

# Advantech AE Technical Share Document

<b>Date</b>	2016 / 01 / 18	<b>SR#</b>	
<b>Category</b>	<input checked="" type="checkbox"/> FAQ <input type="checkbox"/> SOP	<b>Related OS</b>	RTOS/ WinXP/ Win7
<b>Abstract</b>	How To Use KEPWARE OPC Server with WebOP OPC UA Client Driver		
<b>Keyword</b>	OPC, UA, KEPWARE, WebOP, WOP		
<b>Related Product</b>	WOP-2000, Panel Express		

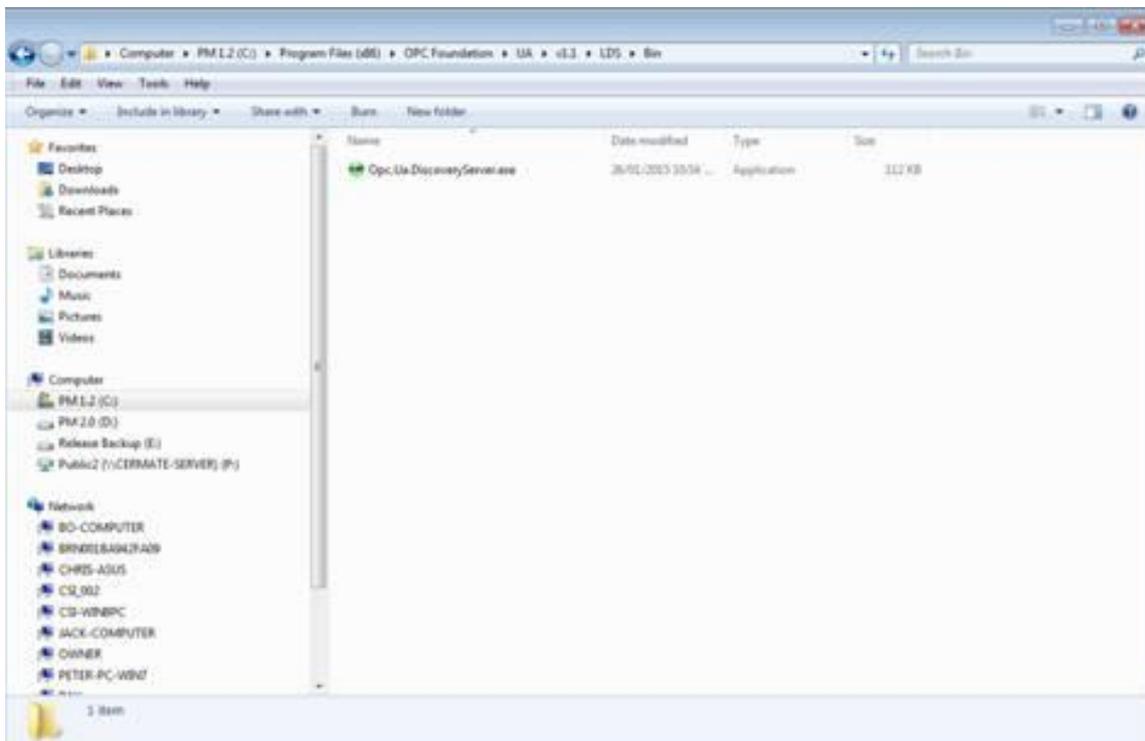
■ **Problem Description:**

How To Use KEPWARE OPC Server with WebOP OPC UA Client Driver

■ **Brief Solution - Step by Step:**

**Environment: UNO-2184G + WebOP Designer v2.1.5.00 + KepServerEx 5 + Win7.**

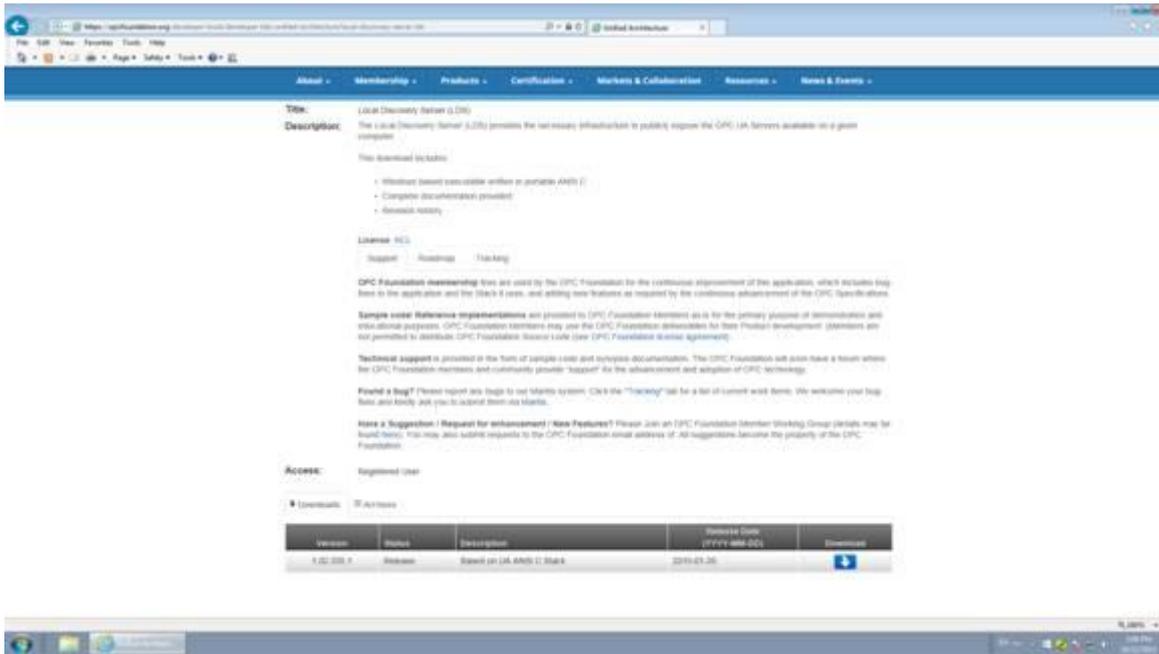
- 1) In your file system, please check if the OPC DiscoveryServer.exe exists or not  
Ex. C:\Program Files\OPC Foundation\UA\v1.1\LDS\Bin



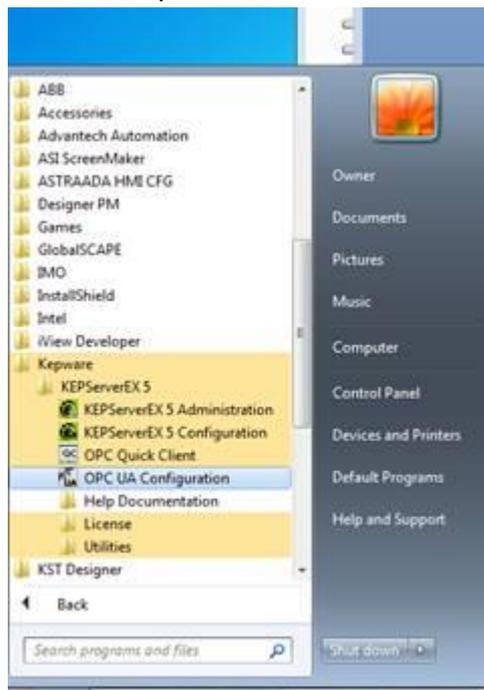
If it does not exist, please go to OPC website to download one.

<https://opcfoundation.org/developer-tools/developer-kits-unified-architecture/local-discovery-server-lds>

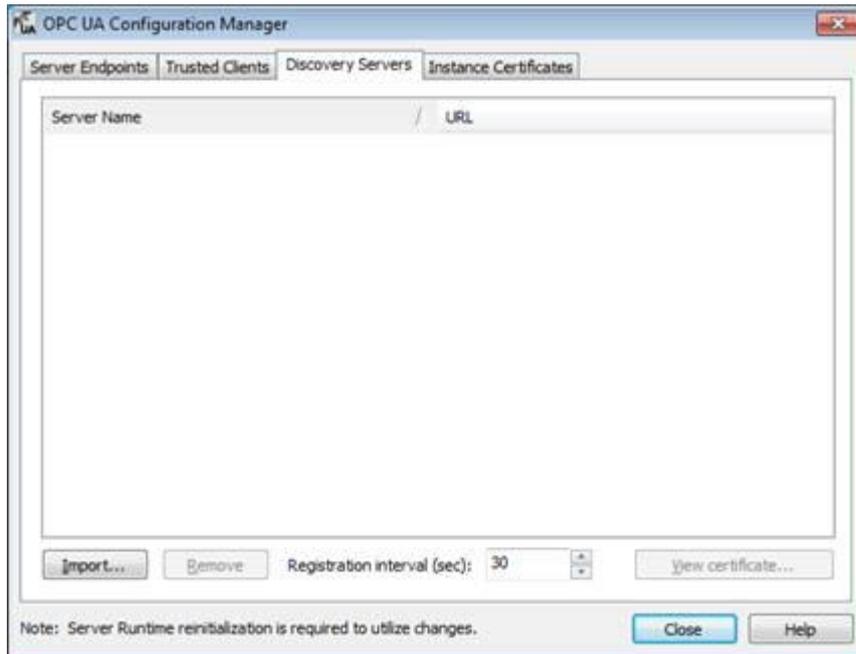
Please install it by following its installation guide (default setting is good).



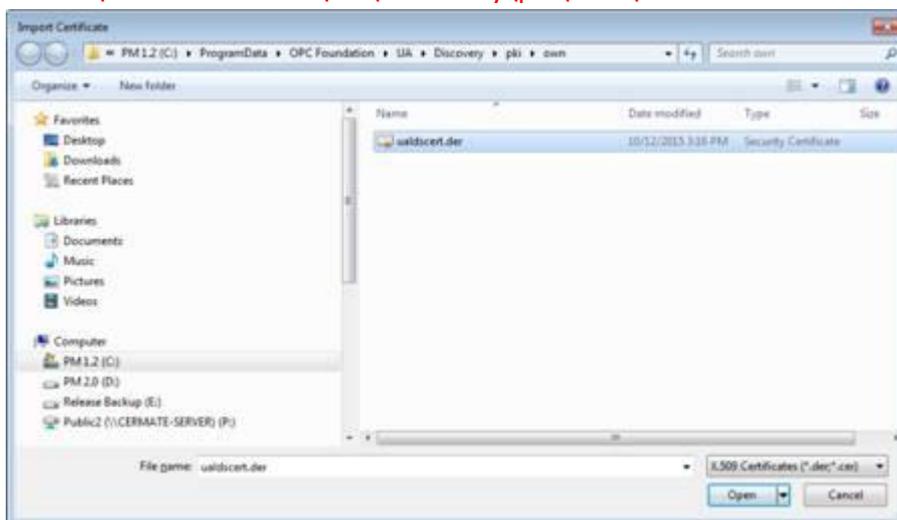
2) Open the OPC UA Configuration toolbox of Kepware



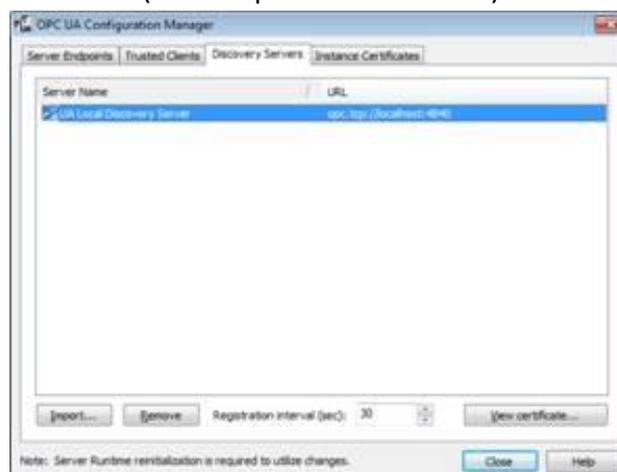
In the Discovery Servers tab, click the “Import...” button



Select the Discovery Server certificate file (**ualdscert.der**) as shown in the Figure below. Normally it is in the directory **C:\Program Data\OPC Foundation\UA\Discovery\pki\own\**



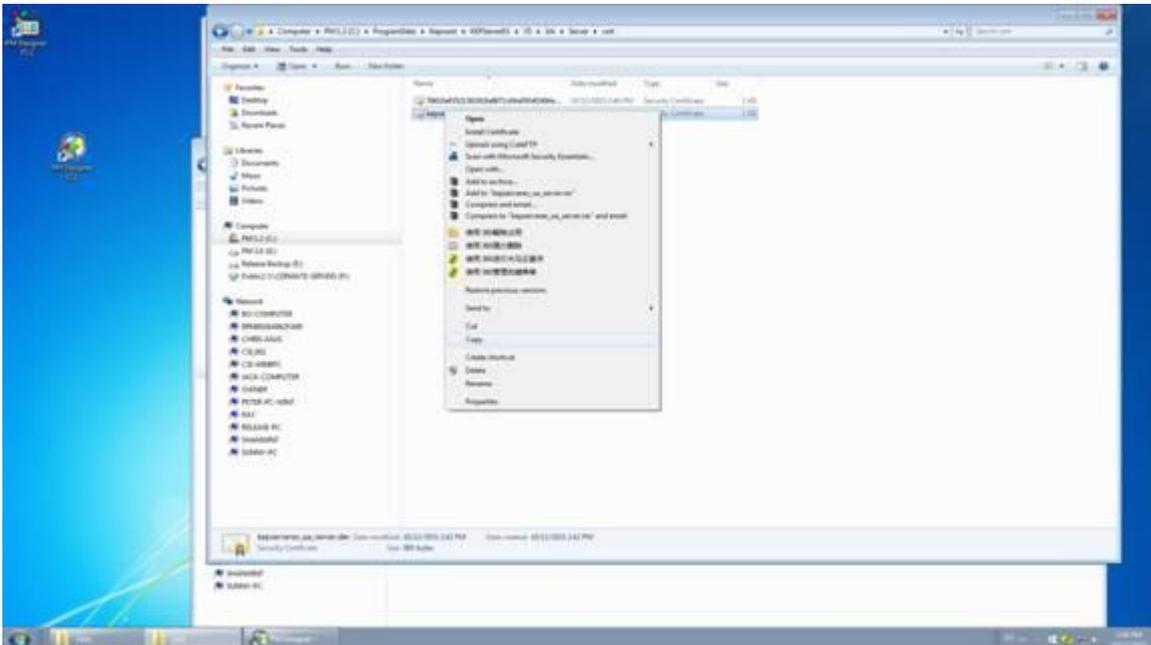
(after import **ualdscert.der**)



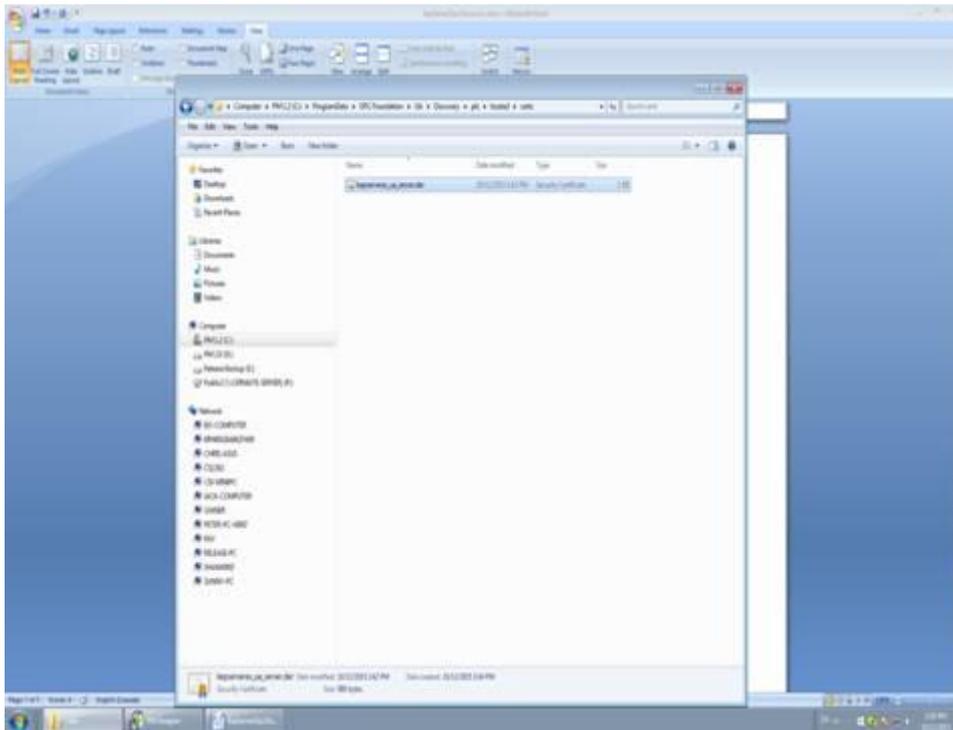
3) Close the OPC UA Configuration Manager, and check if the Kepware server is running in background



4) Copy the the Kepware server certificate (kepserverex\_ua\_server.der) from the following directory:  
C:\\Program Data\\Kepware\\KEPServerEX\\V5\\UA\\Server\\cert\\



5) Paste it to the Discovery Server trusted certificate store: **C:\\Program Data\\OPC Foundation\\UA\\Discovery\\pki\\trusted\\certs\\**

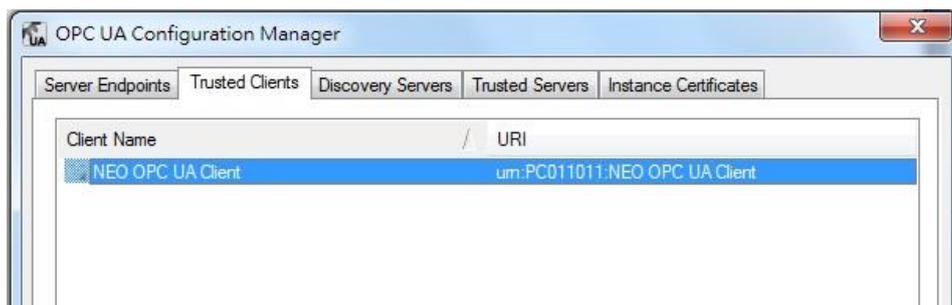


6) you need to manually add our client's certificate to the Kepware server trust client list.

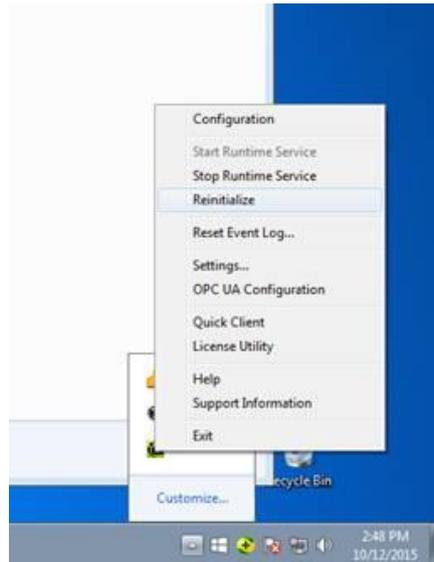
The location of the NEO Client's certificate can be found here:

**C:\\ProgramData\\Neo\\OPCUA\\CertificateStores\\PrivateKeys\\certs\\NEO OPC UA Client [7311060B2C6C0557A1DD640F54ACD34343B81DCE].der**

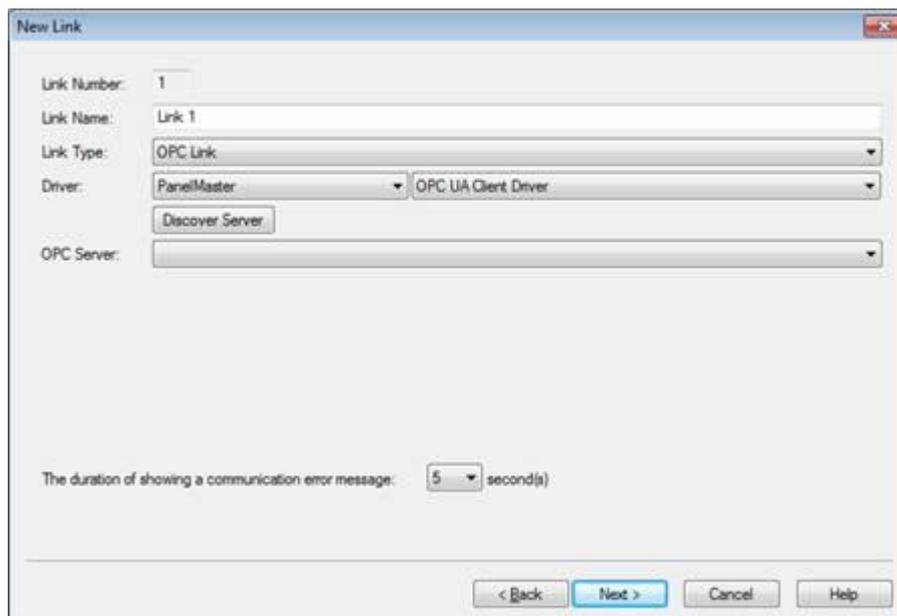
Please use the Import button in the tab page TrustedClient of Kepware server to import it into the Kepware Server's trust list and trust it.



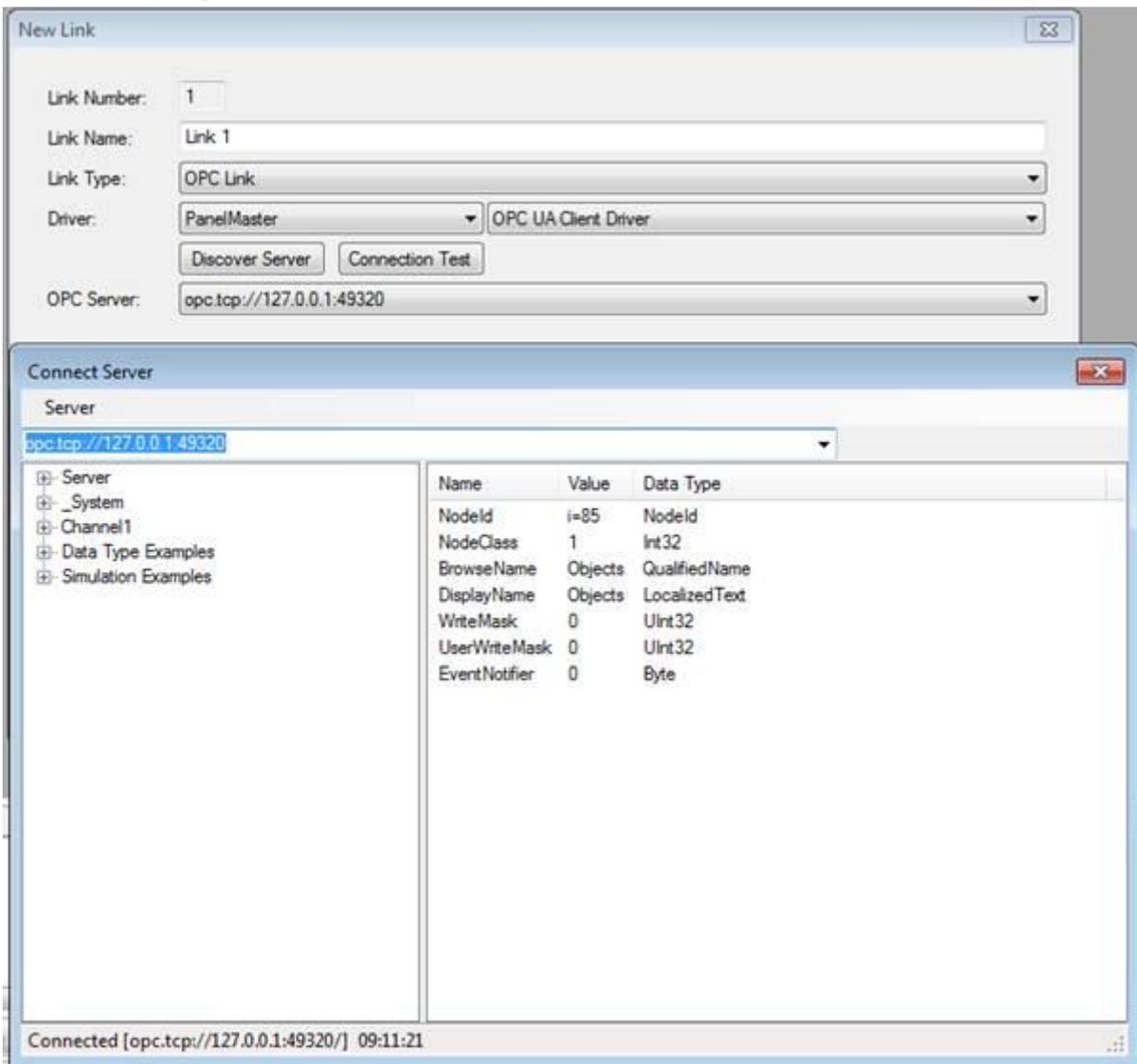
Please right click its icon in the task bar and click the menu item : “Reinitialize”



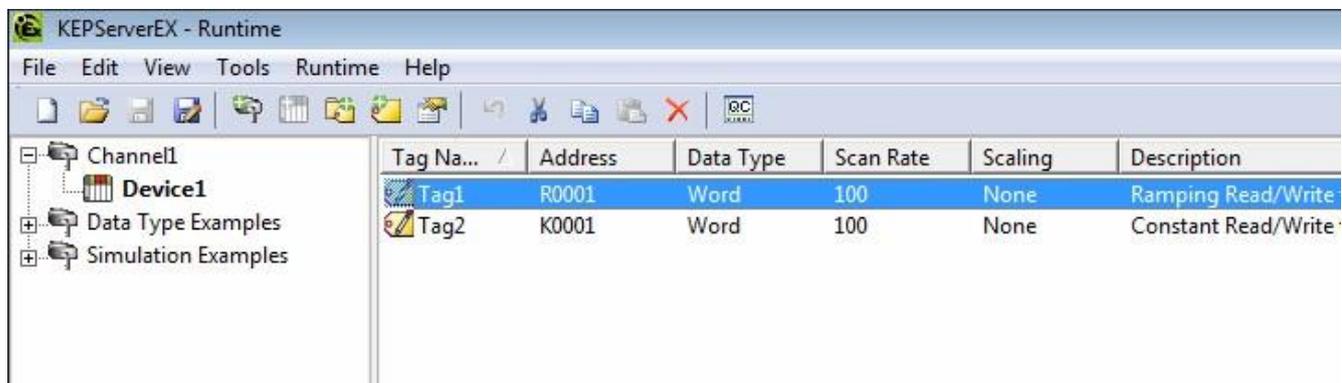
7) Run WebOP Designer and select OPC Link type as shown in the following Figure, and click the “Discover Server” button



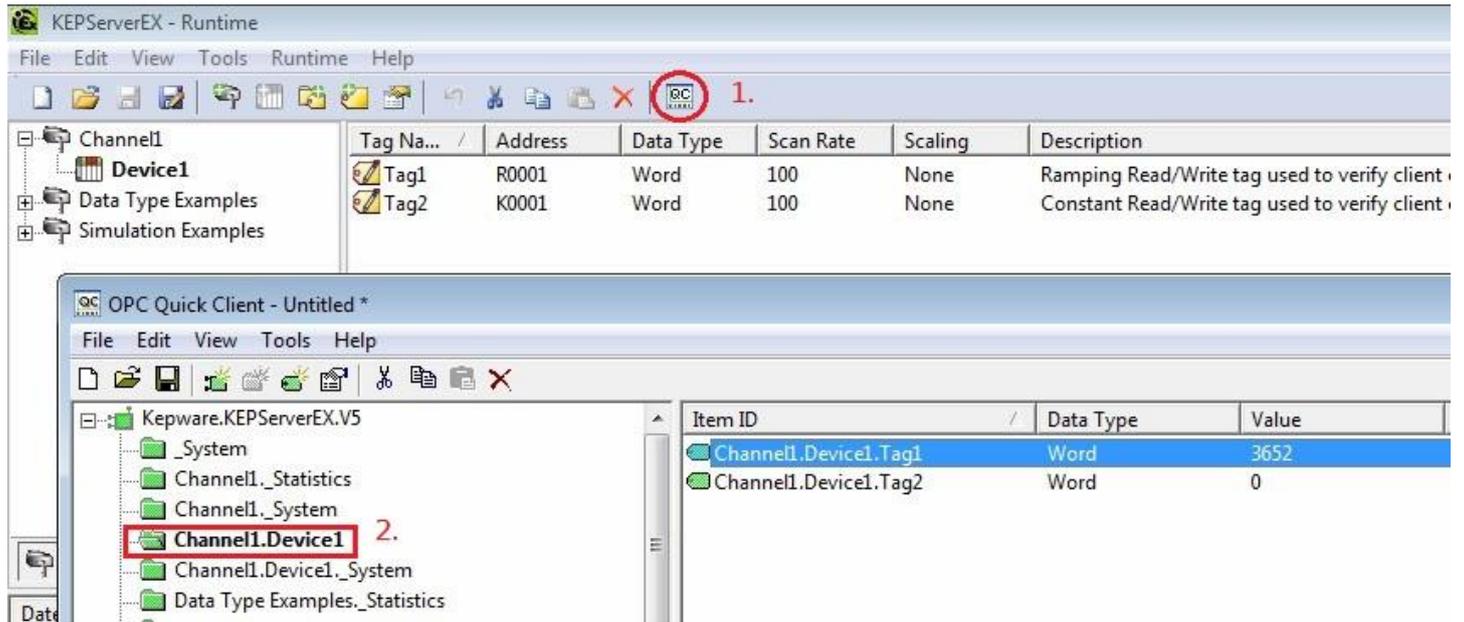
Click the Connection Test button, now you should be able to find OPC Server information. Then finish setting.



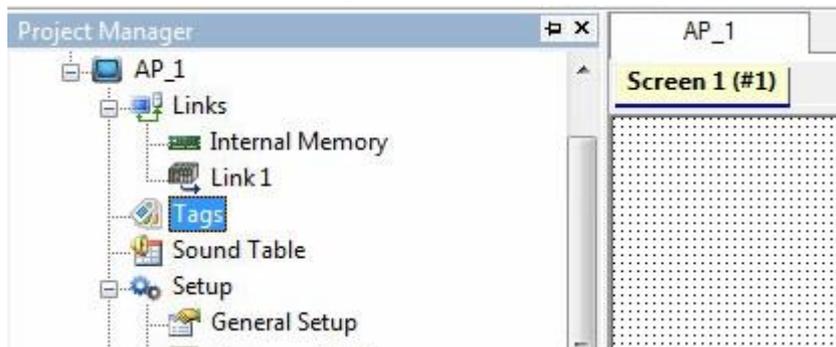
8) Now take a look on KepServer and there should be a Tag1 under path "Channel1 – Device1" (it's default simulation of KEPWARE)



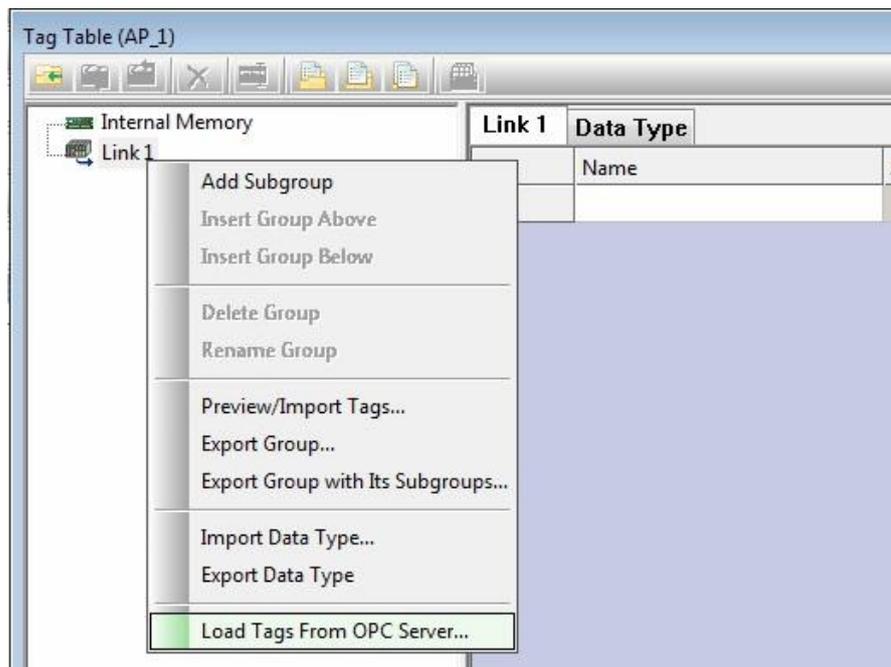
Click quick connection and find Tag1. The value of Tag1 should be increased automatically with simulation.



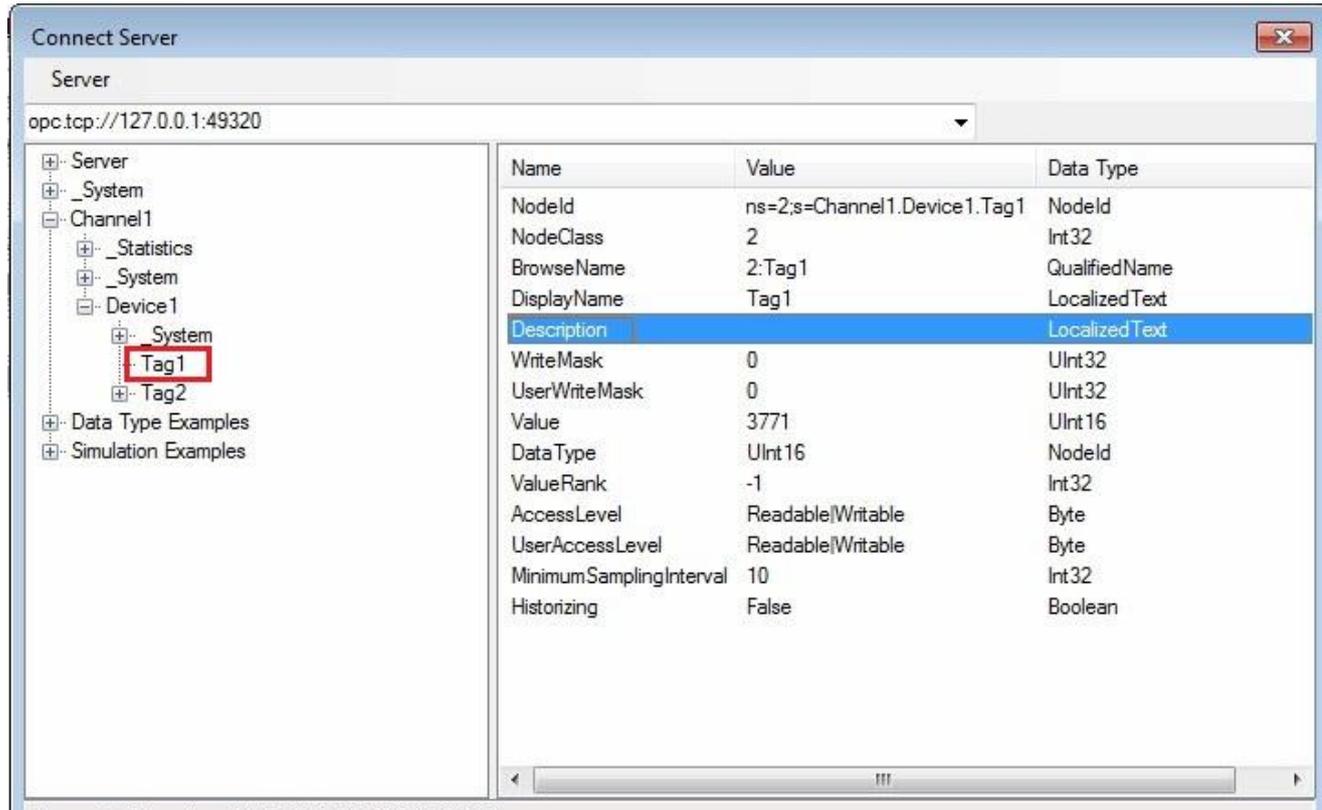
Now back to WebOP Designer and double click Tags.



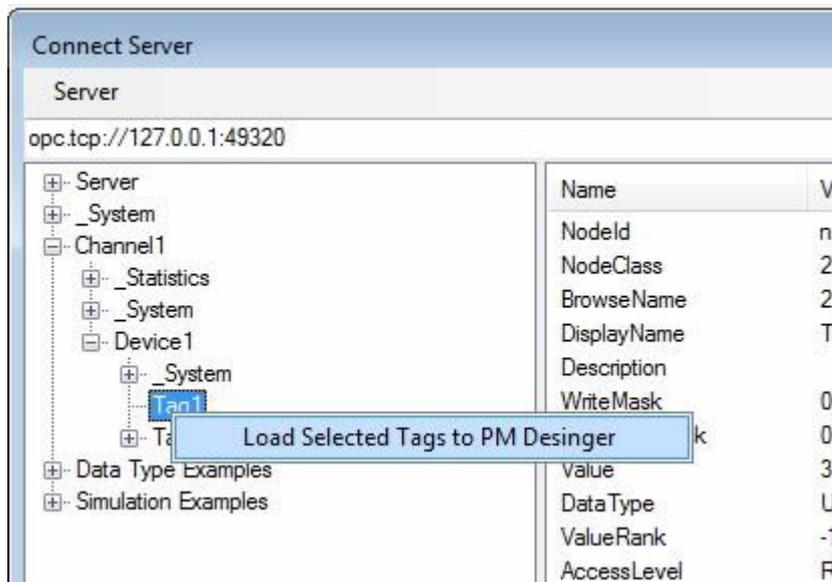
Right click on Link1 and select Load Tags from OPC Server.



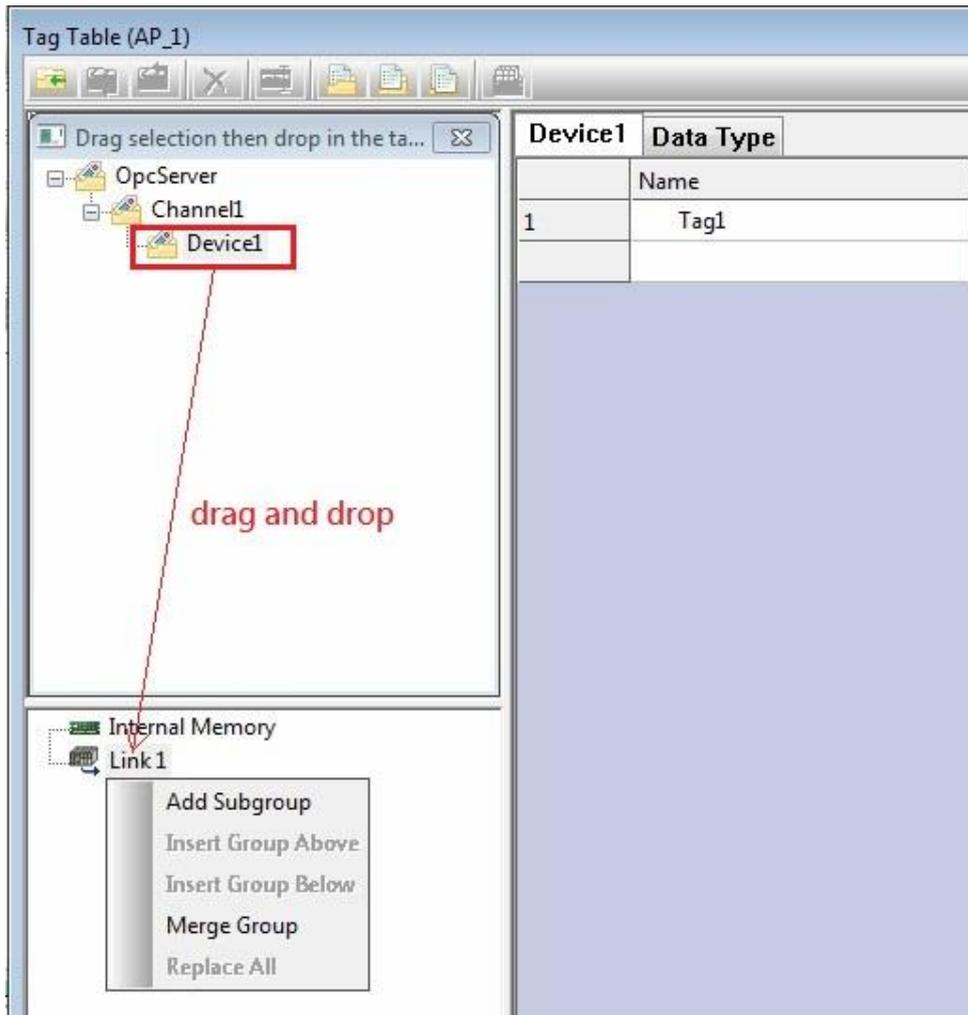
Find Tag1.



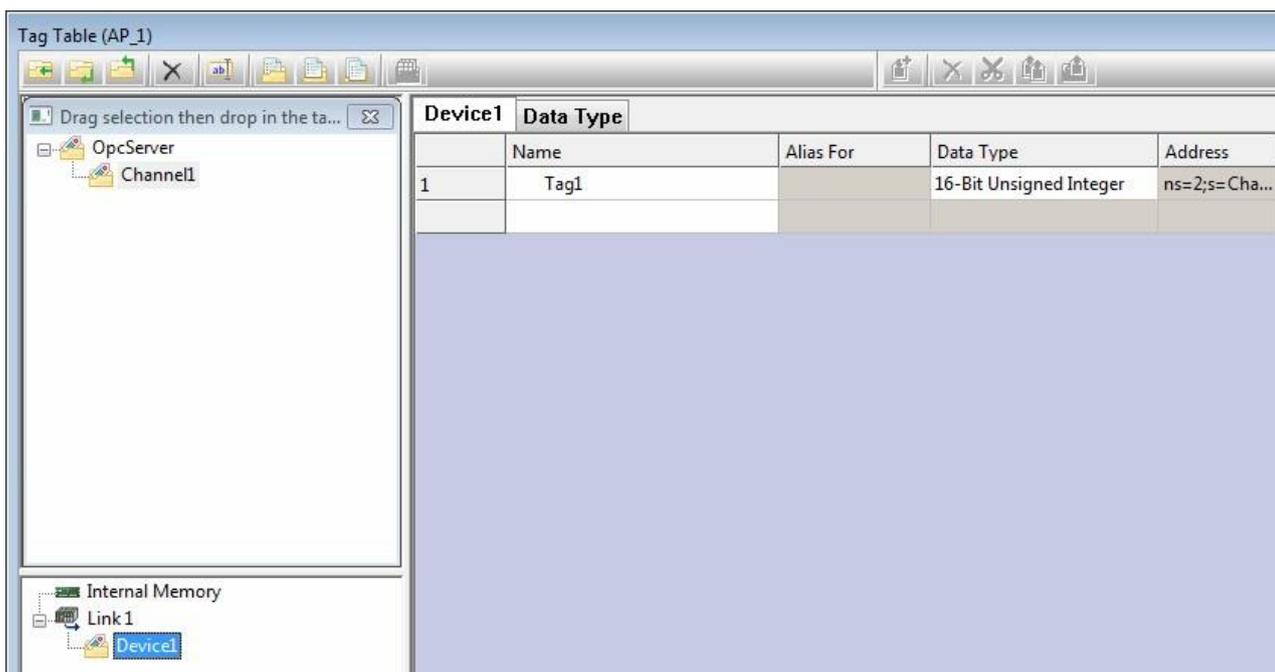
Right click on Tag1 and select "Load Selected Tag to PM Designer."



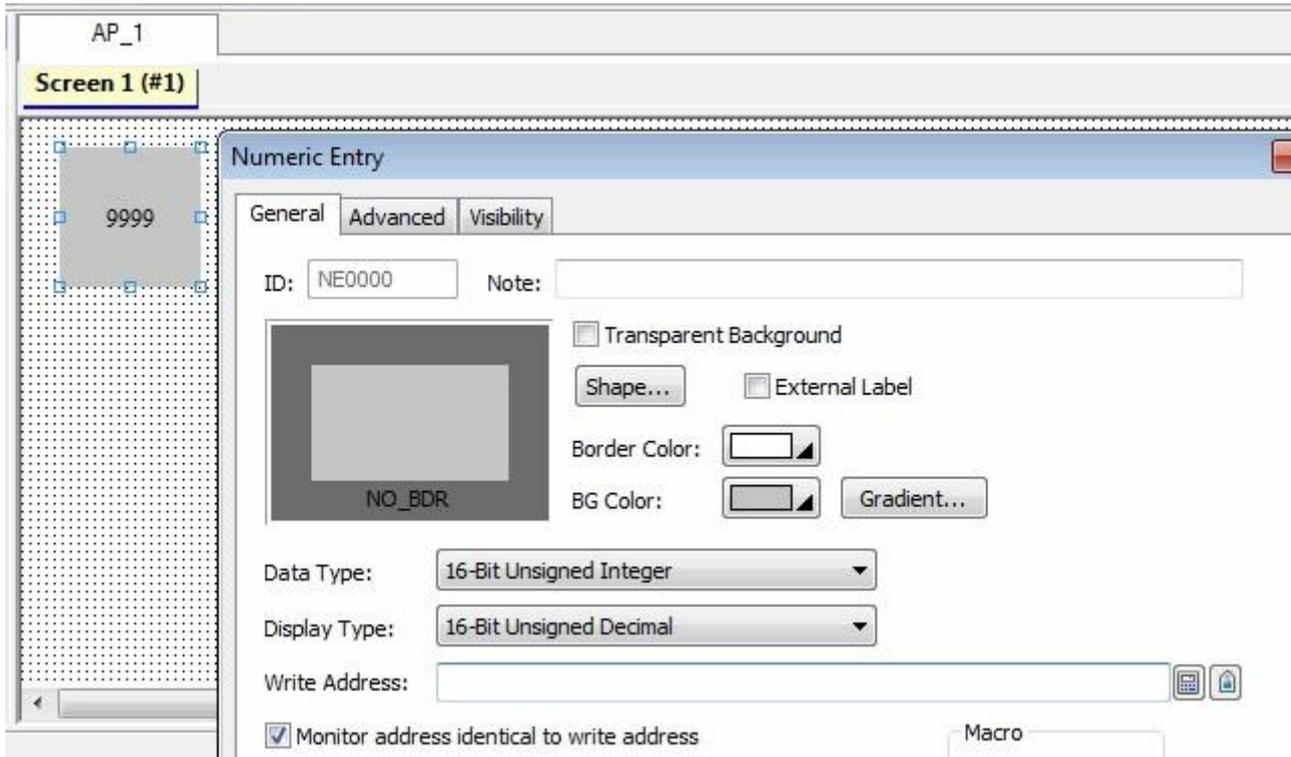
Drag Device1 and drop on Link1 as following screenshot. Then select **“Add Subgroup”**



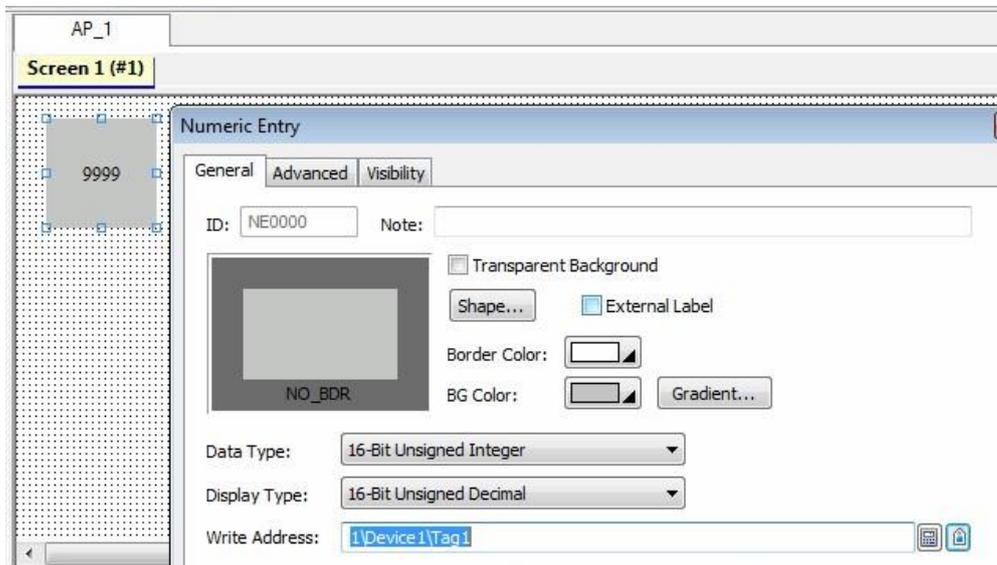
Now Tag1 should be available on Link1.



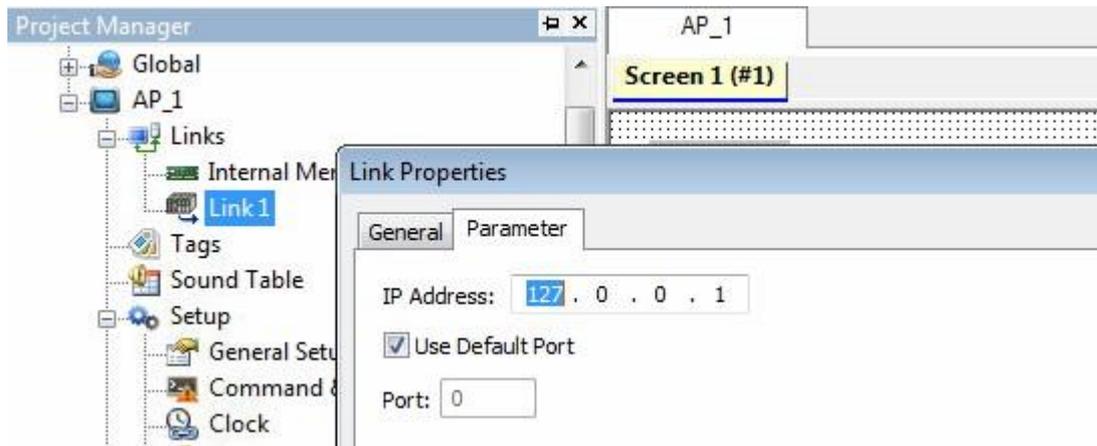
Create a numeric entry on screen.



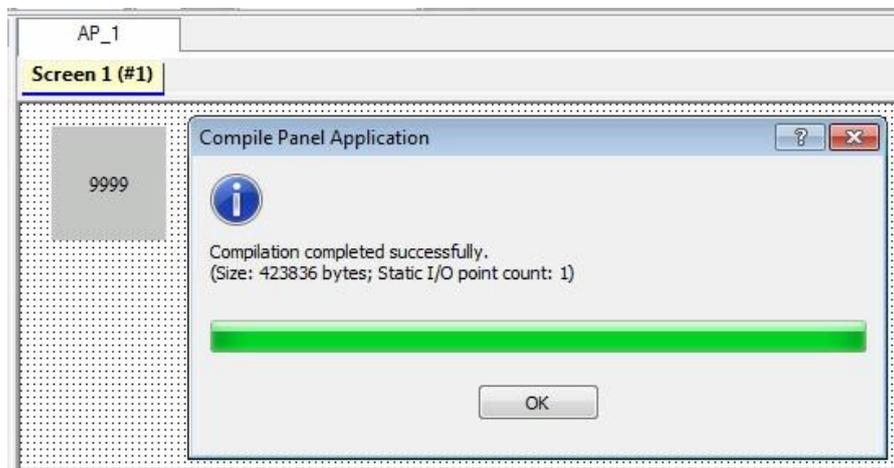
Select Tag1 for Write/Monitor Address.



Because now KepServer and WebOP Designer are under same platform, so we setup Link1 – parameter – IP Address = 127.0.0.1 , for localhost testing.



Save and Compile.



Run online simulation.



Now simulation should be able to READ / WRITE value of tag1 of OPC Server.



■ **Reference:**

N/A