

Advantech AE Technical Share Document

Date	2015 / 12 / 30	SR#	1-2356787815
Category	<input checked="" type="checkbox"/> FAQ <input type="checkbox"/> SOP	Related OS	Microsoft Windows7
Abstract	WebAccess OPC UA Driver Configuration – Security Policies is None		
Keyword	WebAccess, OPC UA		
Related Product	N/A		

■ **Problem Description:**

WebAccess user requires using WebAccess OPC UA client to communicate with KEPWare OPC UA Server. In order to find out tag addresses in KEPWare OPC UA Server, user has to use 3rd party software UaExpert OPC UA Client.

Software Required:

1. KEPWare OPC UA Server (refer to step 1 ~ 16)
2. Unified Automation UaExpert – OPC UA Client (refer to step 17 ~ 32)
3. WebAccess – also acts as OPC UA Client (refer to step 33 ~ 38)

■ **Brief Solution:**

KEPWare OPC UA Server Installation and Configuration: (step 1 ~ 16)

1. KEPWare OPC UA Server Download Link:

<https://my.kepware.com/mykepware/Downloads.aspx>

My Kepware Home

DOWNLOADS

Update Eligibility

To determine which versions of Kepware products are covered by your license, enter your Activation ID:

Product Demo

Kepware Product Downloads are fully functional and are only limited in runtime to 2 hour periods. [**More info](#)

KEPServerEX

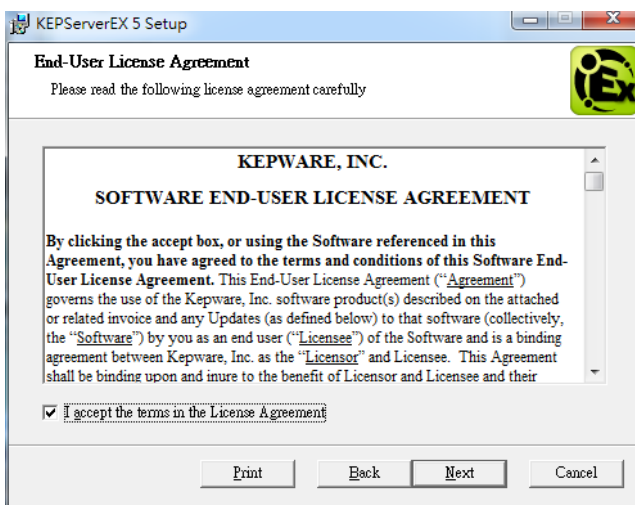
Current version: 5.19.467.0
Previous versions

The **KEPServerEX** download contains all communications drivers, OPC servers, and plug-in options, including DataLogger, Advanced Tags, Oracle Connectivity Suite, Alarms & Events, and SNMP Agent. At installation time, you can select the desired product.

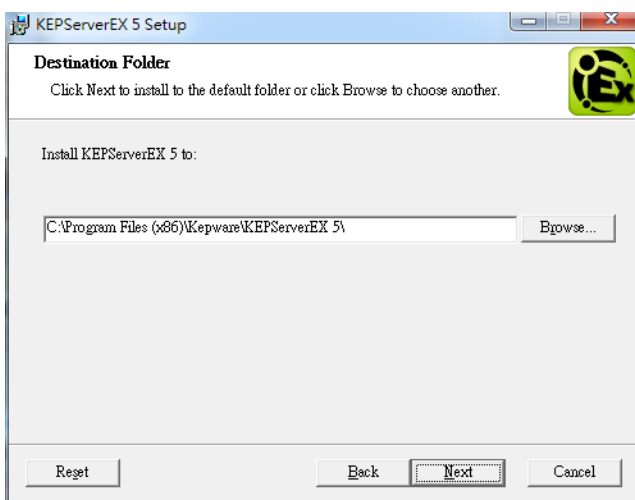
2. Click “Next” to start installation



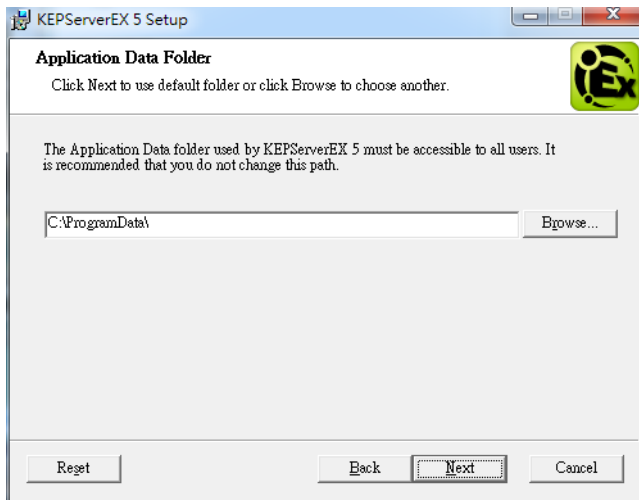
3. Click “I agree...” and then click “Next” to continue



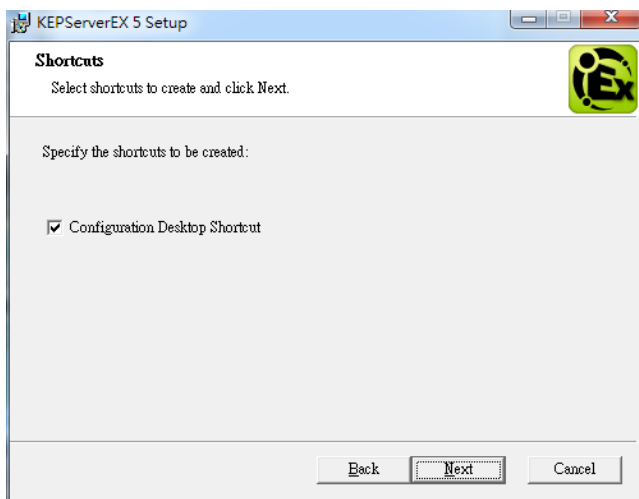
4. About install path, simply click “Next” to continue installation



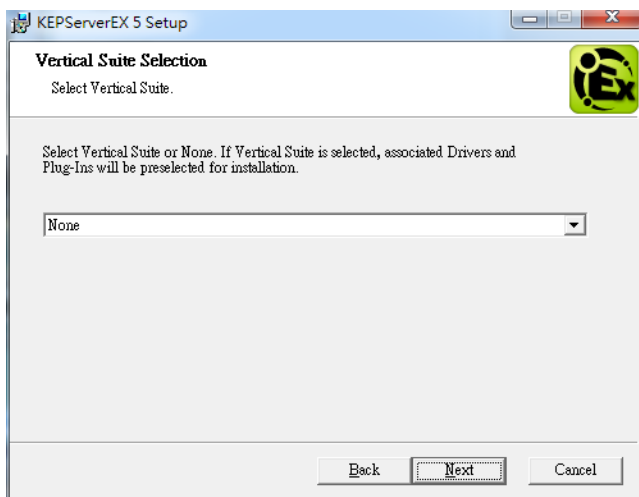
5. Click “Next” to continue installation



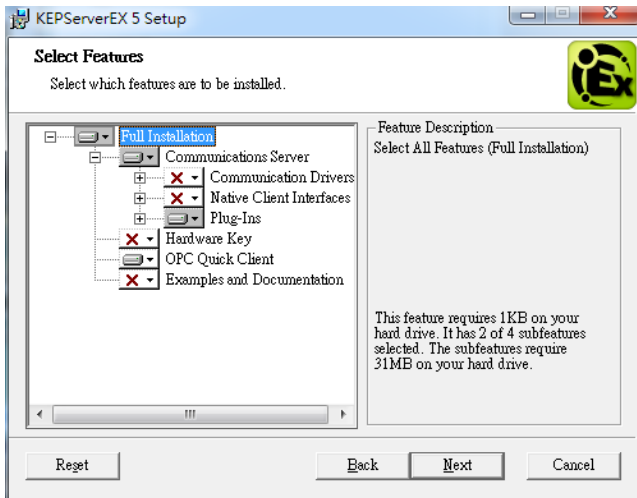
6. Create a shortcut, click “Next” to continue installation



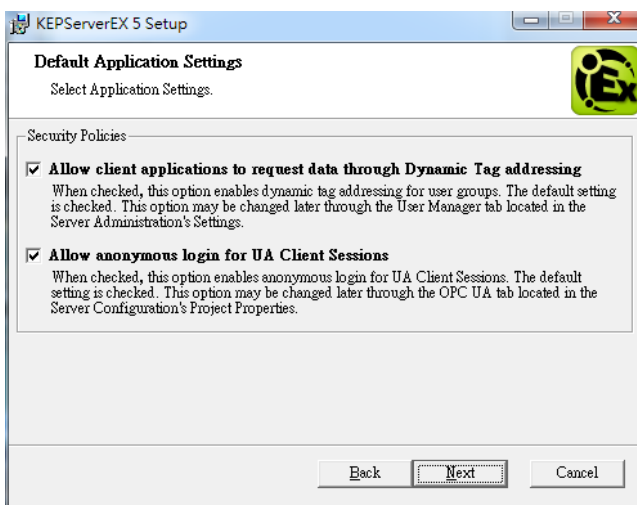
7. Click “Next” to continue installation



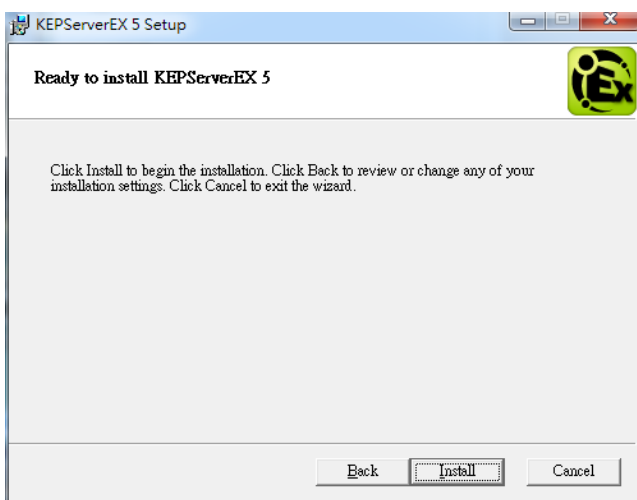
8. Select “Full Installation”



9. Click “Next” to continue installation



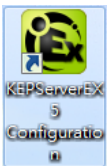
10. Click “Install” to continue



11. Click “Finish” to finish installation.



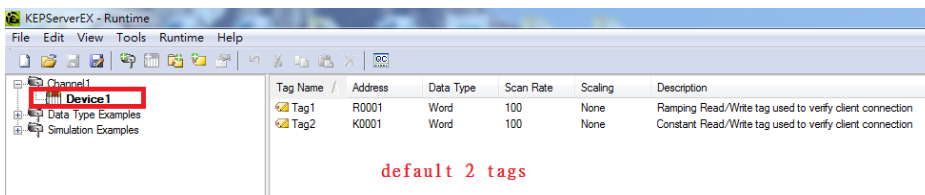
12. KEPServerEX5 Configuration” icon on the desktop, run it



13. Once KEPServerEx starts, OPC UA Server starts automatically.

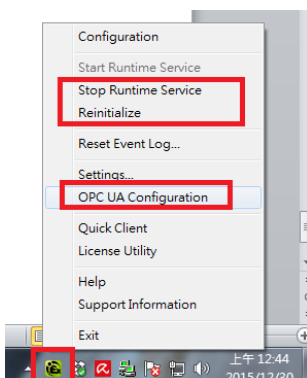
There are two tags by default.

- Tag1: random analog tag value
- Tag2: constant analog tag



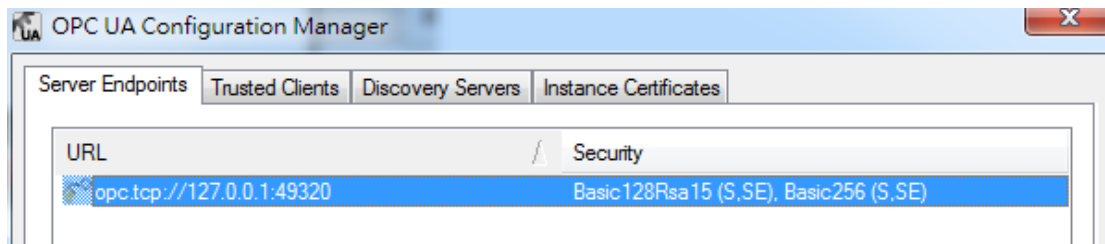
14. KEPWare also located on the Windows task bar.

User allow to start/stop/reinitialize the OPC Server, or click “OPC UA Configuration” to add/delete/modify OPC UA configuration



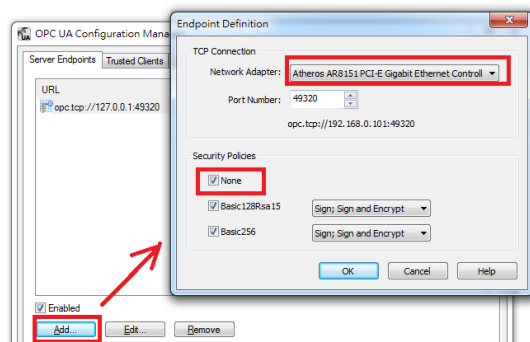
15. Select “OPC UA Configuration”

1. “Server Endpoints” – default only connect to 127.0.0.1 with port 49320

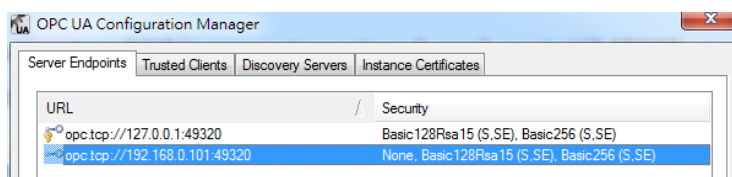


- Click “add” button to add this computer network card, port still 49320
- Also click “None” means no Security required.

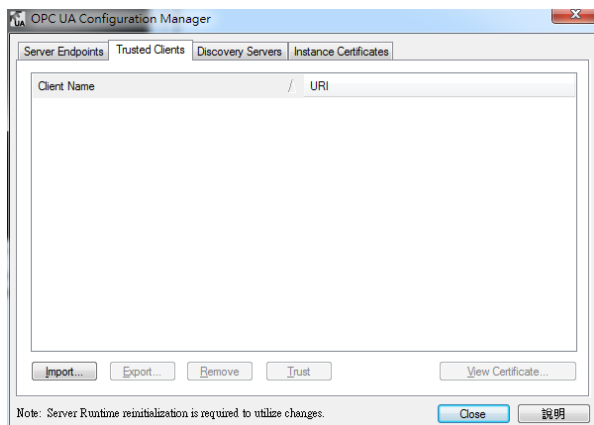
Click “OK” to complete the configuration.



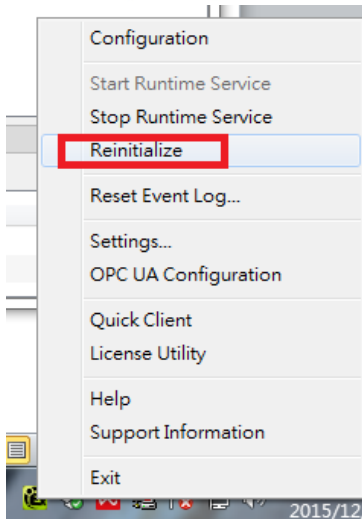
Result



2. Currently, nothing in “Trusted Clients”.




16. Reinitialize the KETWare OPC UA Server



3rd Party OPC UA Client Installation and Configuration: (step 17 ~ 32)

17. Run 3rd party OPC UA Client to check proper tag name
e.g. uaexpert-bin-win32-x86-vs2008sp1-v1.3.1-206.exe

 uaexpert-bin-win32-x86-vs2008sp1-v1.3.1-206.exe

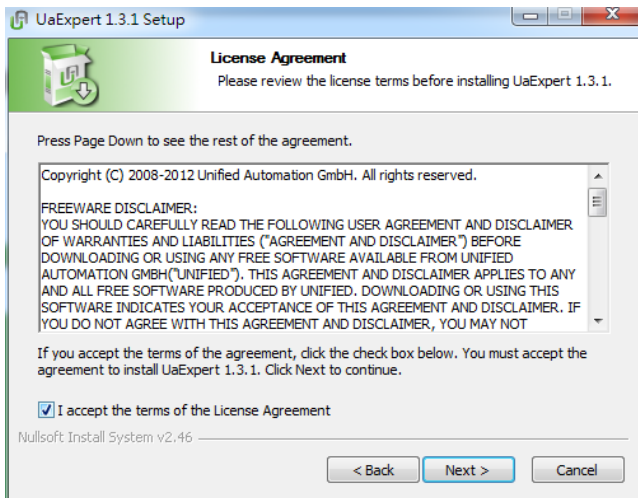
18. Download Link:

<https://www.reasoncoresecurity.com/uaexpert-bin-win32-x86-vs2008sp1-v1.3.1-206.exe-41f1741a2280a189854d1784836b619b49a3c1b7.aspx>

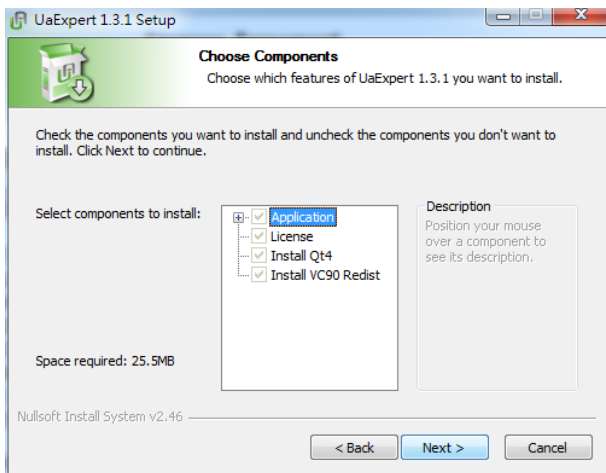
19. Click “Next” to start installation



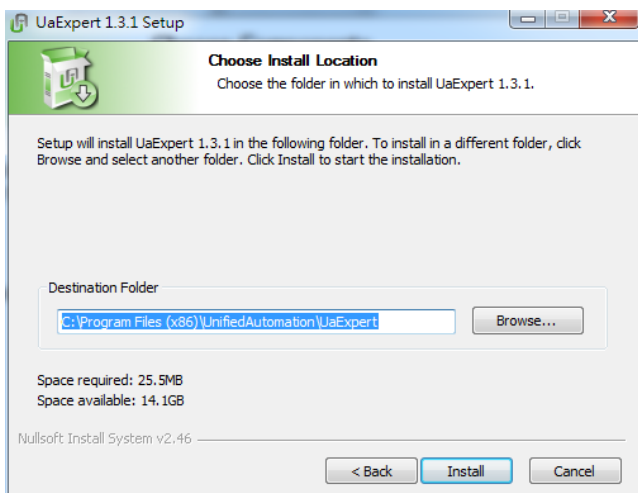
20. Click “Next” to start installation



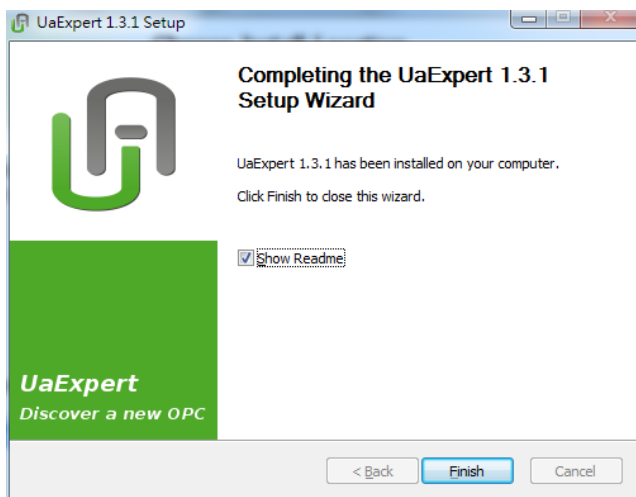
21. Click "Next" to start installation



22. D



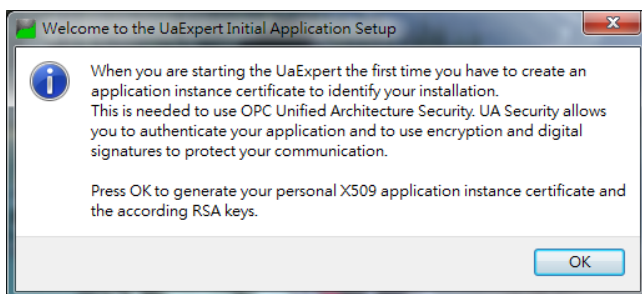
23. Click "Next" to start installation



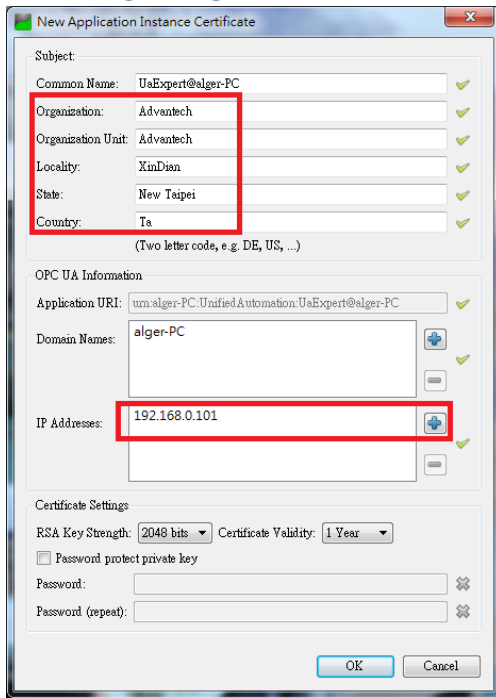
24. Click "UaExpert" icon on desktop to run it



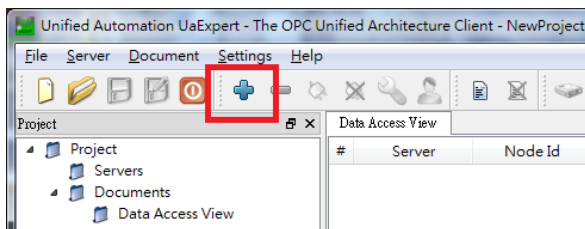
25. UaExpert will generate a certificate



26. Setup Organization info and add this computer IP Address



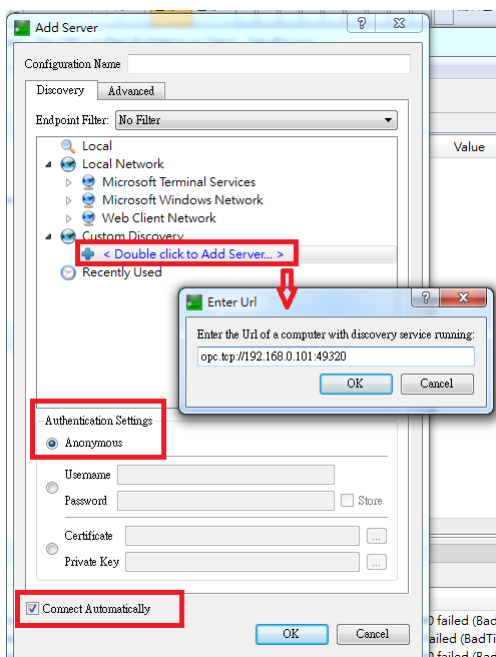
27. Click “+” button to add a server



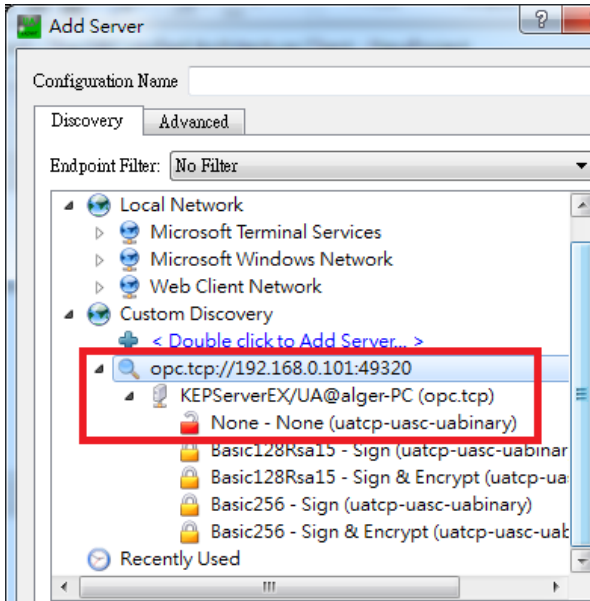
28. Click “+ <Double click to Add Server...> for adding OPC UA Server
e.g. opc.tcp://192.168.0.101:49320

Click “Anonymous” in Authentication Settings

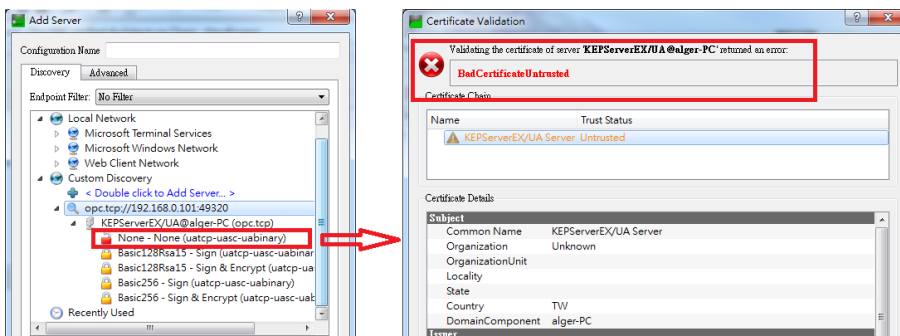
Click “Connect Automatically”



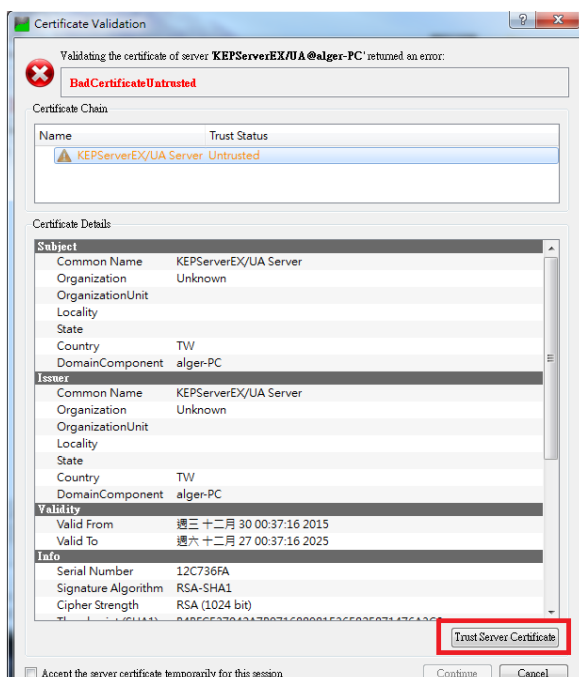
29. Success and user will be able to view all certificates



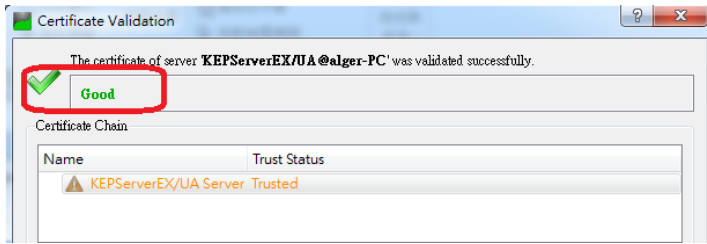
30. This example will focus in None (based on KEPServer OPC UA Configuration) Click "None-None..." and user will find out no certificate of server



31. Click "TrustServer Certificate" button

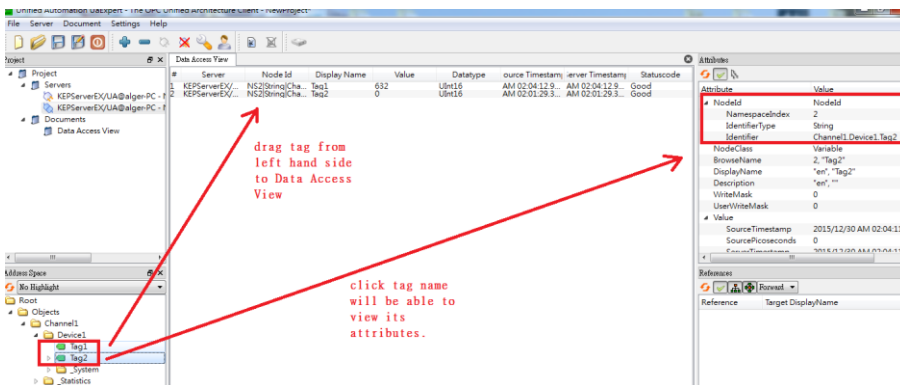


Validated Successfully



32. Drag tag from left to middle (Data Access View) to monitor tag value.

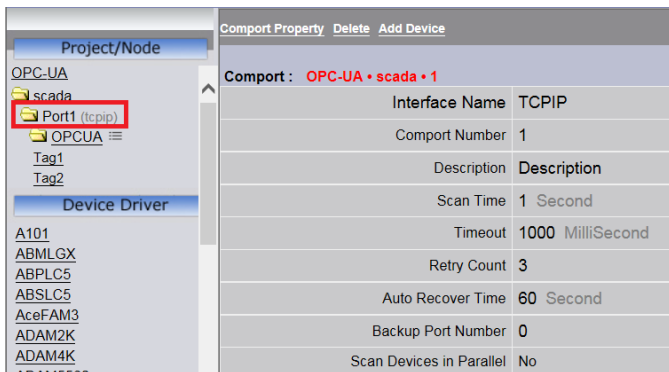
- Click tag name on left hand side (Address Space) in order to monitor its attributes.
- It is important to know tag's "NamespaceIndex", "IdentifierType" and "Identifier" because this will apply to WebAccess Tag Property.



WebAccess Configuration: (step 33 ~ 38)

33. No need to turn off 3rd party UaExpert OPC UA client

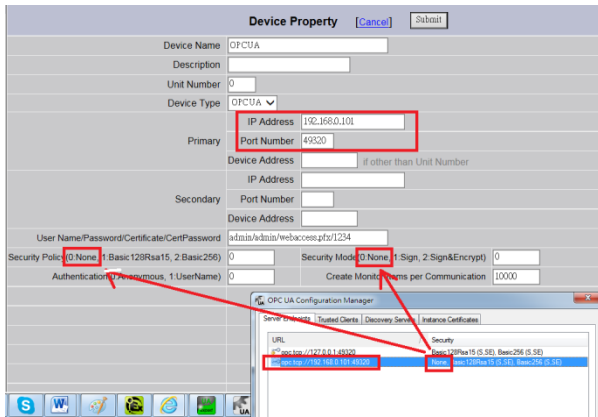
34. ComPort Configuration



35. Device configuration: based on KEPWare OPC UA Configuration

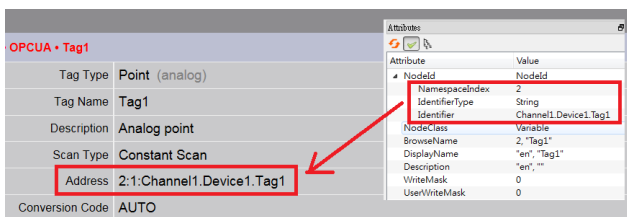
Note:

WebAccess "Security Policy" and "Security Mode" must be matched
e.g. if "Security Policy" is 0, then "Security Mode" must also be 0.



36. Tag1 property: (based on UaExpert tag attribute)

- Address: must match OPC UA NodeId
 - ◆ Address format: [NameSpace Index]:[Identifier Type]:[Identifier]
 - ◆ Identifier Type: 0 for numerical; 1 for string
- note: must use " : " to separate these three settings

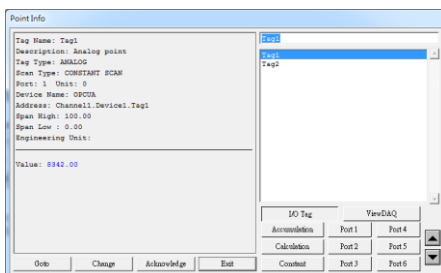


37. Tag2 property



38. ViewDAQ Point Info

Tag 1 Value:



Tag 2 Value: Display both UaExpert and WebAccess Point Info

