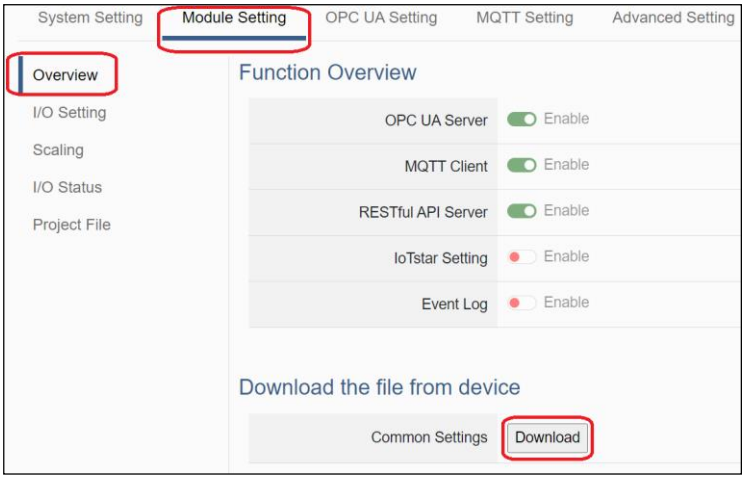
How to graphically present the data collected by UA-I/O series products via OPC UA in AVEVA Edge?

ICP DAS's UA-I/O series products provide OPC UA Server service, allowing AVEVA Edge to easily graph data.

This article will explain:
How AVEVA Edge Quickly Reads OPC UA Server Data from UA-I/O Series Products.

1. How to get the OPC UA Server connection information of UA-I/O series products quickly?

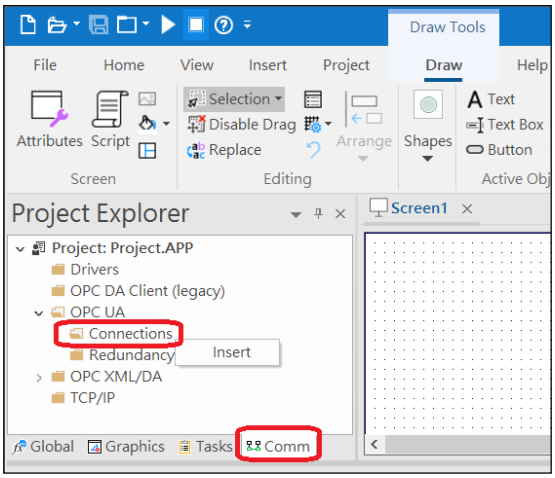
First, go to the UA-I/O series system webpage to download the CSV file (as shown below)
[Module Setting] ➔ [Overview] ➔ [Download the file from device] ➔ [Common Settings] ➔ [Download]



You can view the connection parameters of UA-I/O series products in the CSV file.

2. How to set up OPC UA Server in AVEVA Edge?

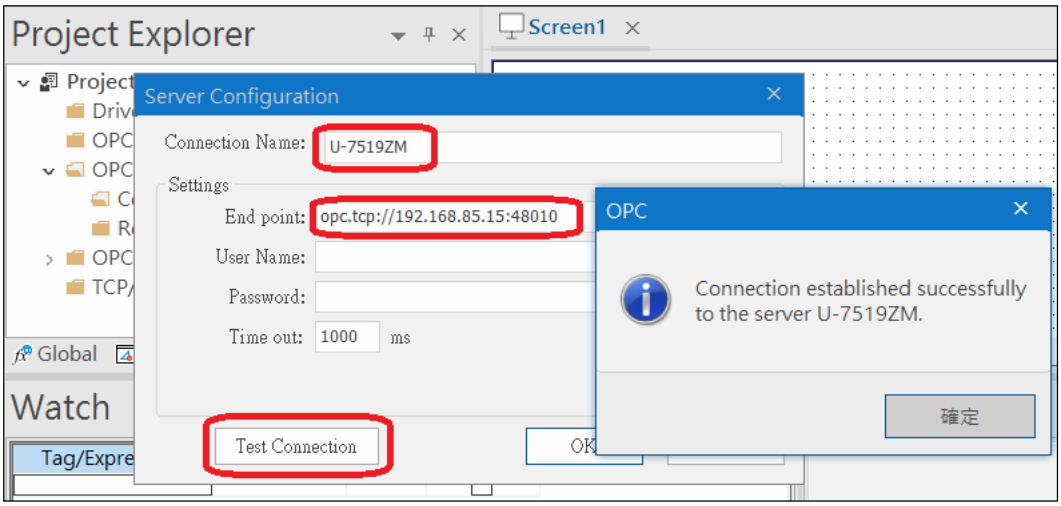
Go to the AVEVA Edge interface and select [Comm]➔ [Connections] below OPC UA and right-click ➔ [Insert] (as shown below)



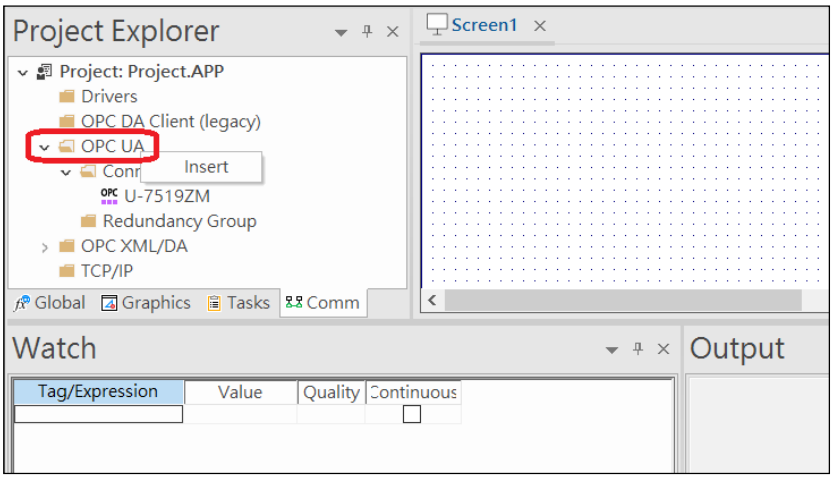
Setting the Server Configuration
The following example is provided for reference. (as shown below)

Input information

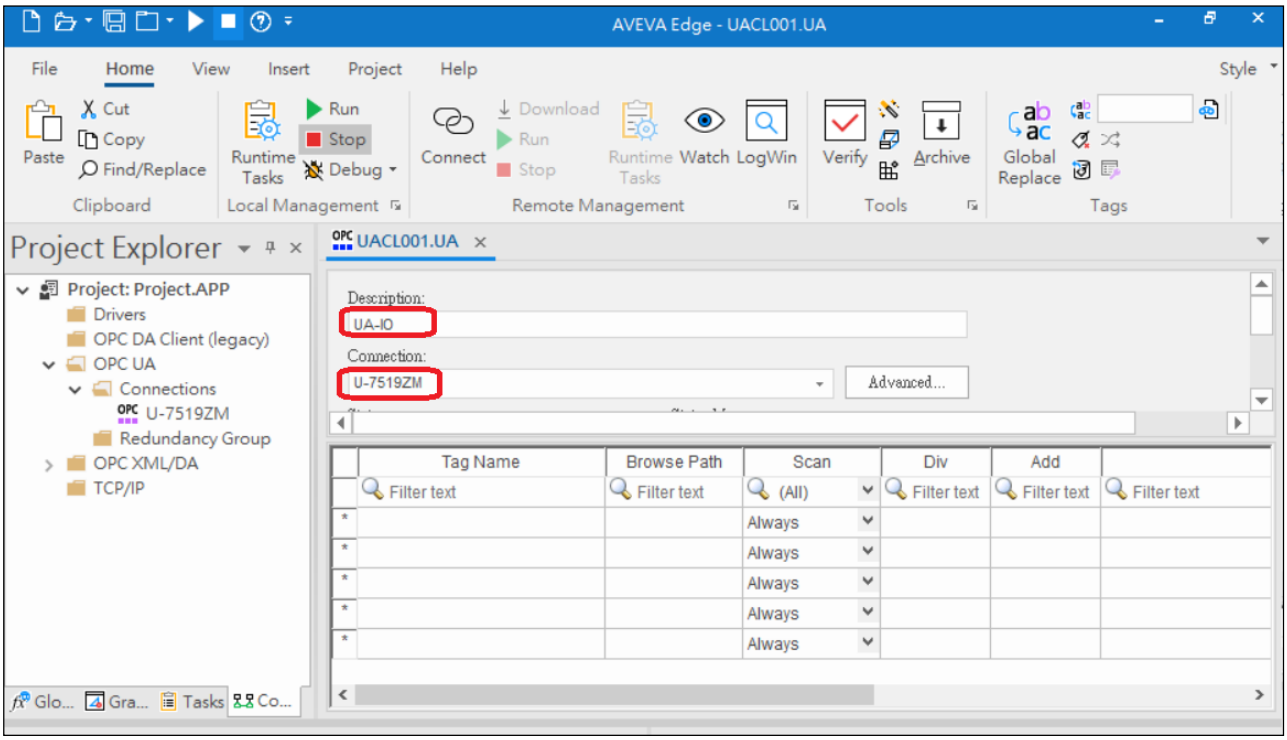
1. Connection Name
2. End point (The format is opc.tcp://[OPC UA Server IP]:[OPC UA Server port])
3. Press [Test Connection] to confirm the success of the connection.
4. Press [OK]



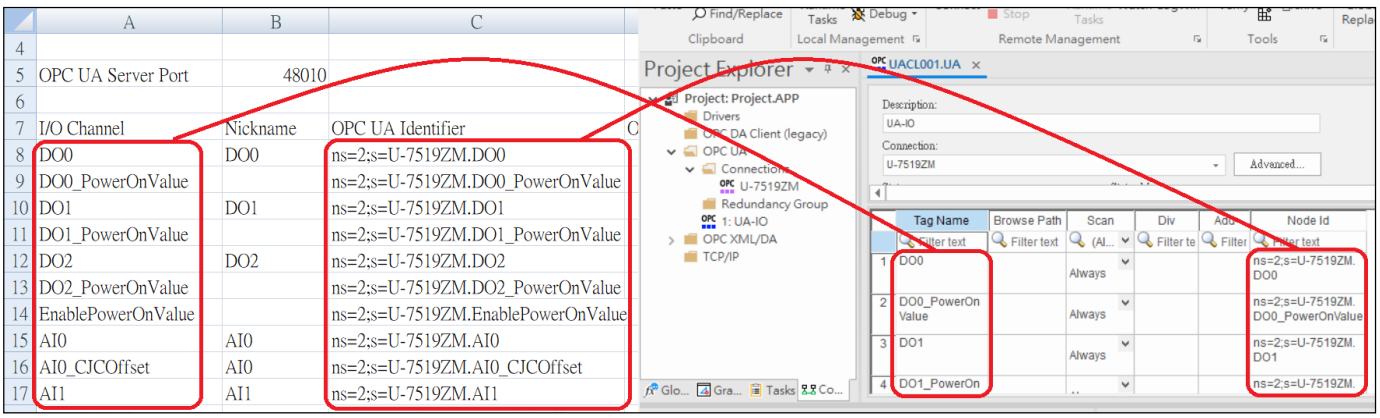
Right-click [Insert] on OPC UA



Input information
1. Description
2. Connection (Select the connection you need)

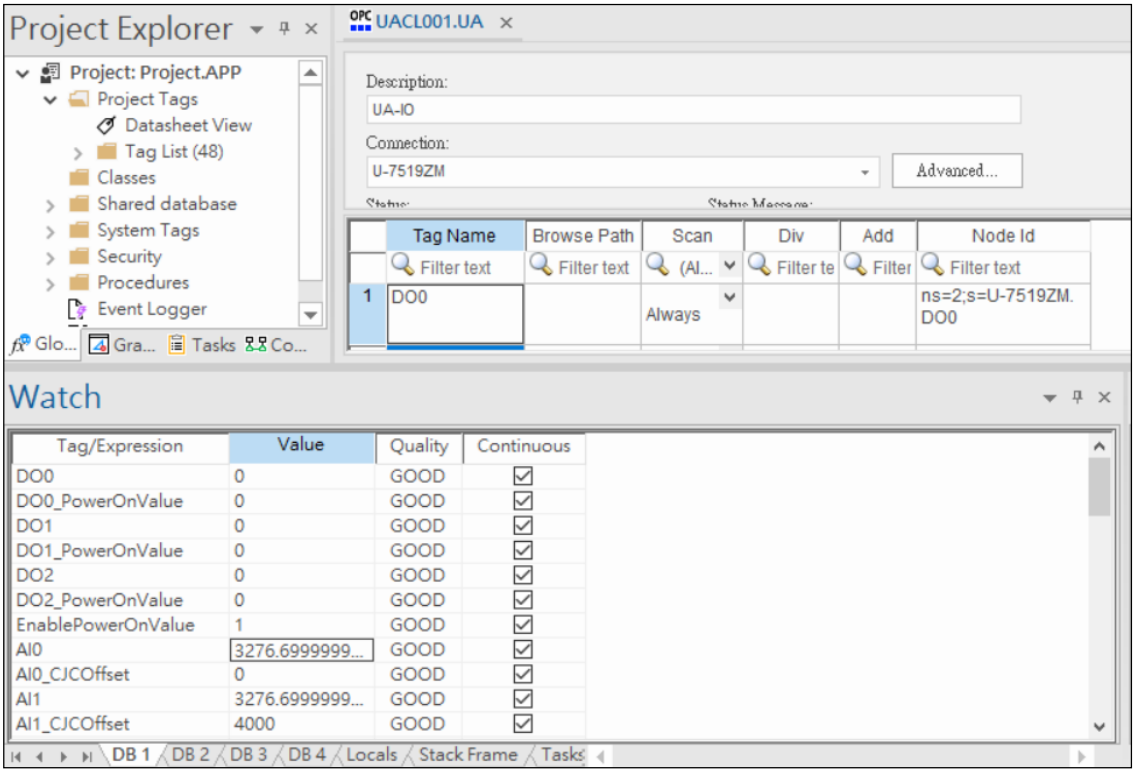


3. Open the CSV file you just downloaded from the UA-I/O series website. Paste the I/O Channel and OPC UA Identifier fields to the Tag Name and Node Id of the AVEVA Edge field respectively (as shown below), select the type of each new Tag, and then click Save.



	A	B	C
4			
5	OPC UA Server Port	48010	
6			
7	I/O Channel	Nickname	OPC UA Identifier
8	DO0	DO0	ns=2;s=U-7519ZM.DO0
9	DO0_PowerOnValue		ns=2;s=U-7519ZM.DO0_PowerOnValue
10	DO1	DO1	ns=2;s=U-7519ZM.DO1
11	DO1_PowerOnValue		ns=2;s=U-7519ZM.DO1_PowerOnValue
12	DO2	DO2	ns=2;s=U-7519ZM.DO2
13	DO2_PowerOnValue		ns=2;s=U-7519ZM.DO2_PowerOnValue
14	EnablePowerOnValue		ns=2;s=U-7519ZM.EnablePowerOnValue
15	AI0	AI0	ns=2;s=U-7519ZM.AI0
16	AI0_CJCOffset	AI0	ns=2;s=U-7519ZM.AI0_CJCOffset
17	AI1	AI1	ns=2;s=U-7519ZM.AI1

After running the AVEVA Edge project, the values can be displayed.


Project Explorer
Project: Project.APP
Project Tags
Datasheet View
Tag List (48)
Classes
Shared database
System Tags
Security
Procedures
Event Logger
UACL001.UA
Description:
UA-IO
Connection:
U-7519ZM
Advanced...
Tag Name
Browse Path
Scan
Div
Add
Node Id
Filter text
1
DO0
Always
ns=2;s=U-7519ZM.DO0
Watch
Tag/Expression
Value
Quality
Continuous
DO0 0 GOOD
DO0_PowerOnValue 0 GOOD
DO1 0 GOOD
DO1_PowerOnValue 0 GOOD
DO2 0 GOOD
DO2_PowerOnValue 0 GOOD
EnablePowerOnValue 1 GOOD
AI0 3276.6999999... GOOD
AI0_CJCOffset 0 GOOD
AI1 3276.6999999... GOOD
AI1_CJCOffset 4000 GOOD
DB 1
DB 2
DB 3
DB 4
Locals
Stack Frame