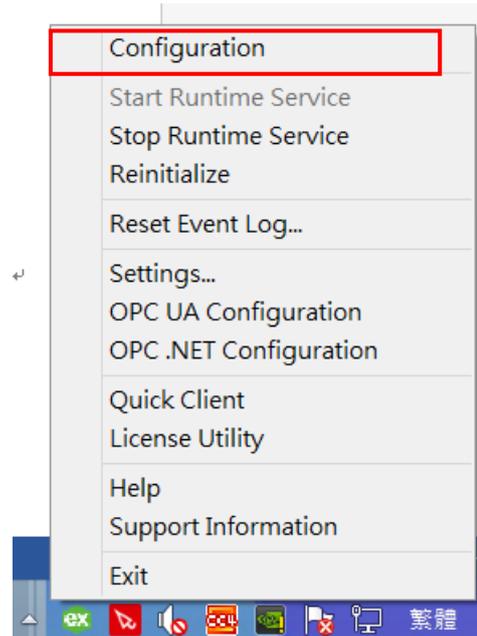
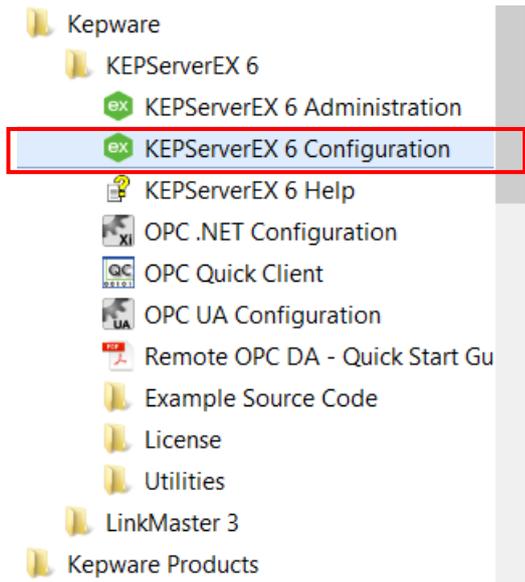


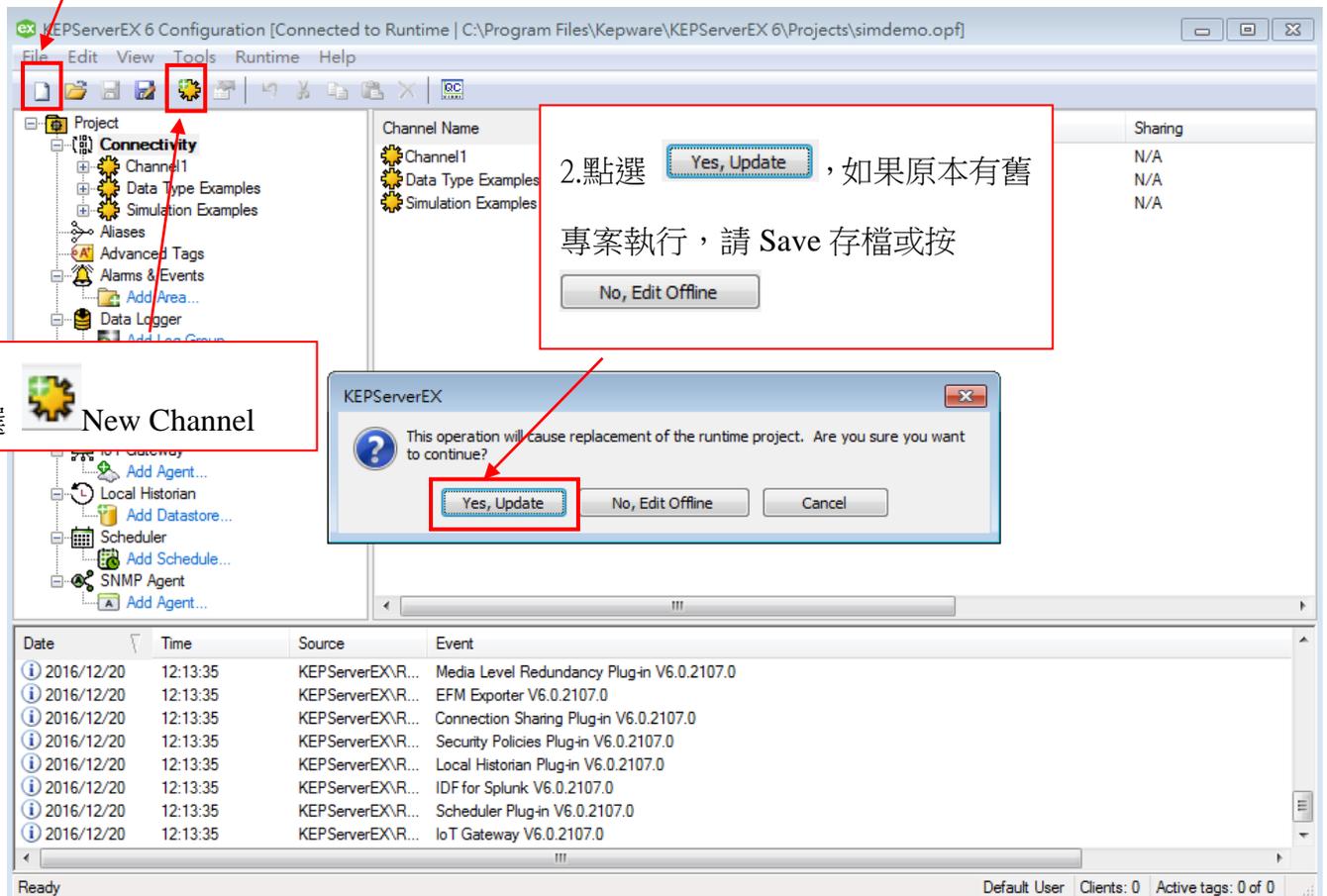
KEPServerEX v6 - Siemens TCPIP Ethernet 操作說明

1. 安裝 Kepware(最新版本 KEPServerEX V6，可從 Youngtec 研杰科技網站下載試用版)，然後在開始→程式集→開啟 KEPServerEX 6 Configuration 或是從桌面右下方的 System Tray 圖示中 KEPServerEX 6 小圖示按滑鼠右鍵，點選 Configuration。



2. 先新增「New Project」，本範例使用預設的設定，保留原本 Kepware Demo Project 設定檔，

點選  New Channel 後，會開啟 New Channel 設定。

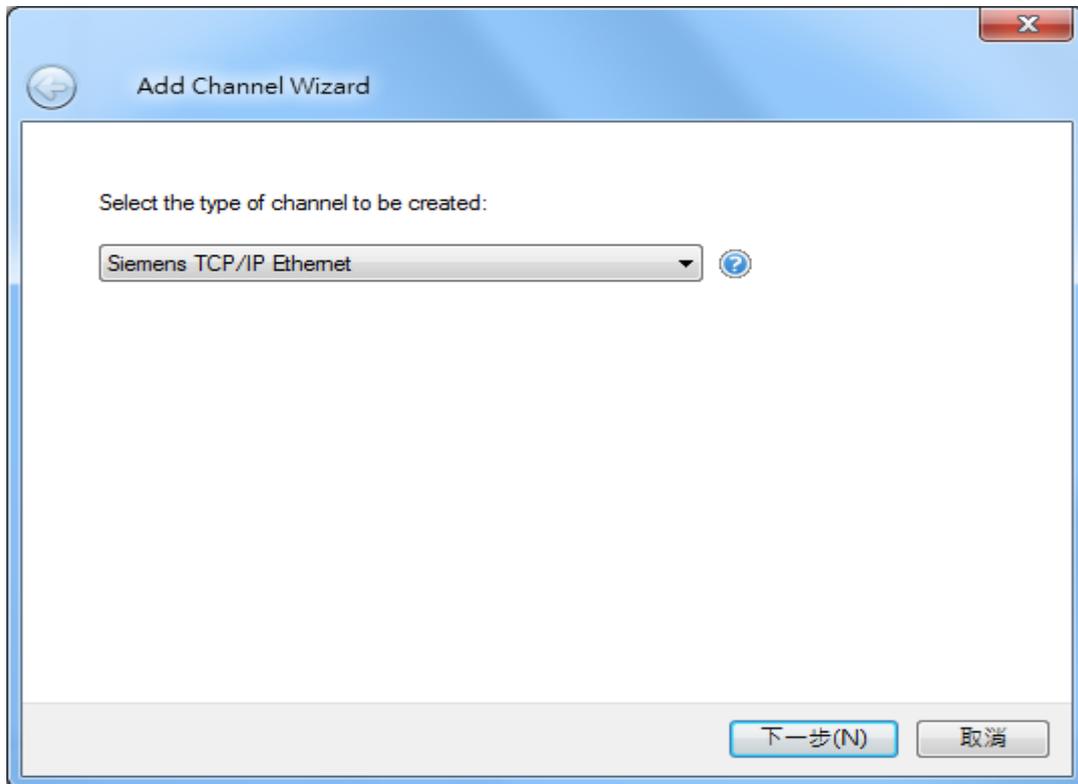


3. 點選  New Channel

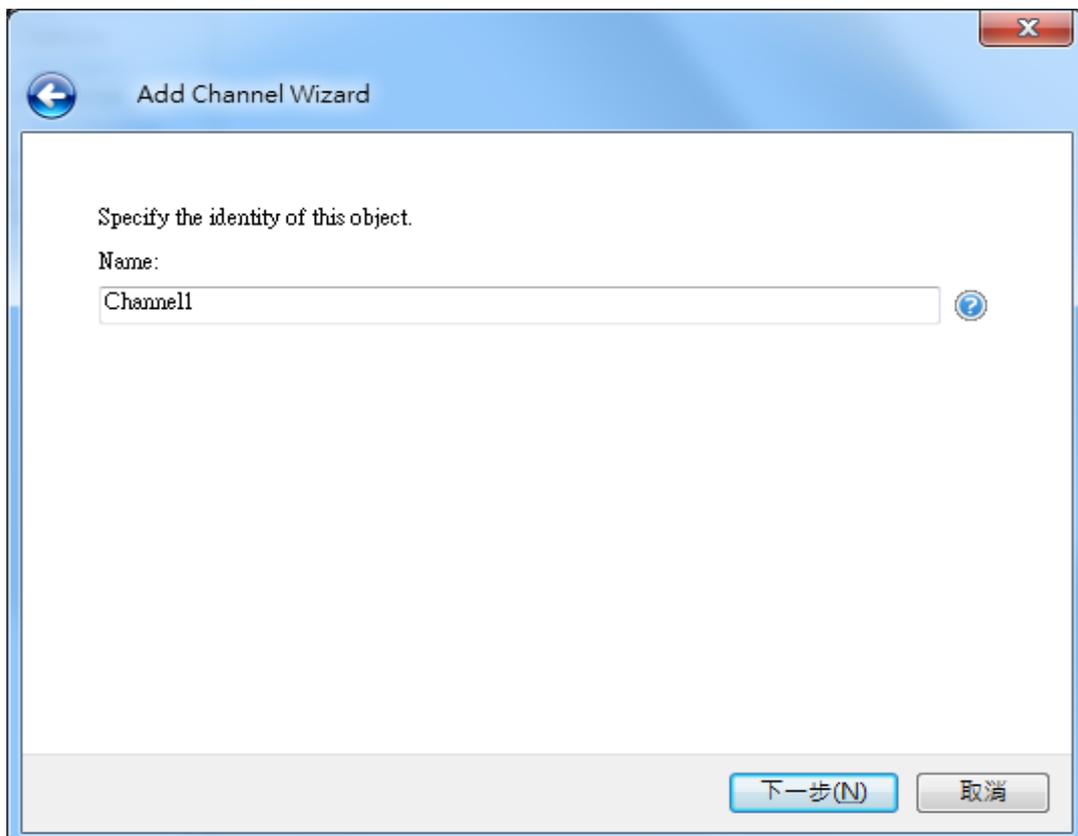
2. 點選 ，如果原本有舊專案執行，請 Save 存檔或按

Date	Time	Source	Event
2016/12/20	12:13:35	KEPServerEX\R...	Media Level Redundancy Plug-in V6.0.2107.0
2016/12/20	12:13:35	KEPServerEX\R...	EFM Exporter V6.0.2107.0
2016/12/20	12:13:35	KEPServerEX\R...	Connection Sharing Plug-in V6.0.2107.0
2016/12/20	12:13:35	KEPServerEX\R...	Security Policies Plug-in V6.0.2107.0
2016/12/20	12:13:35	KEPServerEX\R...	Local Historian Plug-in V6.0.2107.0
2016/12/20	12:13:35	KEPServerEX\R...	IDF for Splunk V6.0.2107.0
2016/12/20	12:13:35	KEPServerEX\R...	Scheduler Plug-in V6.0.2107.0
2016/12/20	12:13:35	KEPServerEX\R...	IoT Gateway V6.0.2107.0

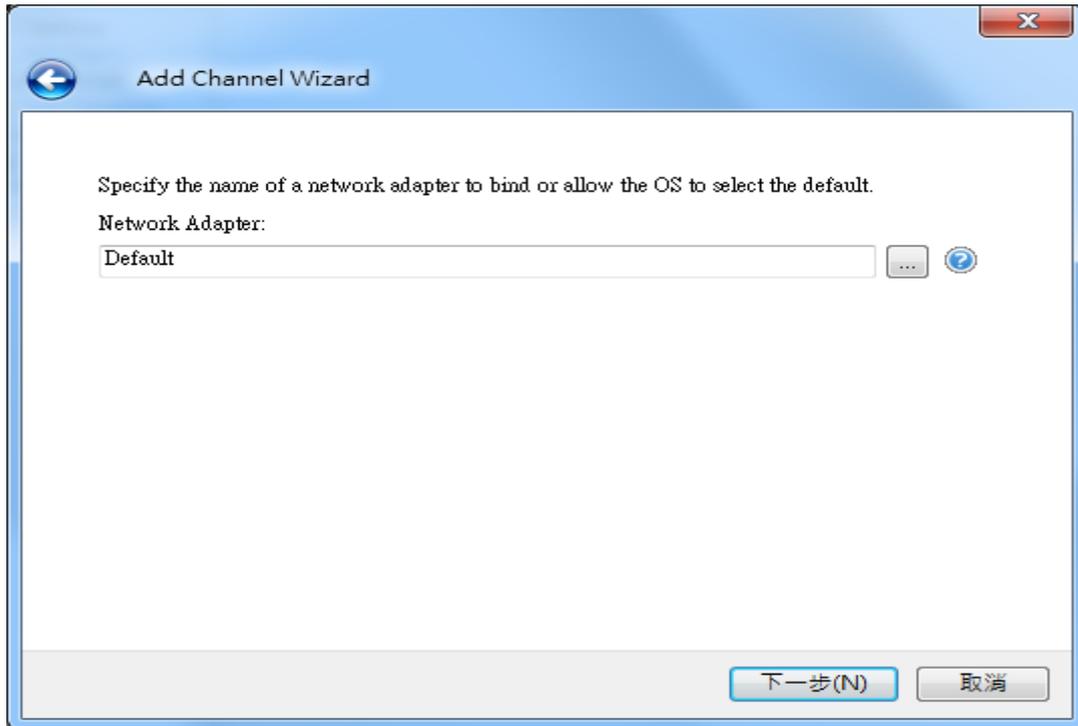
3. 點選  New Channel 後，開起 Device driver 設定，選擇 Siemens TCP/IP Ethernet，再按「下一步」。



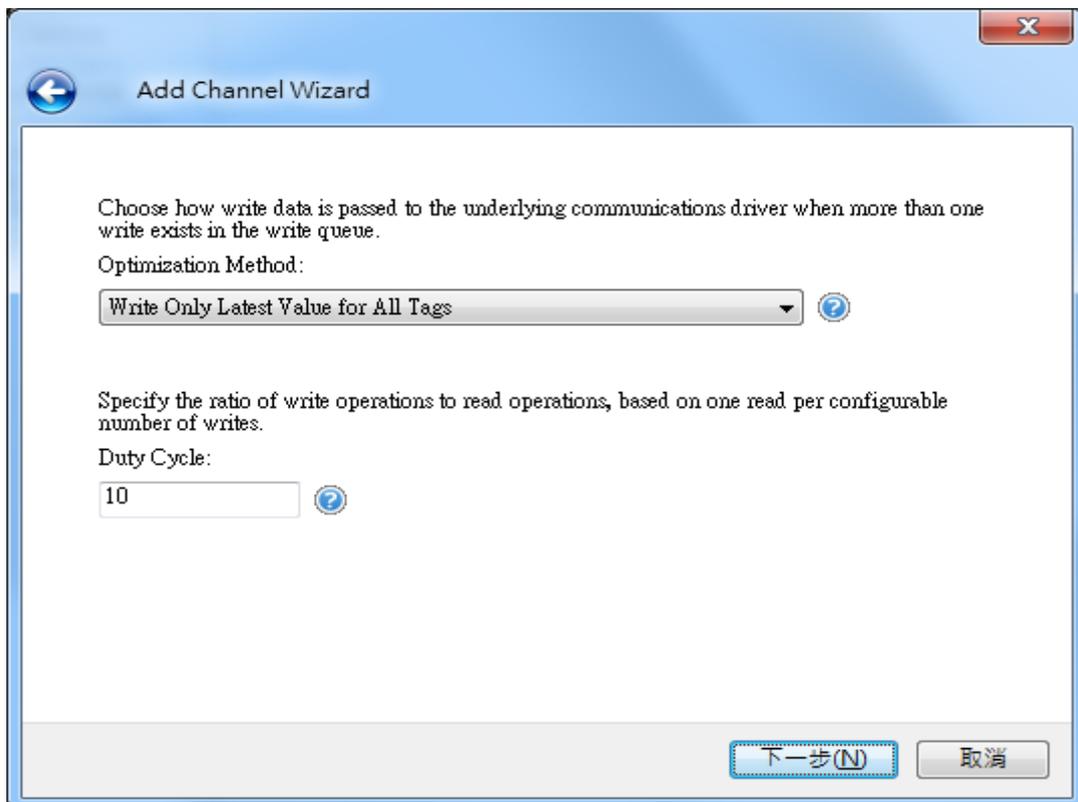
4. 輸入 Channel Name，「Channell」可自行定義名稱，然後按「下一步」。



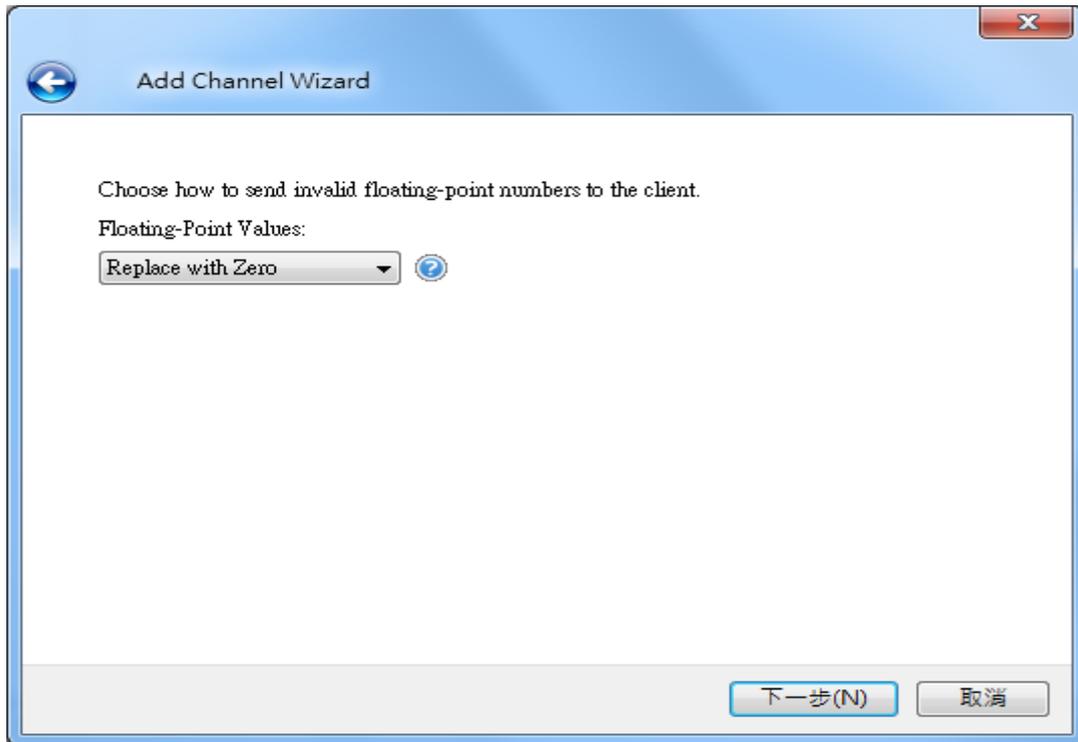
5. 設定網路介面(Network Interface)，使用預設的設定即可。



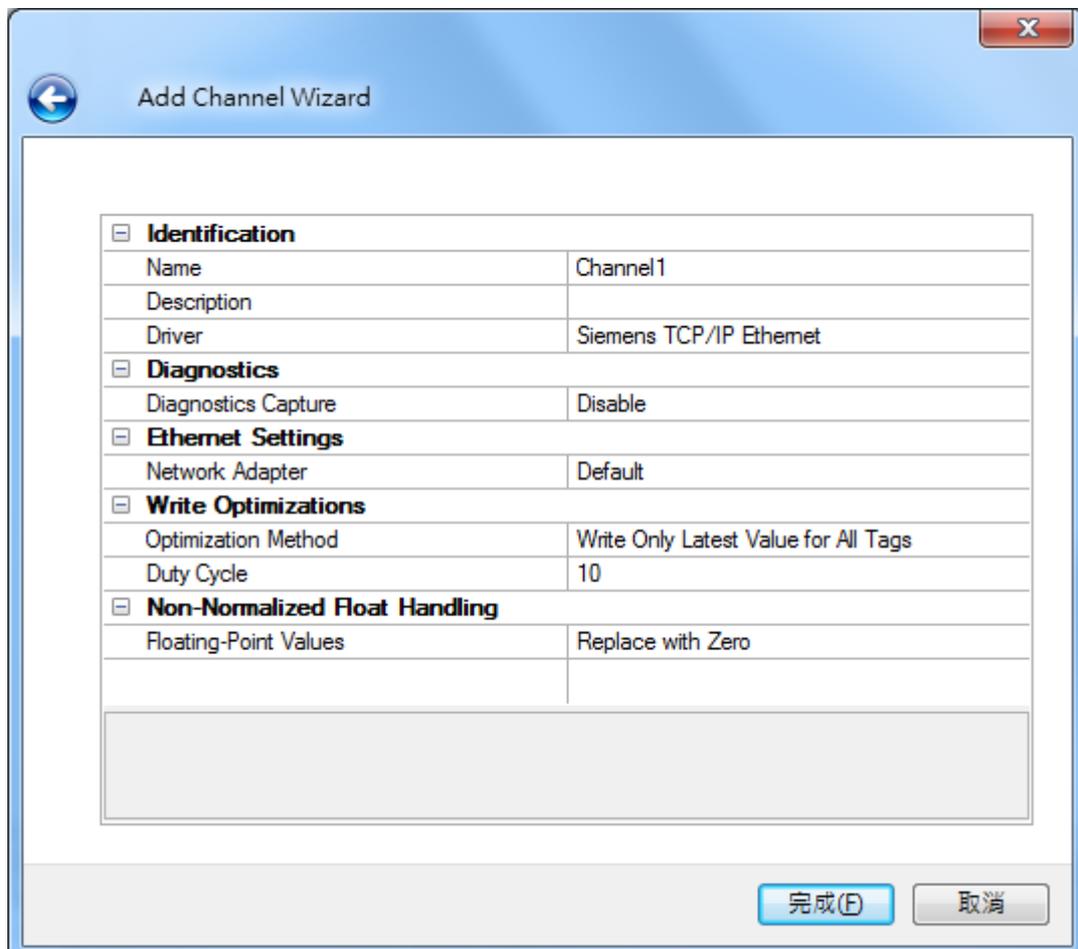
6. 設定寫入最佳化(Write Optimizations)，使用預設的設定即可。



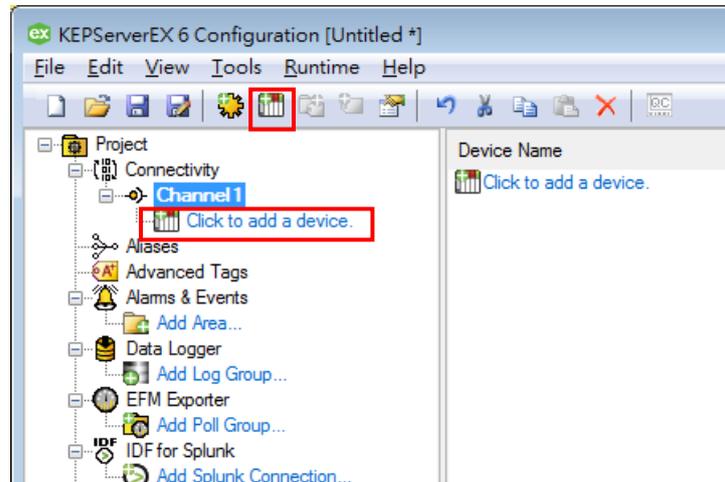
7. 設定 Non normalized Float Handling，若選 Replace with zero，當有非正規化浮點數時”更換為 0”，若選 Unmodified，當有非正規化浮點數時”不做更變”，可使用預設 Replace with zero。



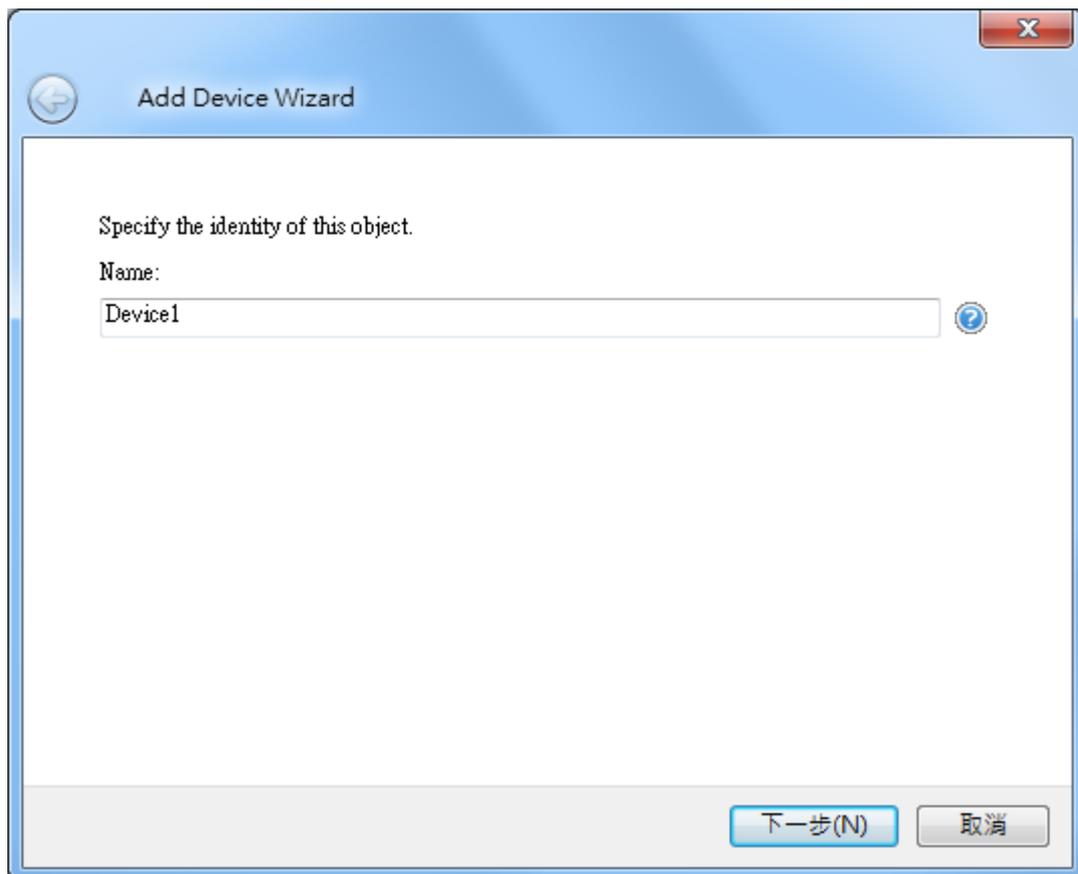
8. New Channel 設定完成，若有設定錯誤可在此介面進行更改。



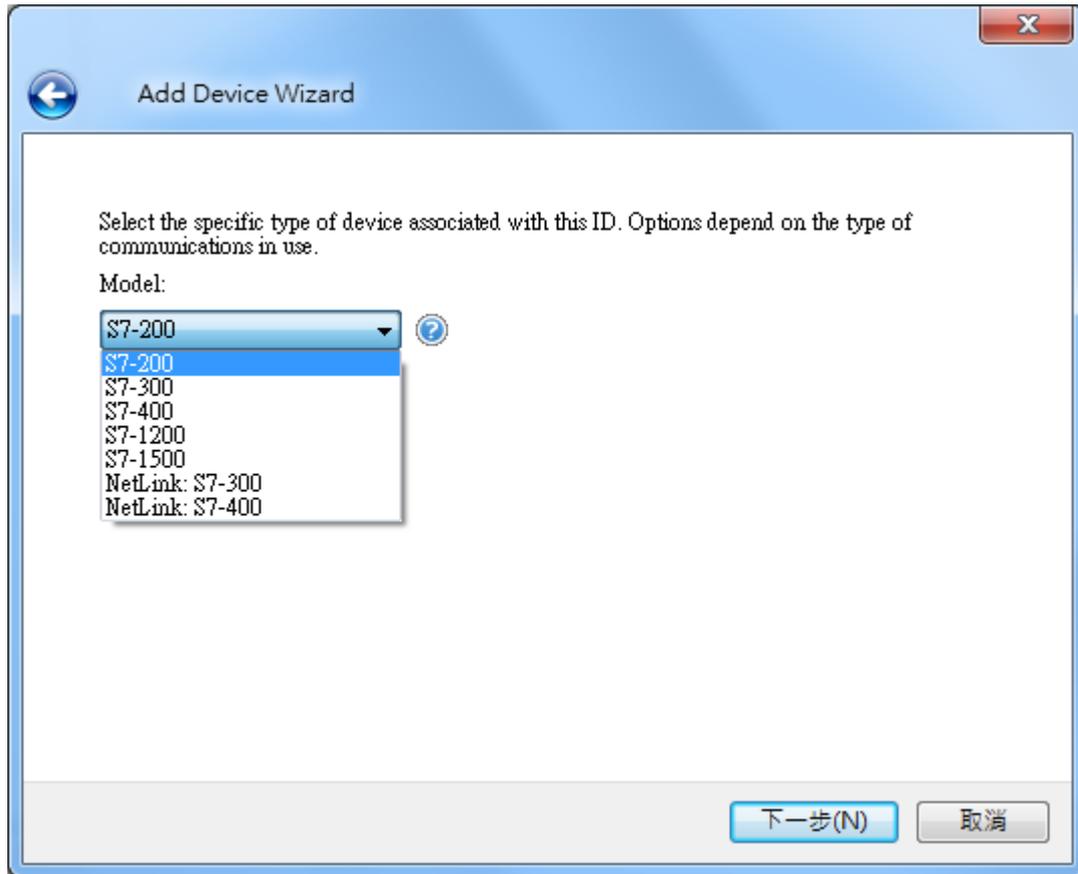
9. 新增 Device 以及設定 Device，點擊 Click to add a device 或是點擊上方的  按鈕來新增 Device。



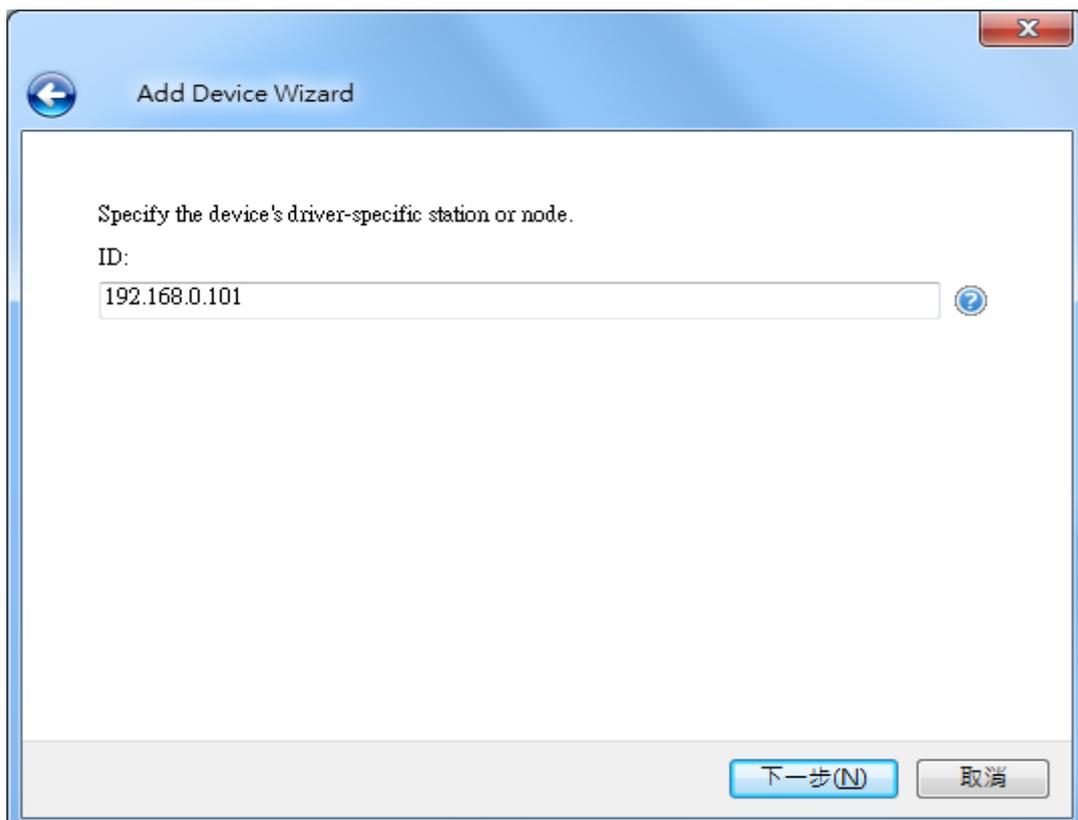
10. 在 New Device，新增一個「Device name」，可自行定義。



11. Model 選擇裝置的種類，在此範例選擇 S7-200，實際 Model 要依現場連接 PLC 裝置為主。



12. 設定 ID，設定 ID，ID 所使用的格式為：255.255.255.255，請輸入 IP 位址，在這裡示範完整的 ID 位址：192.168.0.101。



13. 設定掃描模式(Scan Mode)，底下為選項說明：

Respect Client-Specified Scan Rate：遵守客戶端指定的掃描速度。

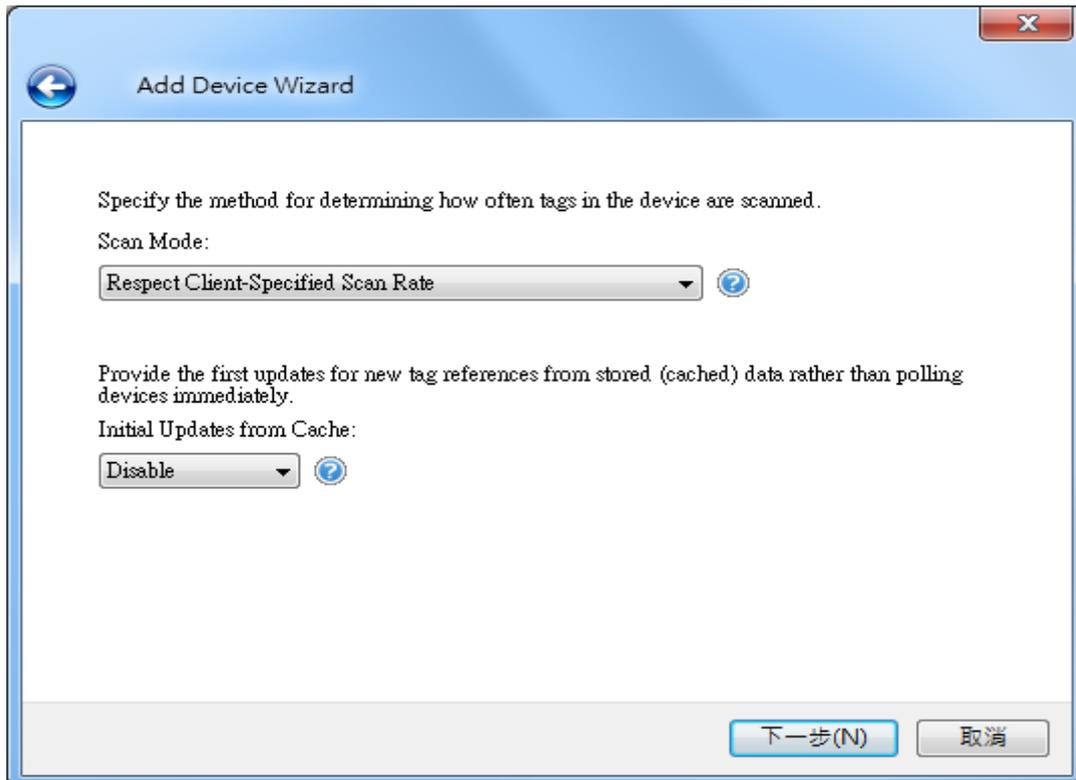
Request Data No Faster than Scan Rate：取得資料的速度不得超過您所設定的掃描頻率(Scan Rate)。

Request All Data at Scan Rate：依照您所設定的掃描頻率(Scan Rate)來取得所有資料。

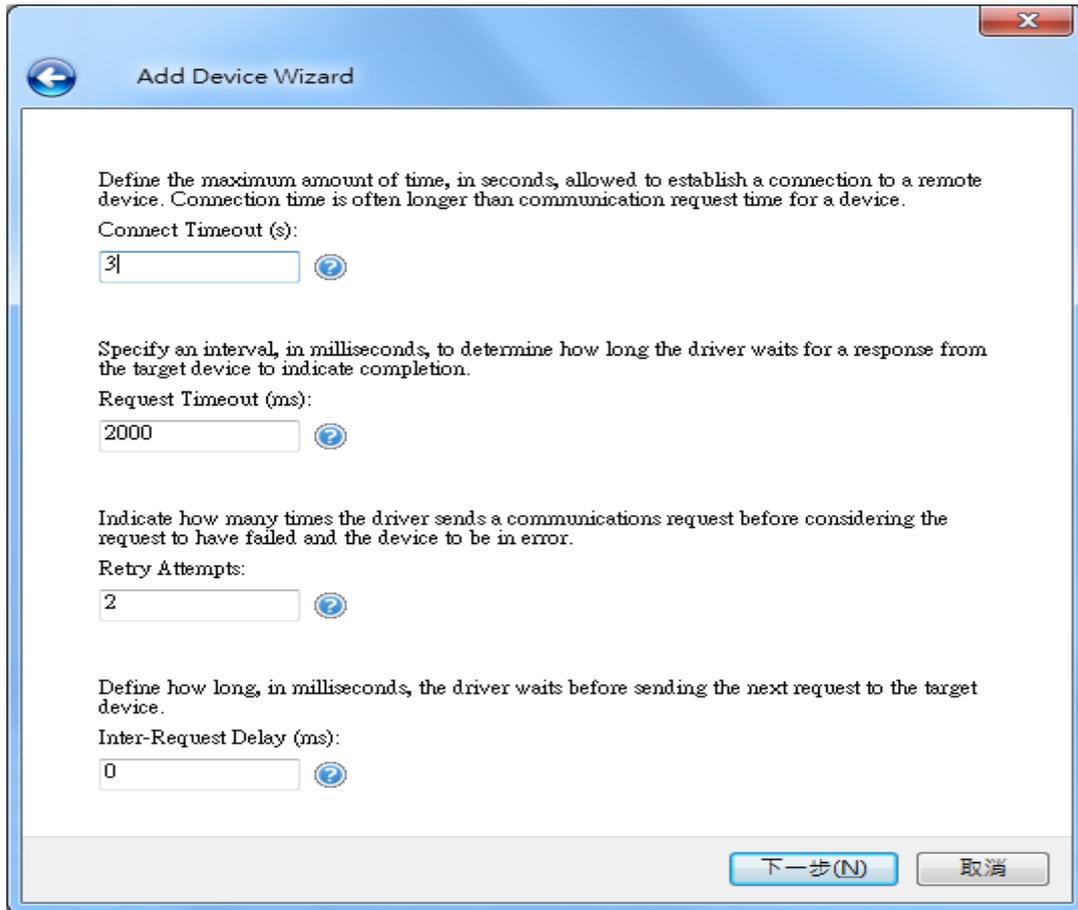
Respect Tag-Specified Scan Rate：指定各別的 Tag 掃描頻率(Scan Rate)來取得資料。

若無特殊考量，在此建議選擇 **Respect Client-Specified Scan Rate**。

Initial Updates from Cache：預設為 Disable。



14. 設定通訊時機(Timing)，使用預設的設定即可。



Define the maximum amount of time, in seconds, allowed to establish a connection to a remote device. Connection time is often longer than communication request time for a device.

Connect Timeout (s):

Specify an interval, in milliseconds, to determine how long the driver waits for a response from the target device to indicate completion.

Request Timeout (ms):

Indicate how many times the driver sends a communications request before considering the request to have failed and the device to be in error.

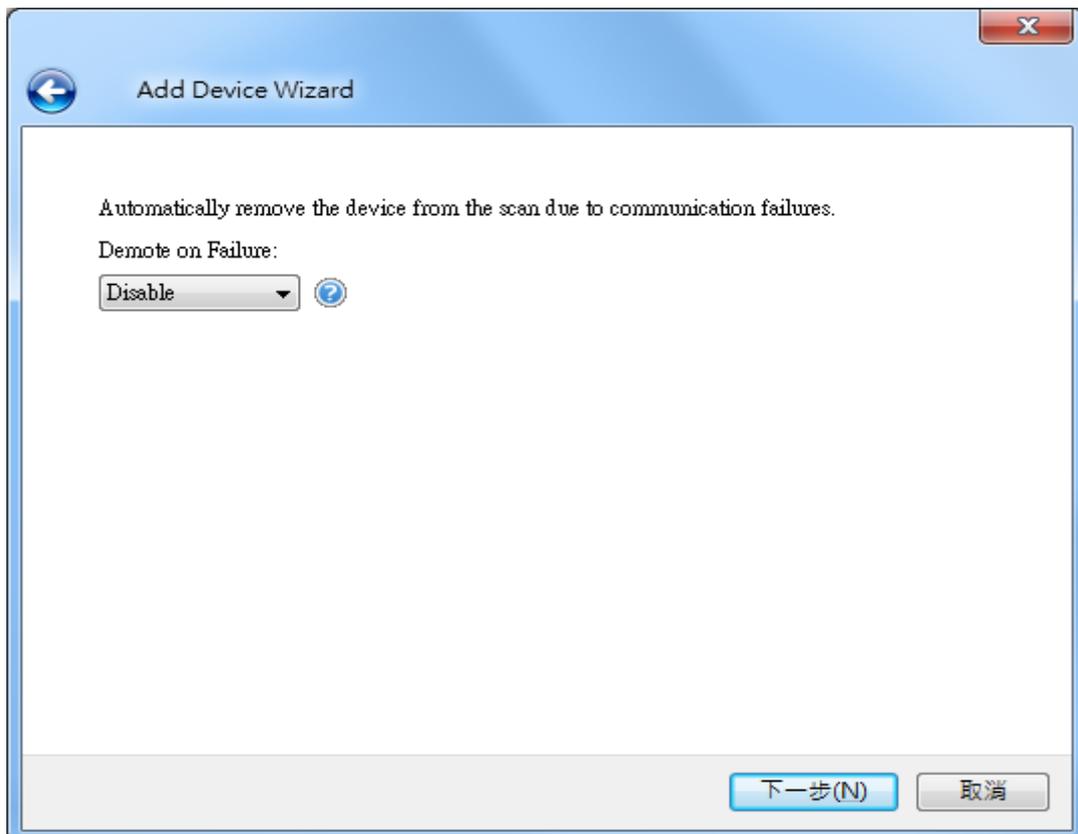
Retry Attempts:

Define how long, in milliseconds, the driver waits before sending the next request to the target device.

Inter-Request Delay (ms):

下一步(N) 取消

15. 設定自動降級(Auto Demotion)，使用預設的設定即可。

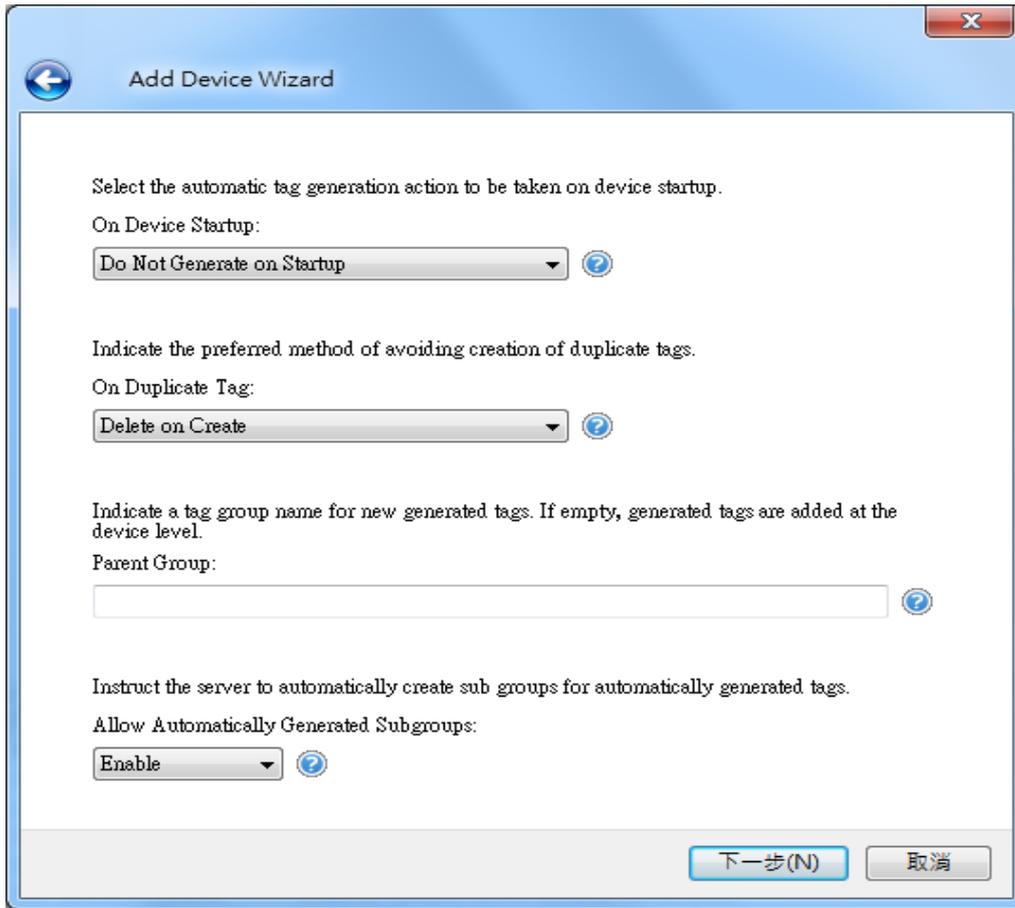


Automatically remove the device from the scan due to communication failures.

Demote on Failure:

下一步(N) 取消

16. 設定 Tag 的產生方式(Tag Generation)，使用預設的設定即可。

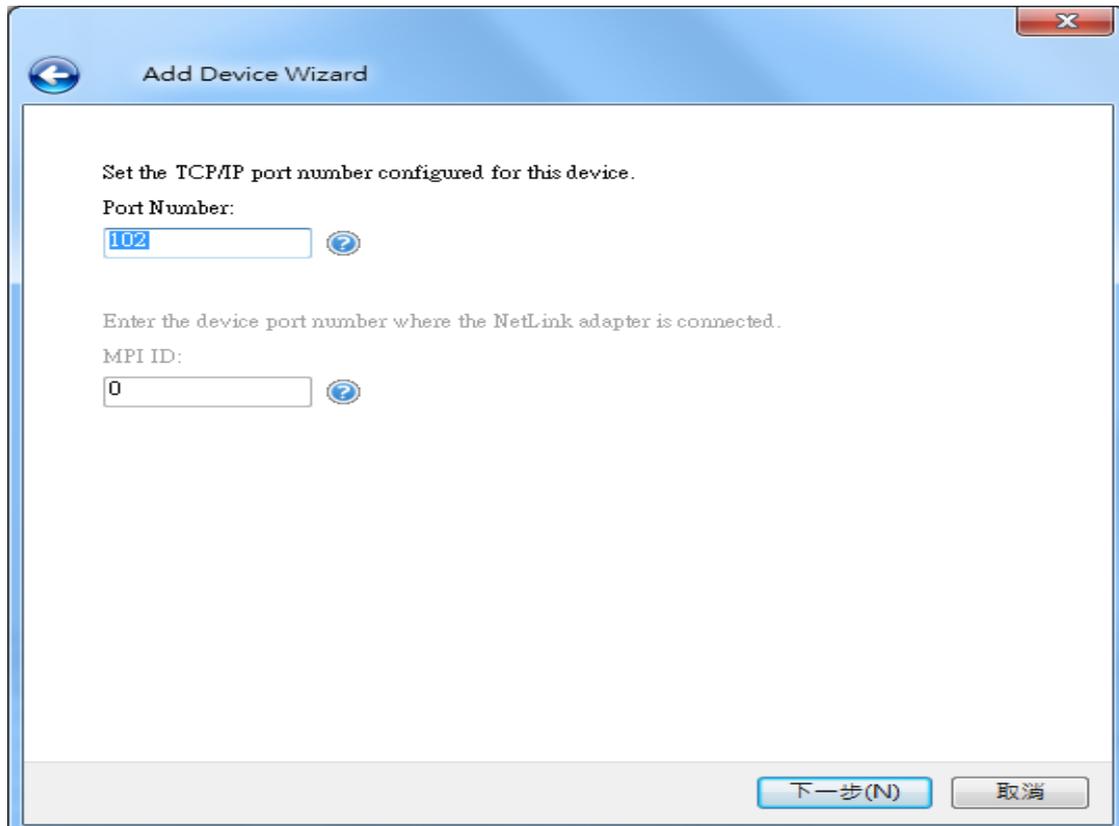


The screenshot shows the 'Add Device Wizard' dialog box with the following settings:

- Select the automatic tag generation action to be taken on device startup.**
On Device Startup: ?
- Indicate the preferred method of avoiding creation of duplicate tags.**
On Duplicate Tag: ?
- Indicate a tag group name for new generated tags. If empty, generated tags are added at the device level.**
Parent Group: ?
- Instruct the server to automatically create sub groups for automatically generated tags.**
Allow Automatically Generated Subgroups: ?

Buttons at the bottom:

17. 設定 Communicatipns Parameters，請輸入 TCP/IP 的 Port Number。

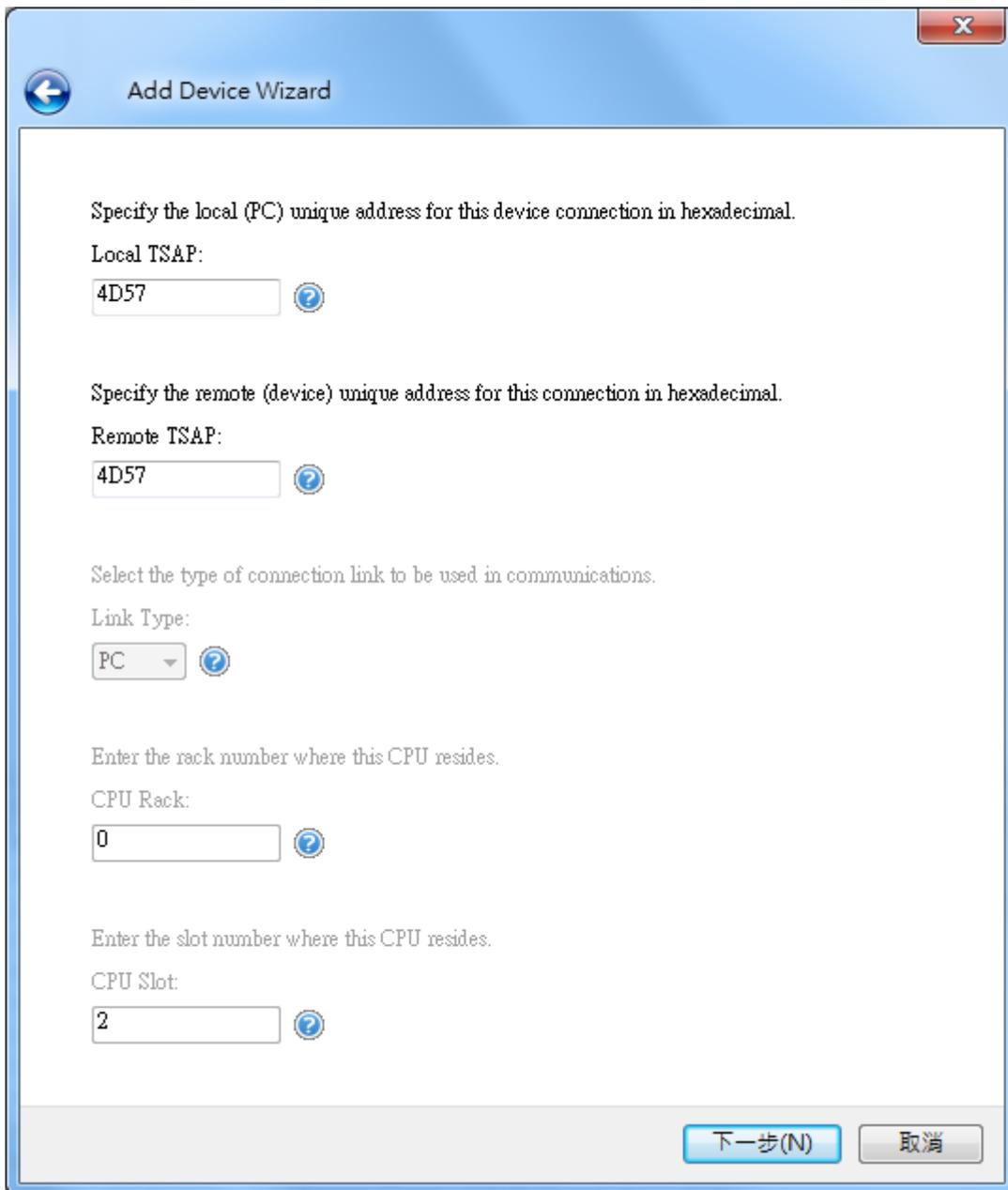


The screenshot shows the 'Add Device Wizard' dialog box with the following settings:

- Set the TCP/IP port number configured for this device.**
Port Number: ?
- Enter the device port number where the NetLink adapter is connected.**
MPI ID: ?

Buttons at the bottom:

18. 設定 S7 的 Comm. Parameters，使用預設的設定即可，更詳細請參考 Help 文件的說明來設定。



The image shows a software dialog box titled "Add Device Wizard". It contains several input fields and a dropdown menu for configuring device connection parameters. The fields are: "Local TSAP" (4D57), "Remote TSAP" (4D57), "Link Type" (PC), "CPU Rack" (0), and "CPU Slot" (2). Each field has a help icon (question mark in a circle). At the bottom right, there are two buttons: "下一步(N)" (Next) and "取消" (Cancel).

Specify the local (PC) unique address for this device connection in hexadecimal.
Local TSAP:
4D57

Specify the remote (device) unique address for this connection in hexadecimal.
Remote TSAP:
4D57

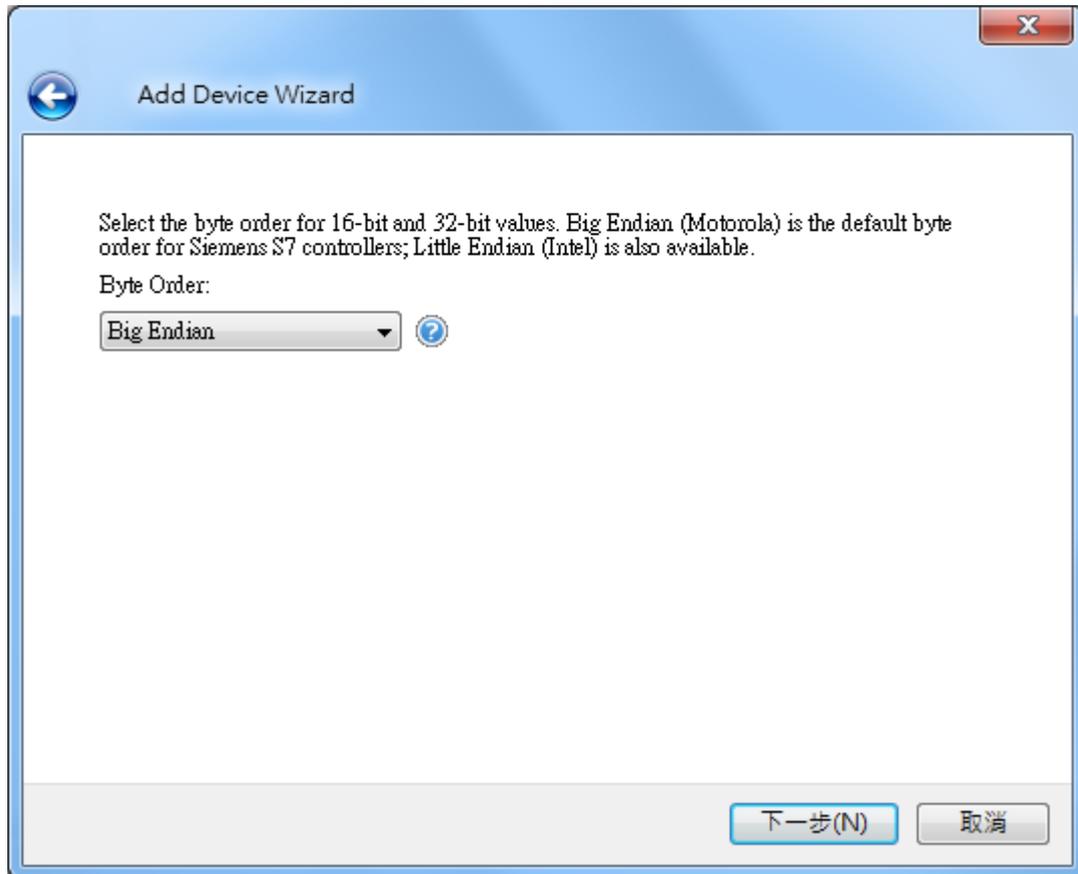
Select the type of connection link to be used in communications.
Link Type:
PC

Enter the rack number where this CPU resides.
CPU Rack:
0

Enter the slot number where this CPU resides.
CPU Slot:
2

下一步(N) 取消

19. 設定 Addressing Options，請依照現場環境設定，如果是 Siemens S7，請使用預設的 Big Endian(32 bit)，或是視環境需求選擇 Little Endian(16 bit)。



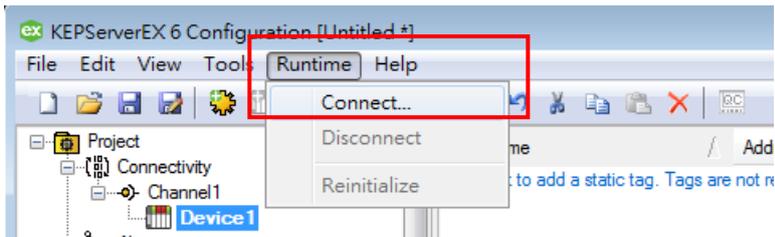
20. 這樣就完成 Device 設定，若有設定錯誤可在此介面進行更改。

←
✕
Add Device Wizard

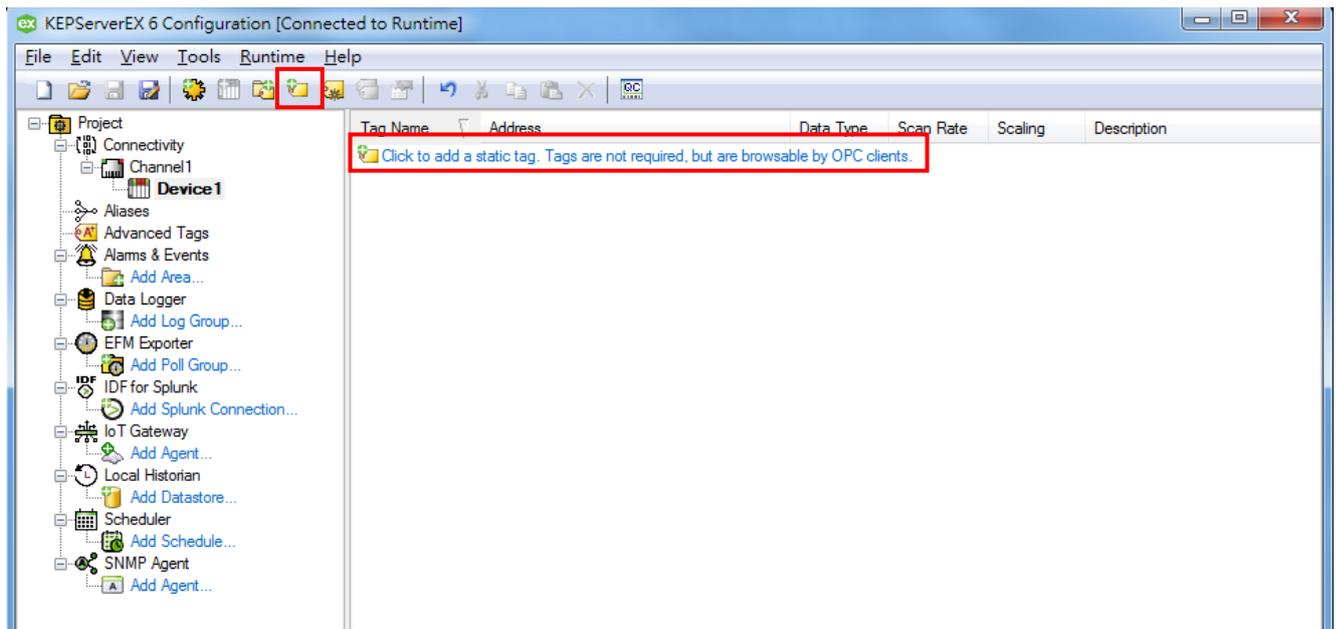
Identification	
Name	Device1
Description	
Channel Assignment	Channel1
Driver	Siemens TCP/IP Ethernet
Model	S7-200
ID	192.168.0.101
Operating Mode	
Data Collection	Enable
Simulated	No
Scan Mode	
Scan Mode	Respect Client-Specified Scan Rate
Initial Updates from Cache	Disable
Communication Timeouts	
Connect Timeout (s)	3
Request Timeout (ms)	2000
Retry Attempts	2
Timing	
Inter-Request Delay (ms)	0
Auto-Demotion	
Demote on Failure	Disable
Tag Generation	
On Device Startup	Do Not Generate on Startup
On Duplicate Tag	Delete on Create
Parent Group	
Allow Automatically Generated Subgroups	Enable
Communication Parameters	
Port Number	102
MPI ID	0
S7-200	
Local TSAP	4D57
Remote TSAP	4D57
S7-300/400/1200/1500	
Link Type	PC
CPU Rack	0
CPU Slot	2
Addressing Options	
Byte Order	Big Endian

完成(F)
取消

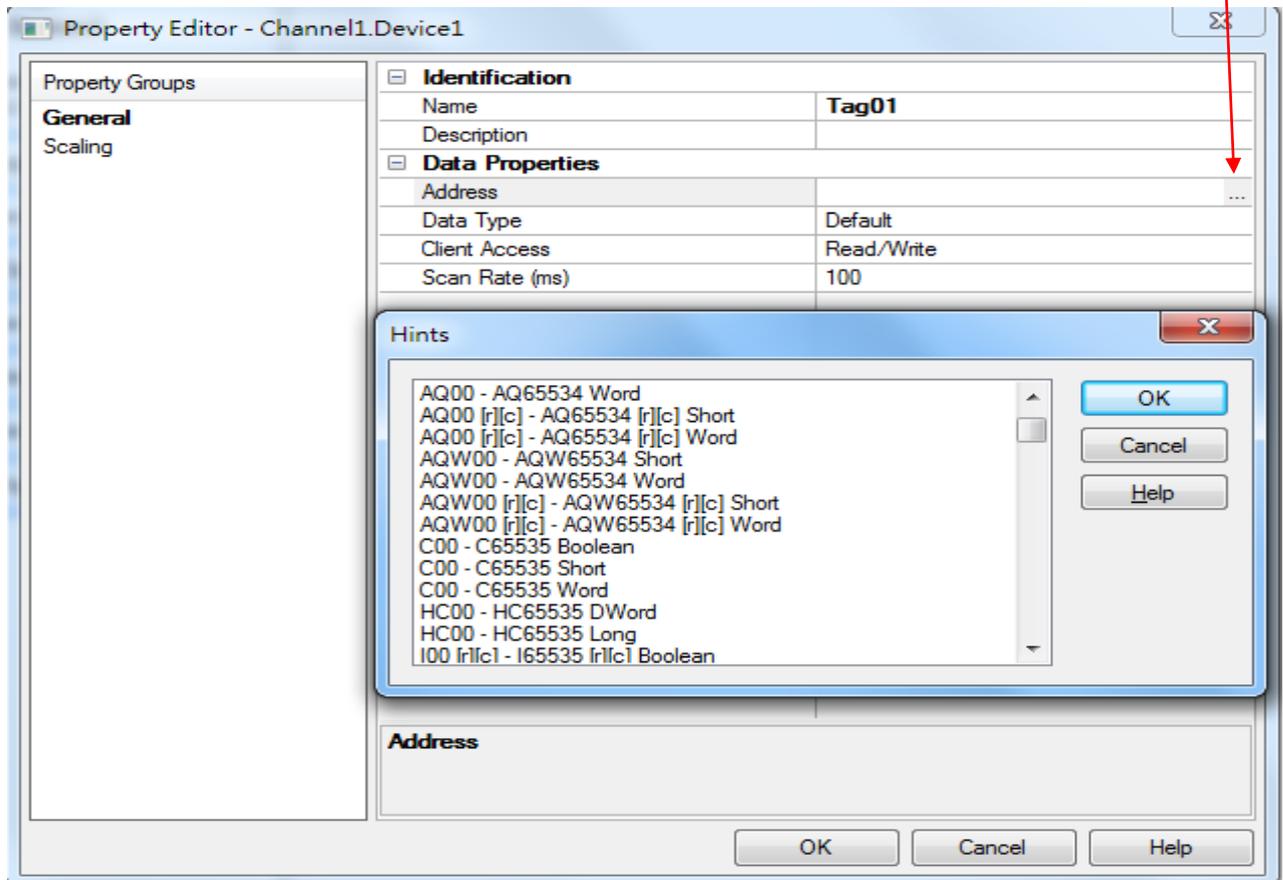
21. 若專案未 Connect，請點選 KEPServerEX Runtime 的 Connect...。



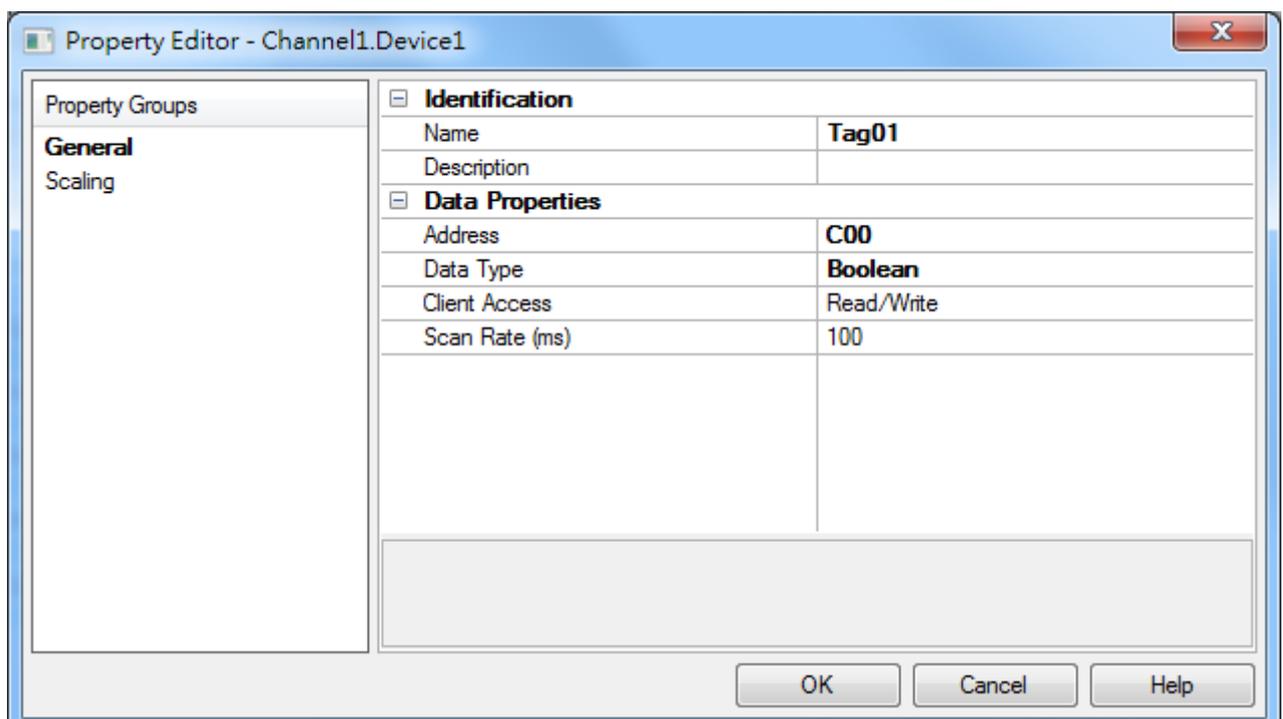
22. 新增 Tag 及設定 Tag，點擊 ” Click to add...” 或是上方工具列的  圖示來新增 Tag。



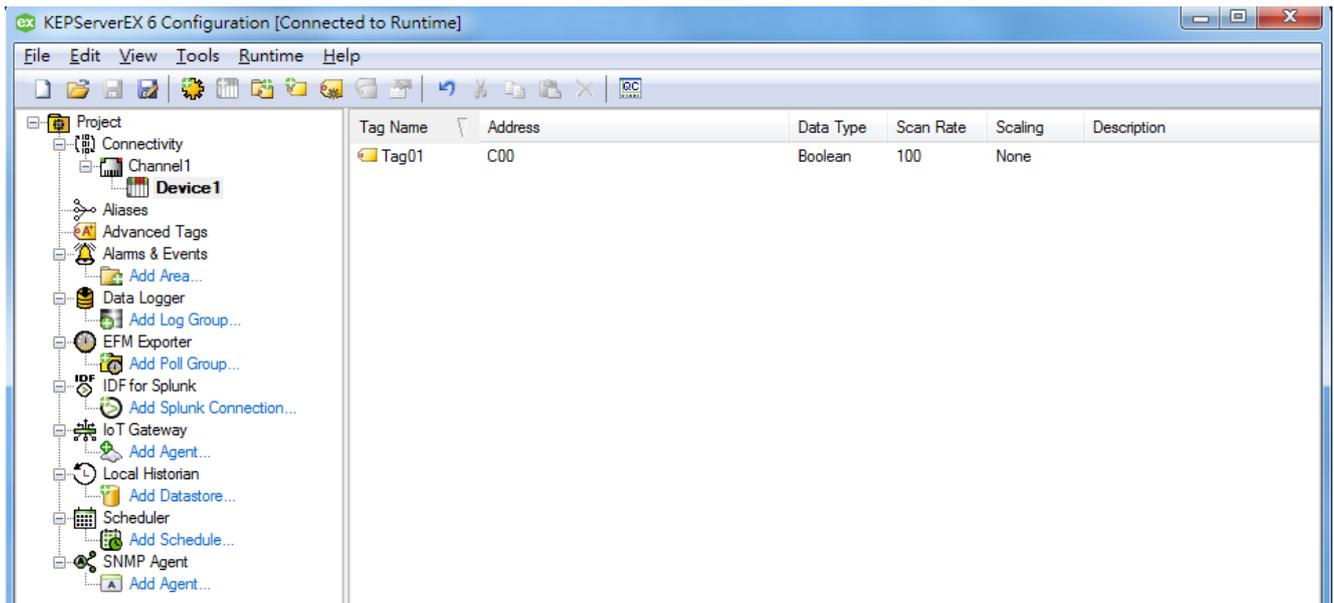
23. 設定 Tag，輸入名稱(Name)，以及位址(Address)，位址(Address)的設定請按下後方的 ，開啟 Hints 介面來查詢如何設定或直接依照 PLC 上面 Tag 清單新增。



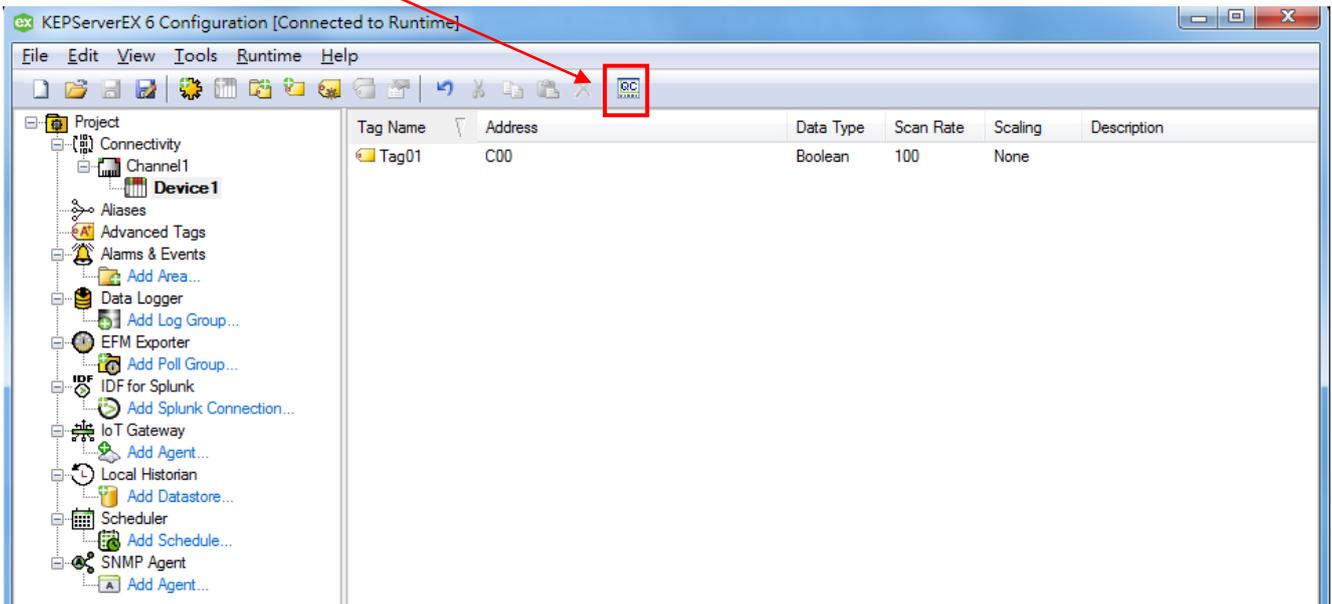
24. 設定完名稱(Name)，以及位址(Address)後，記得設定 Data type 以符合上述所設定的位址 (Address)，設定完後按下 OK 。



25. 新增完成後，就會出現剛剛所設定的 Tag 資料。



26. 設定完 Tag 後可按  Quick Client 小圖示，看目前 Value 數值。



27. 在 Quick Client 裡，選擇我們 Add 新增的 Item Tag Name，看目前 Value 數值，Quality 正常是 Good 的，如果沒有連接成功會顯示 Bad，如果要詳細了解 Quick Client 操作，可以參考 OPC Quick Client Help。

