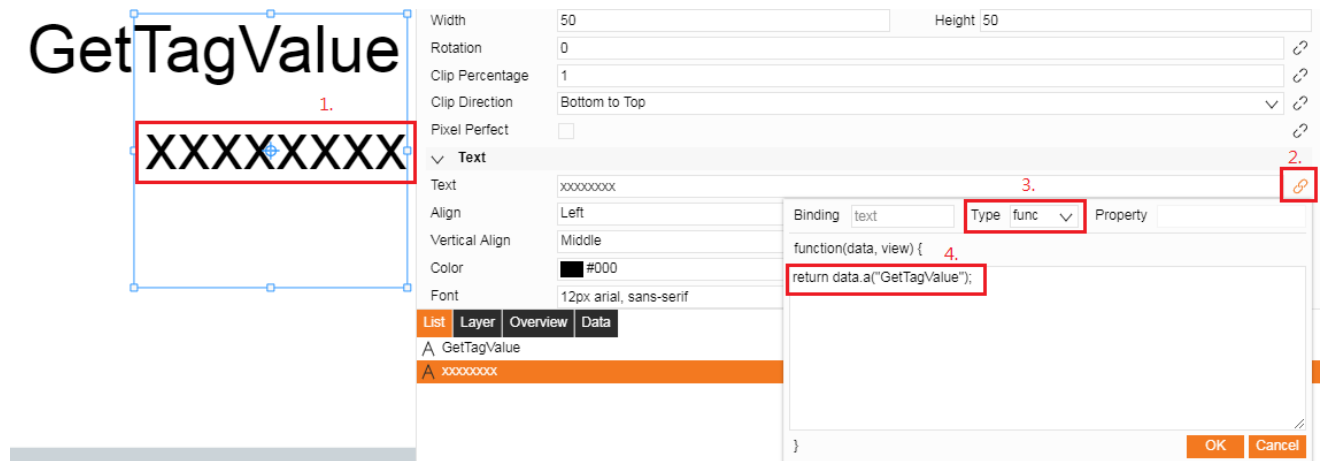


Figure 18: Modify Text Property

And then save the symbol



19. Check this new symbol in 2D display

Displays -> New Folder -> give it a name, e.g. Alger 201909

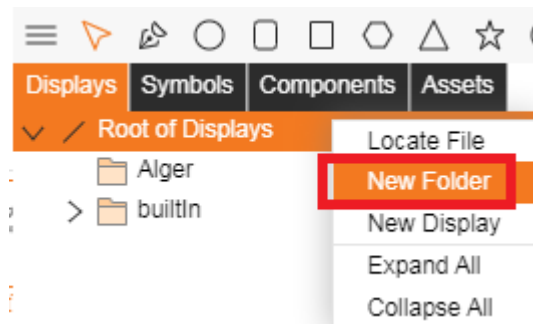


Figure 19: New Folder for Display

Enter a name, e.g. Alger201909



Figure 20: Folder Name

20. Click right button of mouse and select New Display

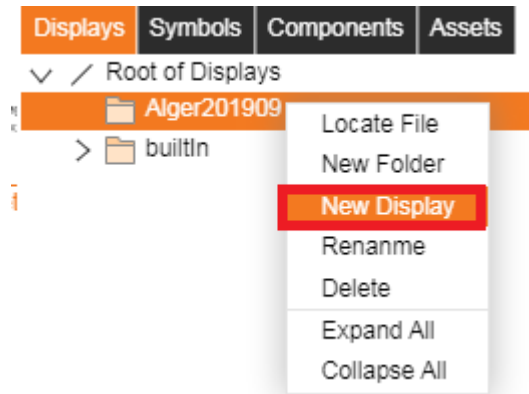


Figure 21: New Display

Enter a name, e.g. demo



Figure 22: Enter New Display Name

21. Key step for inserting GetTagValue symbol in 2D page:
Symbol -> Alger201909 -> drag and drop "GetTagValue" symbol to "demo" Display page

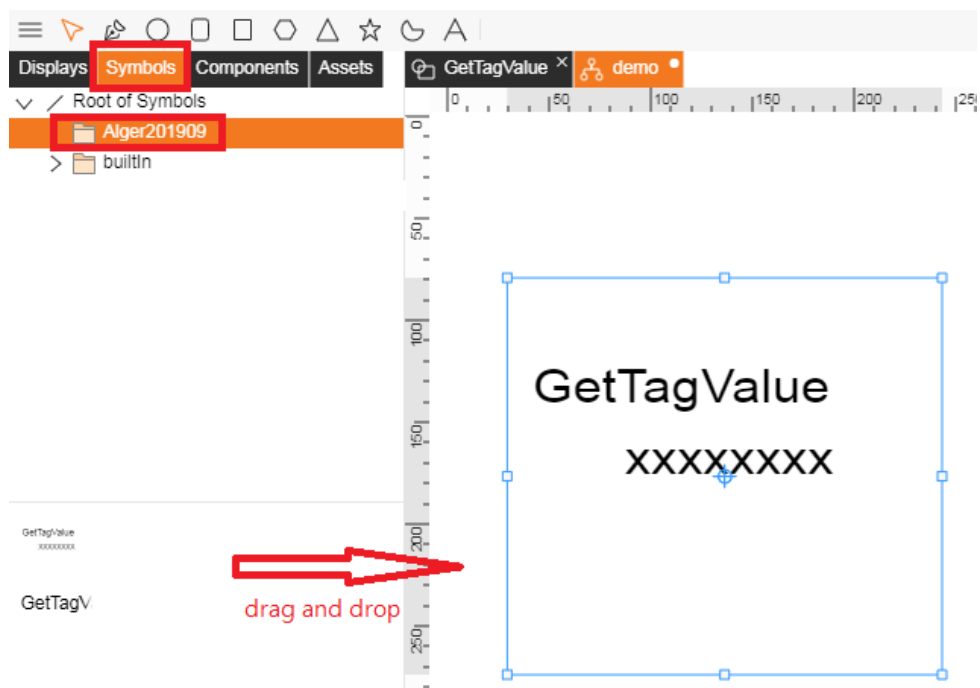


Figure 23: Drag and Drop GetTagValue Symbol

22. There will be a “GetTagValue” option in Basic. This one is created earlier in Symbol.
Click “edit” to assign tag.

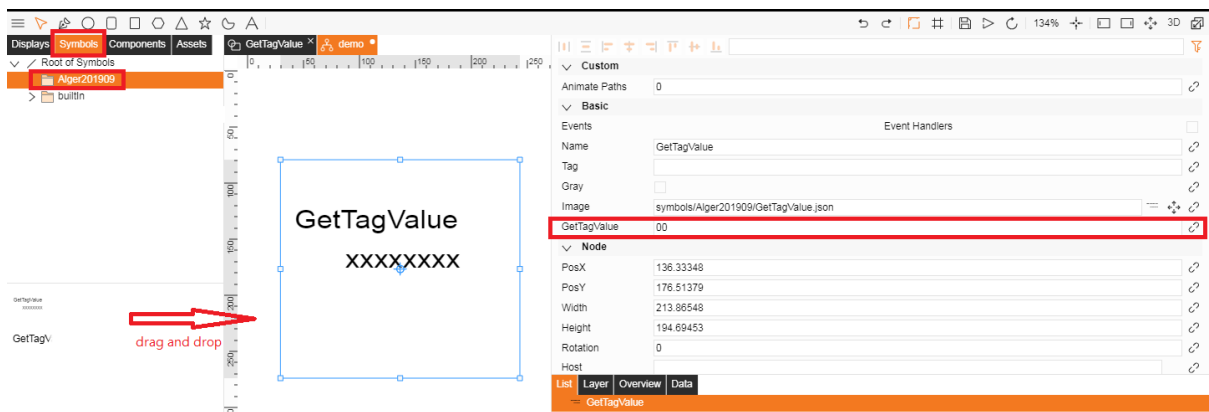


Figure 24: Modify Basic Property

23. Setup Data Binding

- Source: Alger20190916
- Project: Alger20190919
- SCADA: scada
- Device: SystemPoint
- Tag: TMSEC
- Data Type: Last

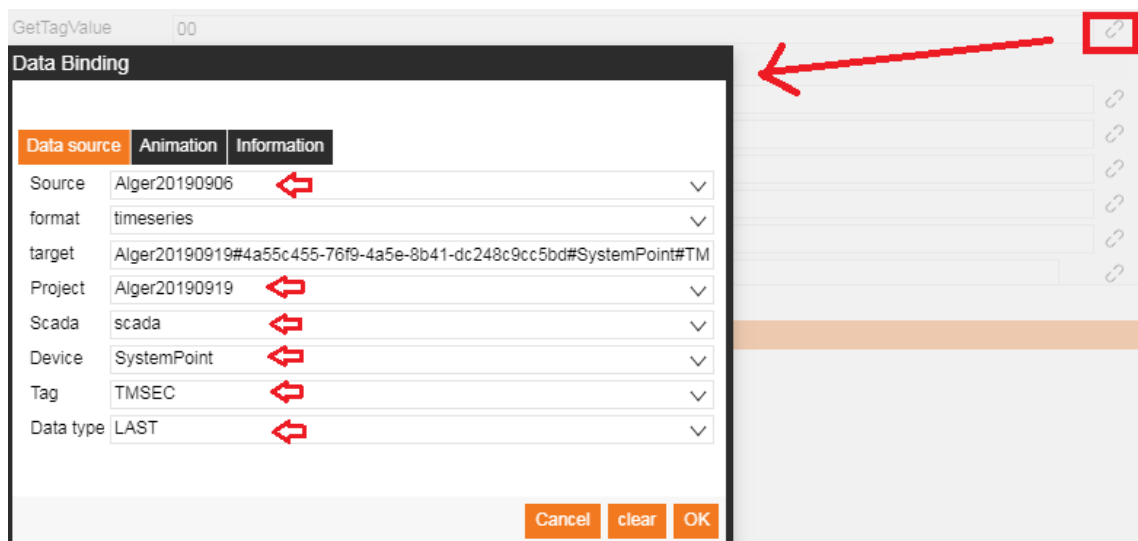


Figure 25: Data Binding

24. Save and preview in 2D

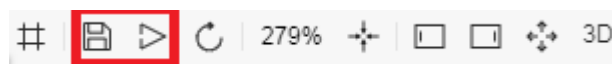


Figure 26: Save and Preview

25. Result in 2D SaaS Composer Viewer



GetTagValue
10

Figure 27: Result in 2D page

26. Insert the GetTagValue symbol in 3D page

Back to Sketchboard and then click “+ New 3D Sketchboard”



Figure 28: 3D Sketchboard

27. Create a folder to save the 3D page

Scenes -> Root of Scenes -> New Folder -> enter a name, e.g. Alger20190920

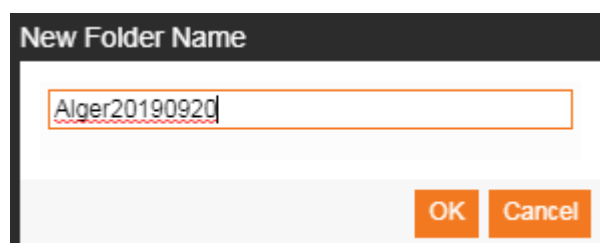
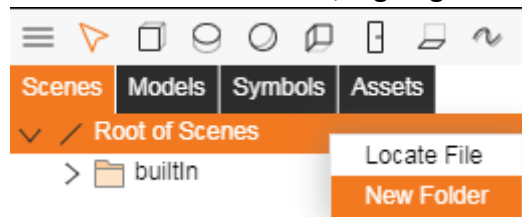


Figure 28: New Folder for Scene

28. Insert a models (not necessary)

Models -> others -> meter

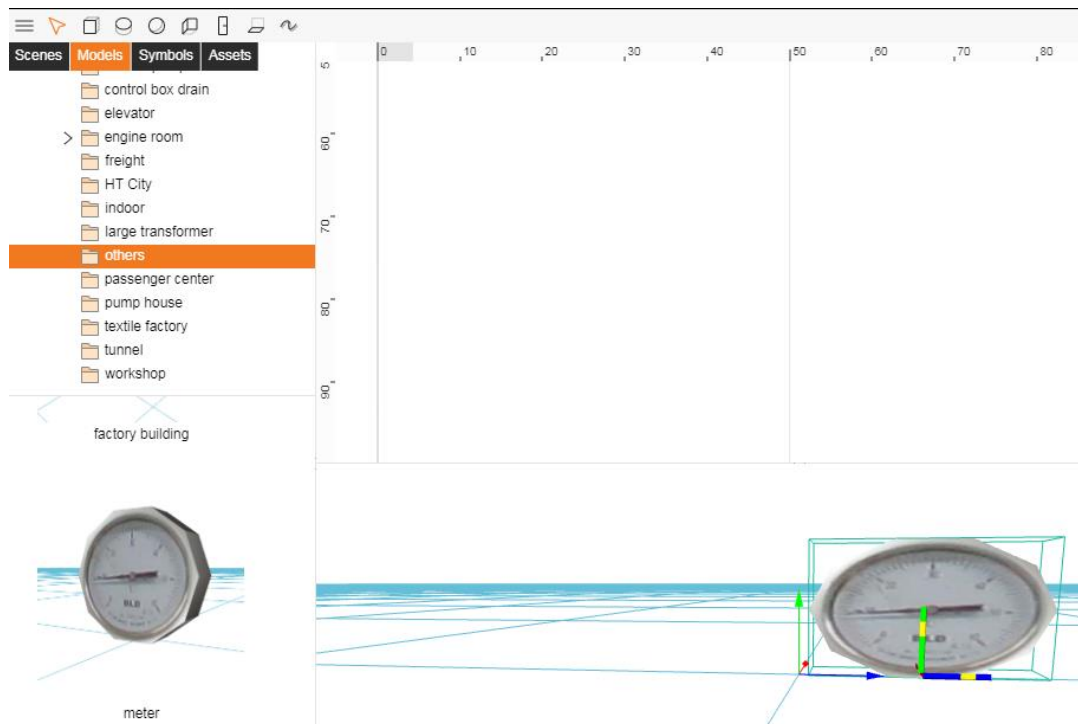


Figure 29: Models

29. Insert the GetTagValue symbol

Symbols -> Alger201909 -> GetTagValue

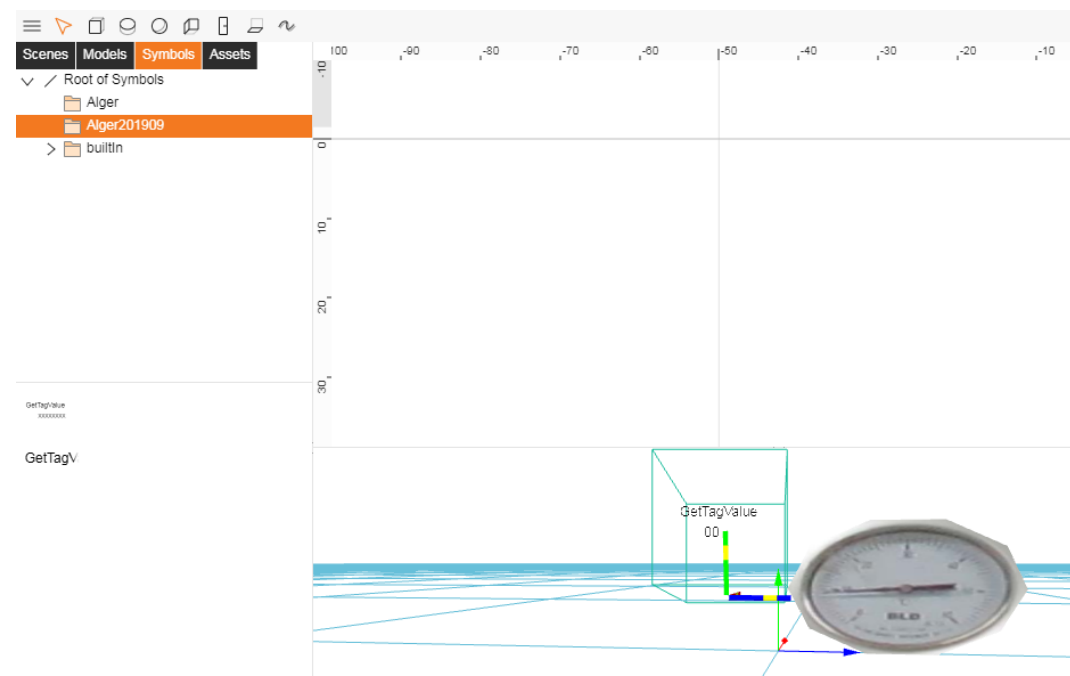


Figure 30: Add Symbol

Modify GetTagValue property

Data Bindings -> GetTagValue -> click modify button

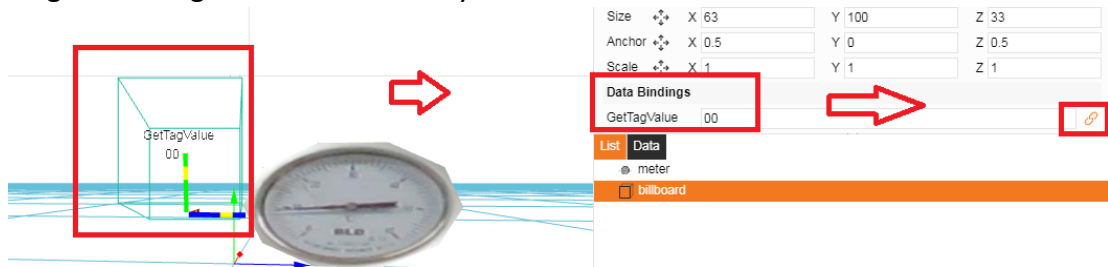


Figure 31: Data Bindings

Setup Data Binding in Data Source

- Source: Alger20190916
- Project: Alger20190919
- SCADA: scada
- Device: SystemPoint
- Tag: TMSEC
- Data Type: Last

Then click OK button

Data Binding

Data source	Animation	Information
Source	Alger20190906	
format	timeseries	
target	Alger20190919#4a55c455-76f9-4a5e-8b41-dc248c9cc5bd#SystemPoint#TM	
Project	Alger20190919	
Scada	scada	
Device	SystemPoint	
Tag	TMSEC	
Data type	LAST	

Cancel
clear
OK

Figure 32: Data Source Configuration

30. Save the scene page

Click Save -> enter a name (e.g. meter) in New Scene Name dialog box.

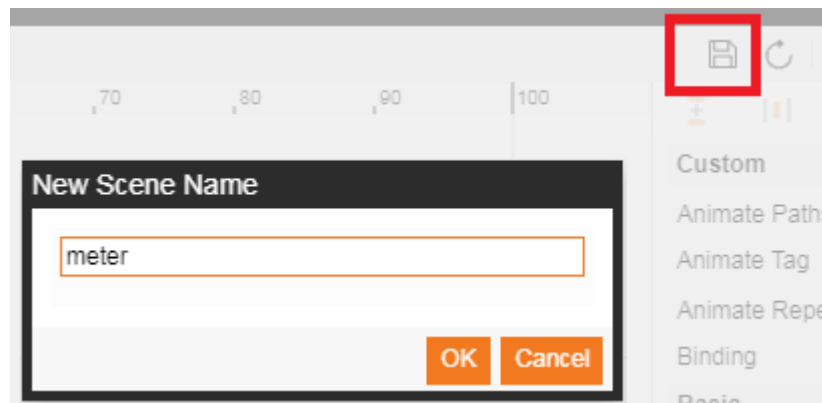


Figure 33: Save

31. Make sure new scene (e.g. meter) can be seen in Scenes -> Alger20190920 folder.

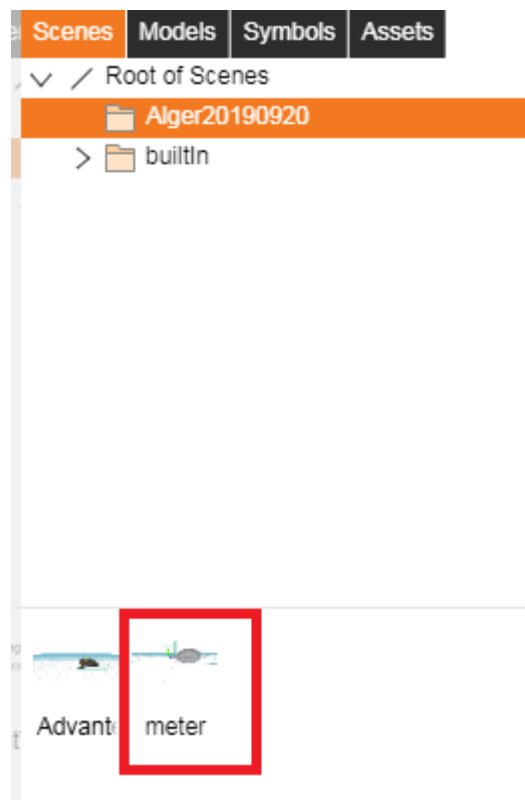


Figure 34: Save Successfully

32. Click "Preview" button

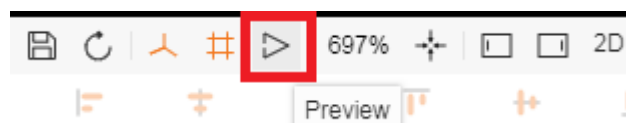


Figure 35: Preview

33. Result of showing TMSEC tag value in 3D page.



Figure 36: Result in 3D page

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