Technical Note

PC56-OPC/PC56-SLS Connection to OPC Client

How to create an OPC connection between PC56-OPC/PC56-SLS and an OPC client. (In this document we will be using Matrikon OPC Explorer as an OPC client and OPC test client. See for download instructions.)

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Document Information

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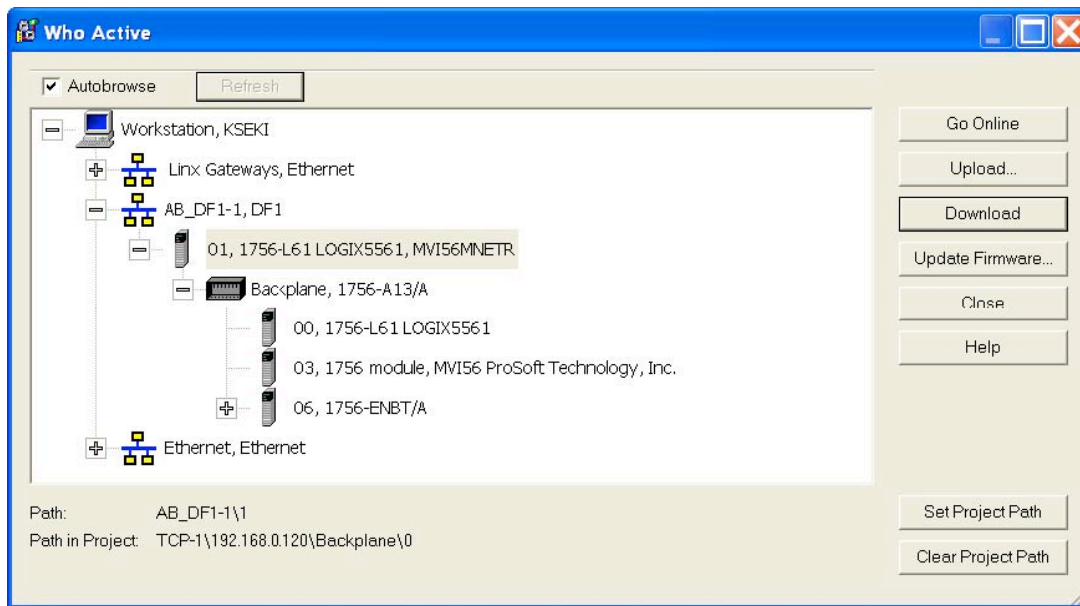*Languages spoken: Spanish, English*
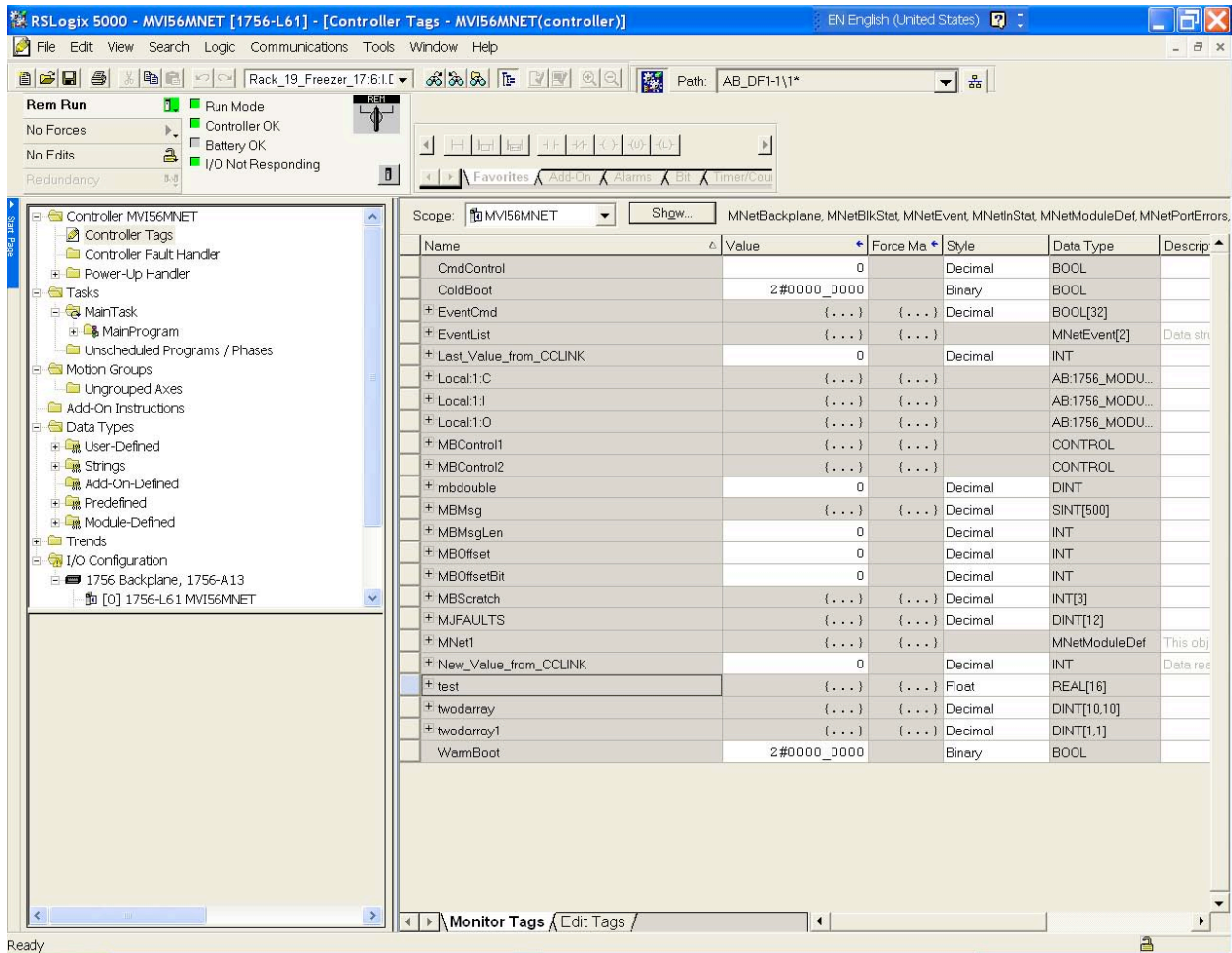
Contents

Equipment Required

You will need:
*   ProSoft's PC56-OPC or PC56-SLS
*   OPC Client (In this example Matrikon OPC Explorer and OPC Test Client were used)
*   ControlLogix Processor with a ControlLogix program downloaded to it.
*   ControlLogix Chassis
*   Computer Screen for PC56-OPC/PC56-SLS
*   Keyboard
*   Mouse

Description

Download a ControlLogix program in ControlLogix processor.
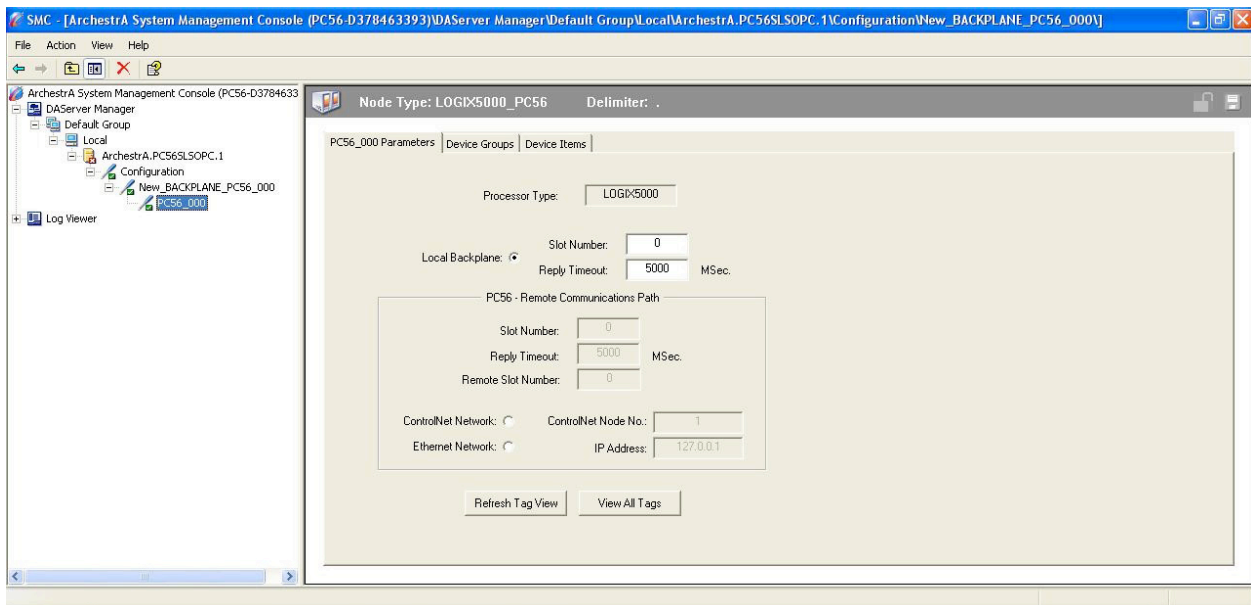
Put ControlLogix into remote run after downloading a program.
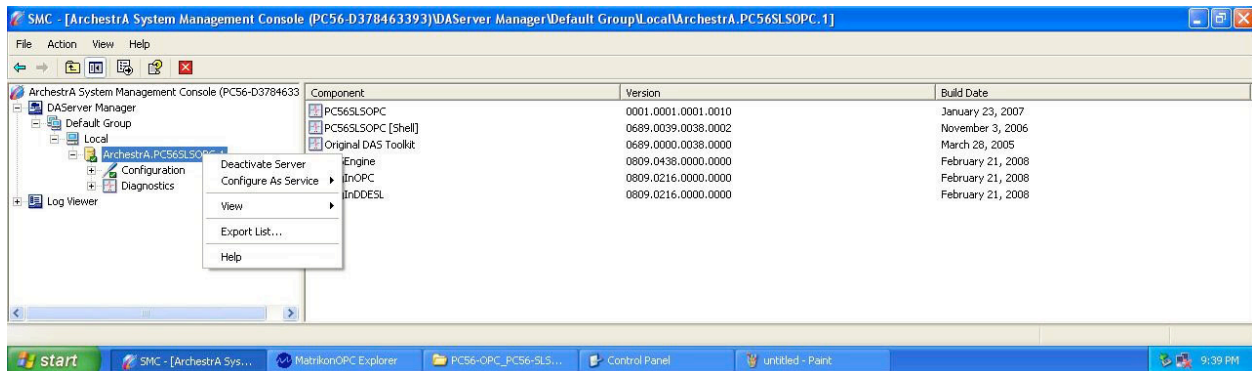
On PC56-OPC/PC56-SLS click the Start button and choose System Management Console. (It may also be under Start –> All Program –> ArchestrA –> System Management Console.)
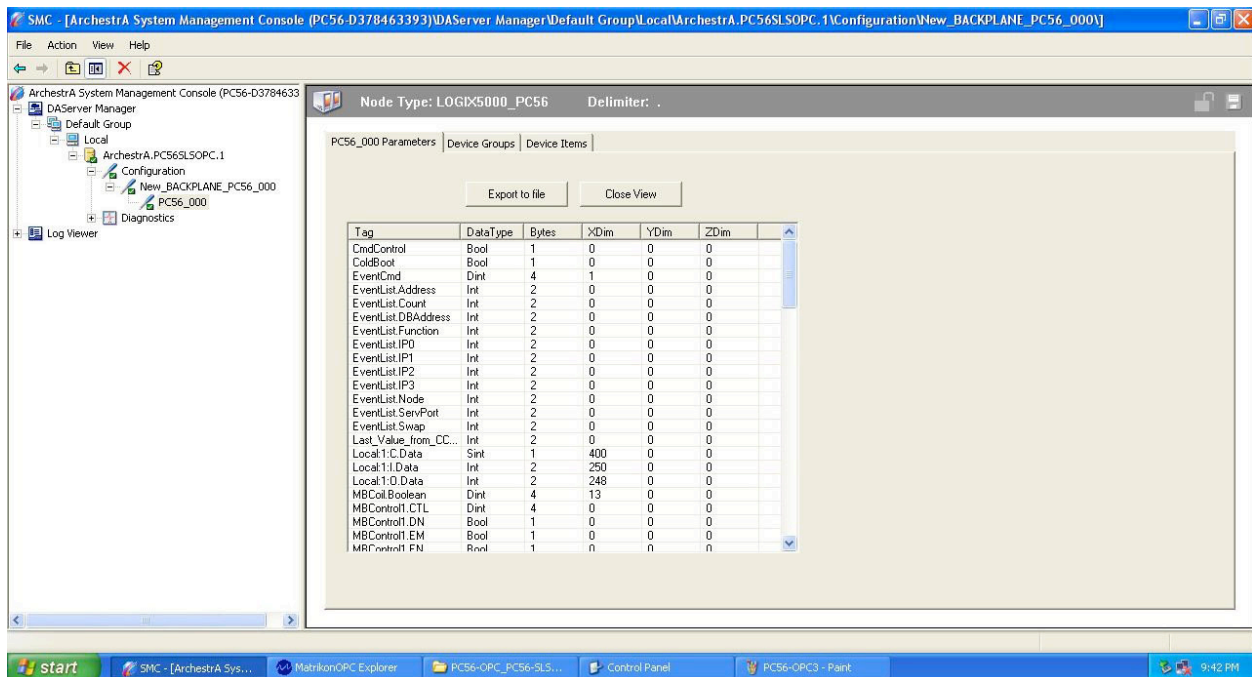

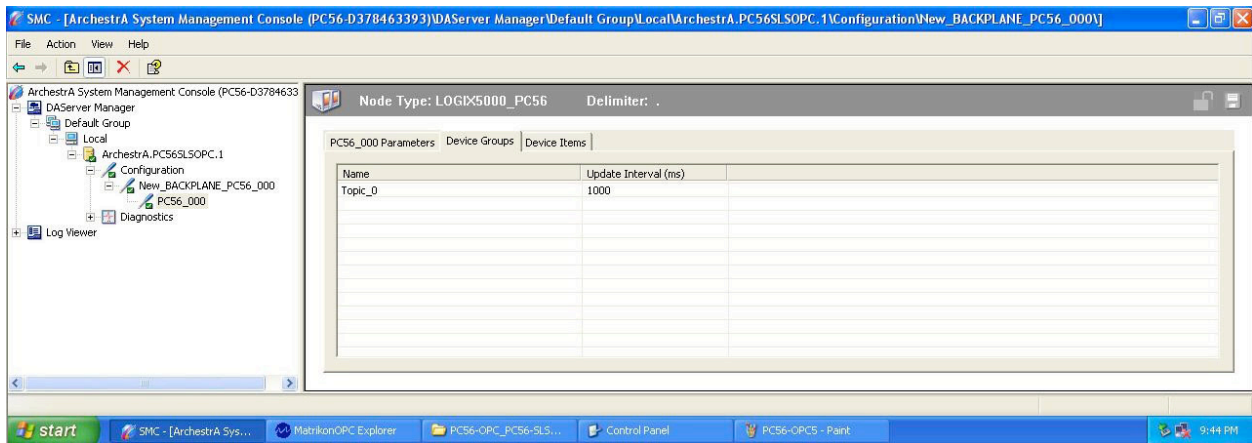Create/Modify/Add Logix5000_PC56 Object to meet your application.

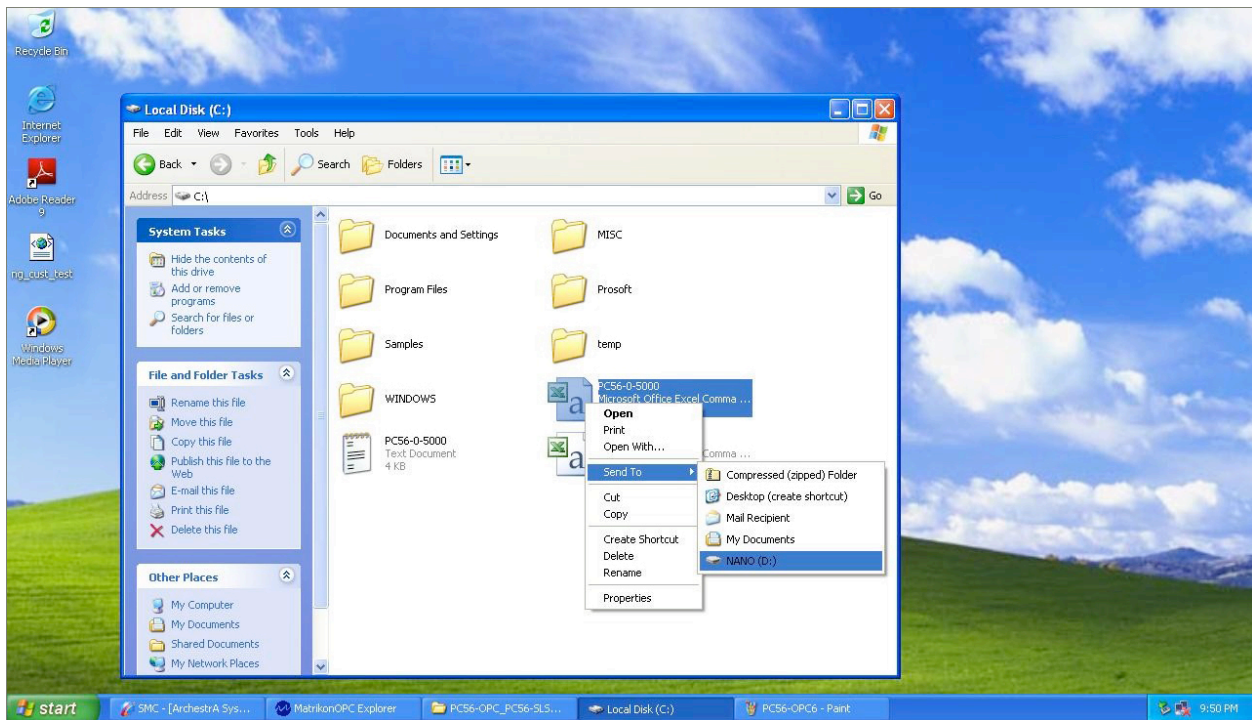Right click on ArchestrA.PC56SLSOPC.1 and choose Activate Server.

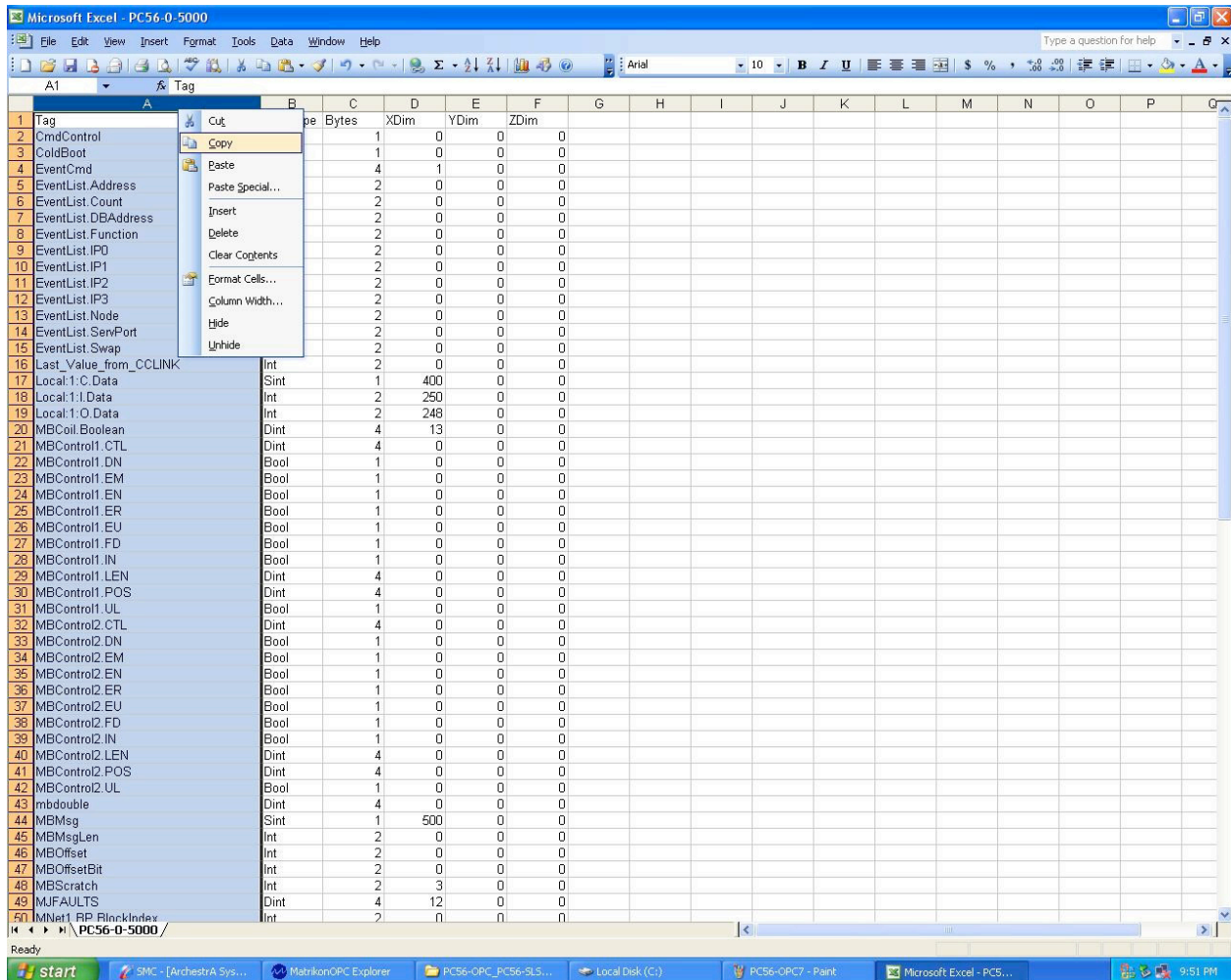You should see the controller tags in the ControlLogix processor (see screenshot below).

You should see Topic_0 in the name column and 1000 under Update Interval on the Device Groups tab.

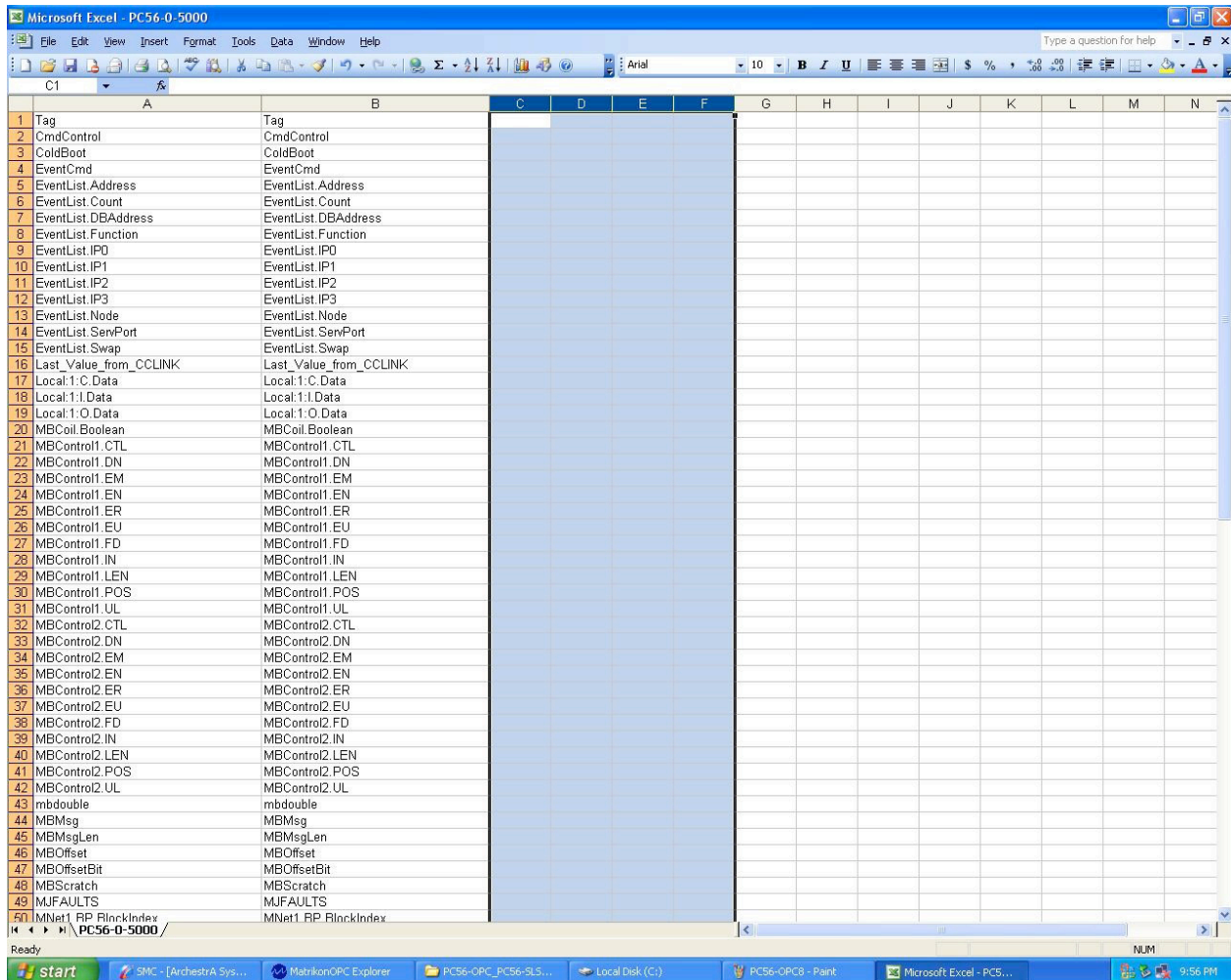Send/Copy PC56-0-5000.csv file onto the USB memory stick.

Open the PC56-0-5000.csv file using Excel on a computer with Microsoft Excel.
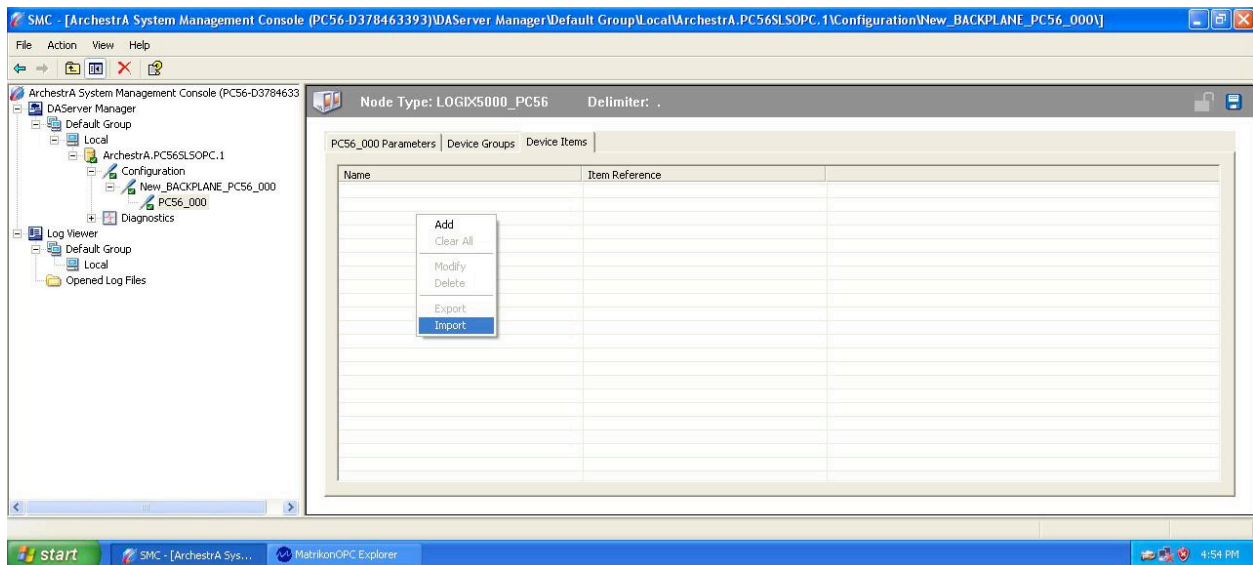
Copy column A then paste it in Column B. Delete Column C, D, E and F.

Save the Excel file back onto the USB memory stick.

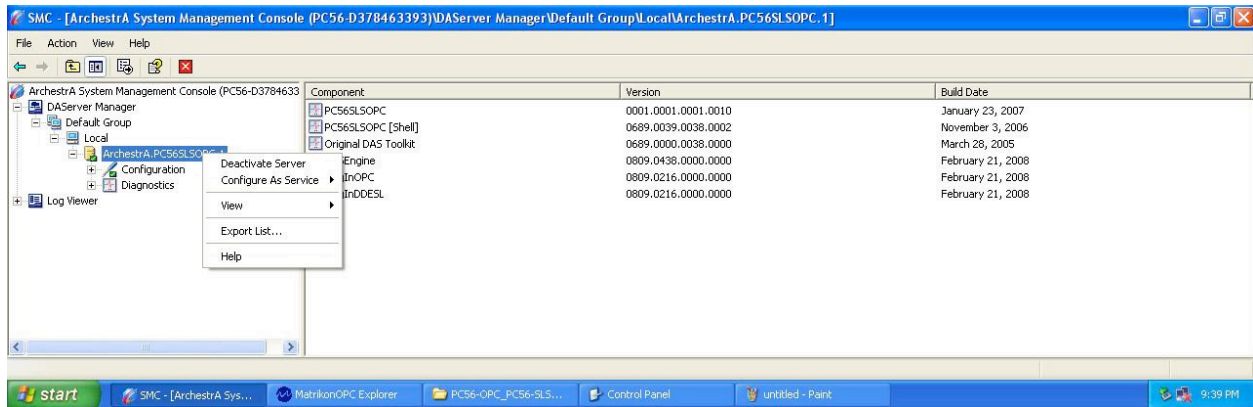Copy the Excel file on the C drive of the PC56-OPC/PC56-SLS.

Right click on the Device Items tab on PC56-OPC/PC56-SLS then click import.

Go to C: drive and choose the PC56-0-5000.csv file then click Open. Click on the disk icon at the right corner to save on the Device Items tab.
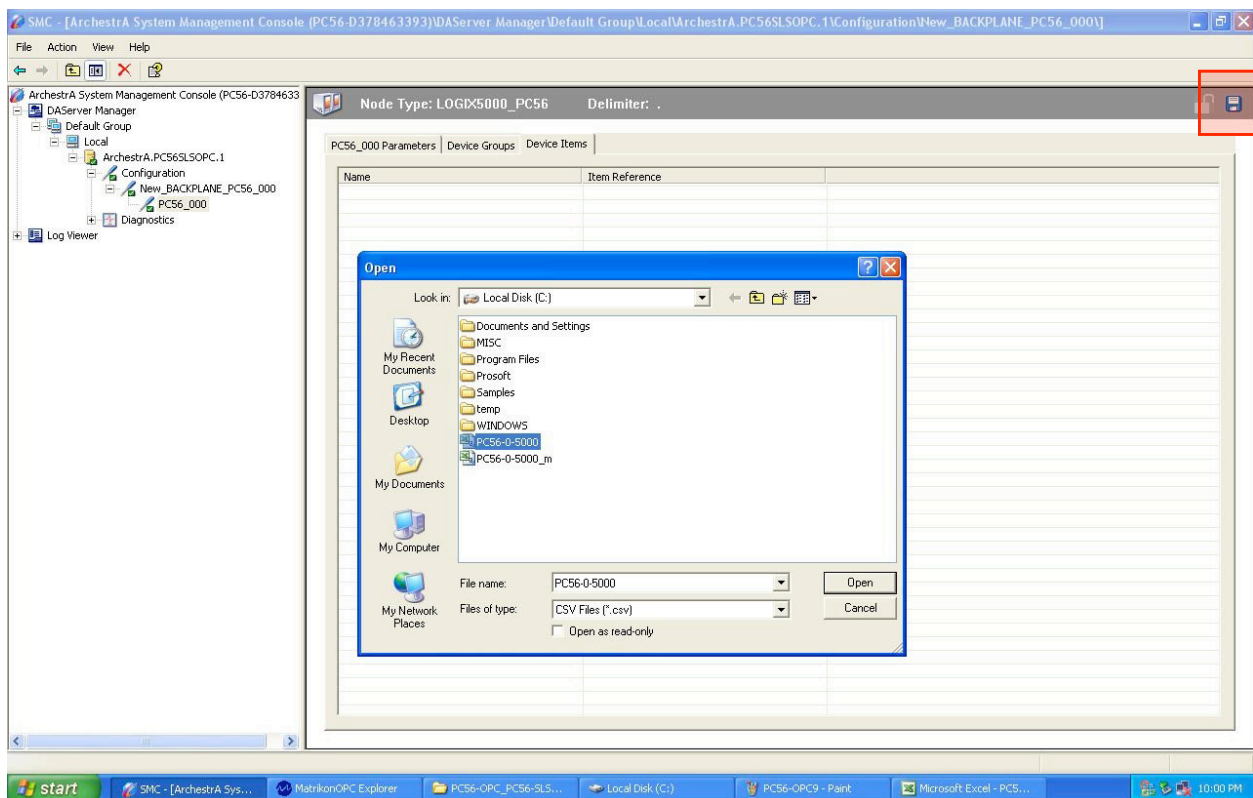
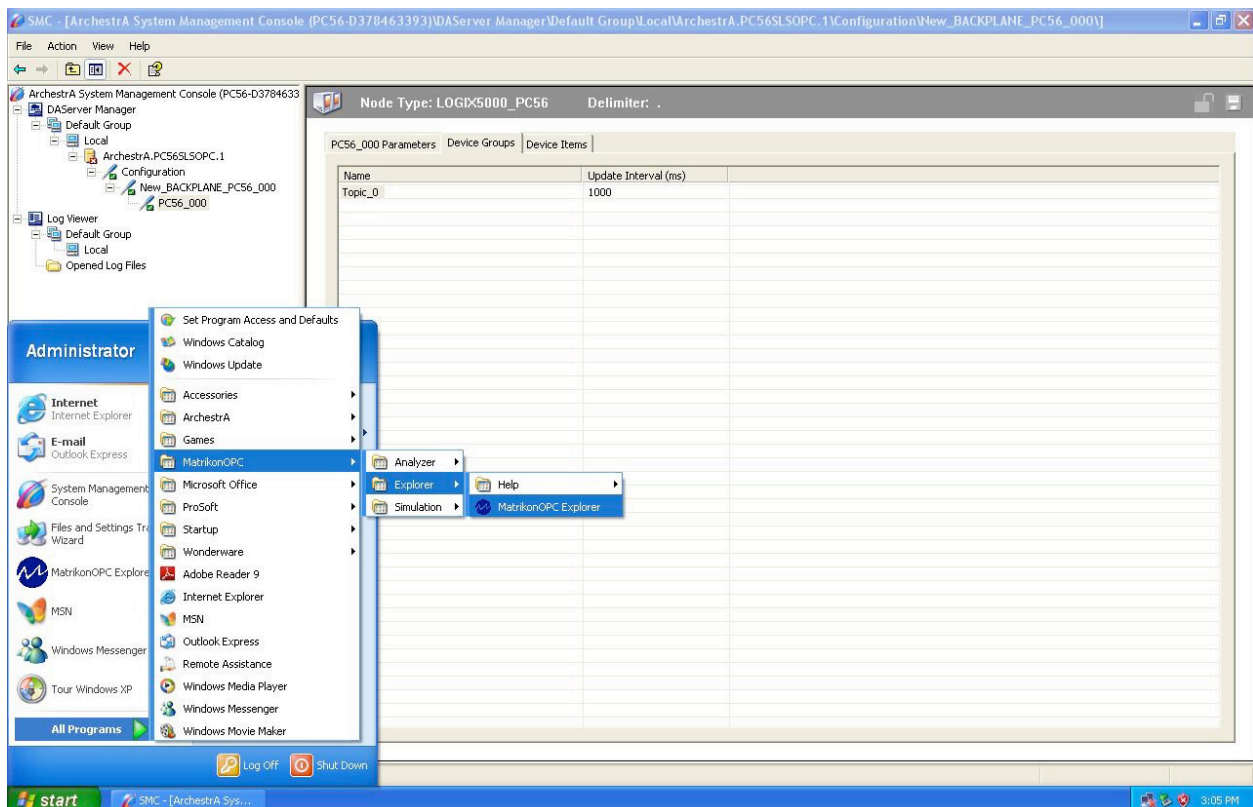Right click on ArchestrA.PC56SLSOPC.1 and choose deactivate server.

In this example Matrikon OPC Explorer is downloaded on the PC56-OPC/PC56-SLS module. This was done to simplify the connection configuration between Matrikon OPC Explorer and PC56-OPC/PC56-SLS. You will need additional configuration if you were connecting to PC56-OPC/PC56-SLS from a remote device.

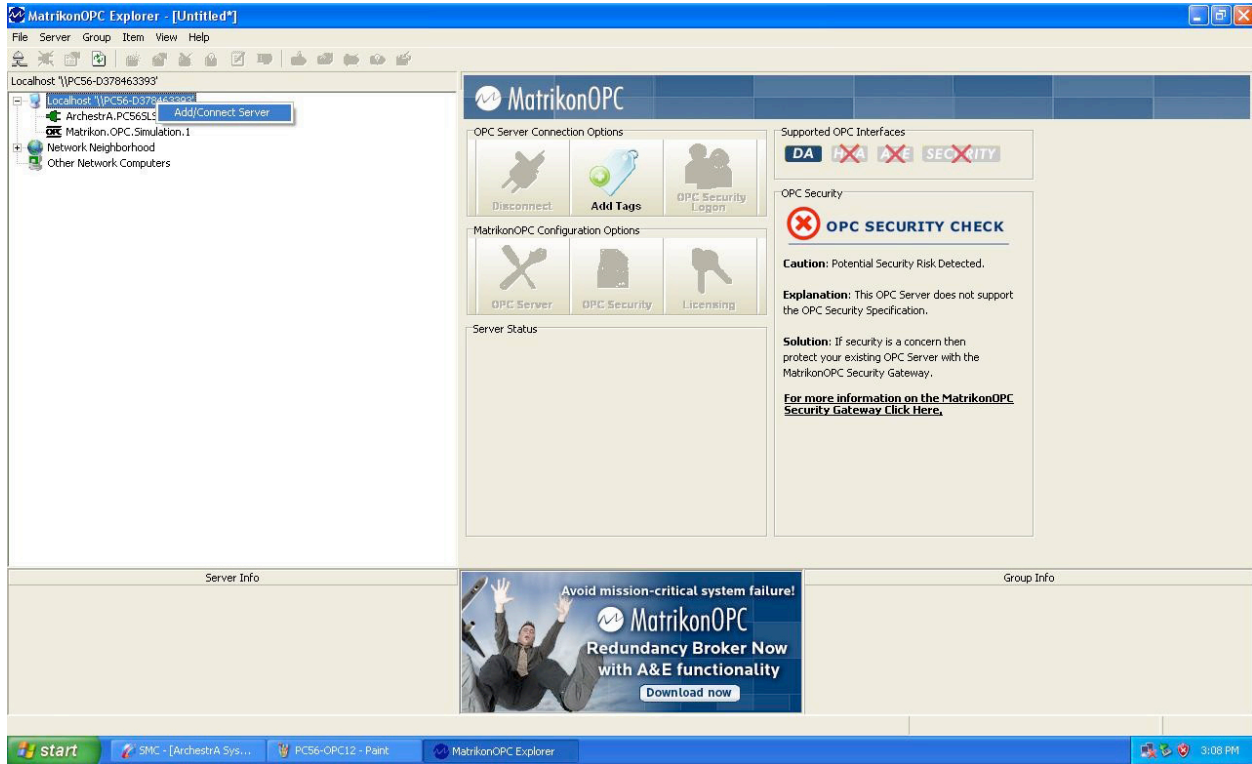Matrikon OPC Explorer can be downloaded at:
http://www.matrikonopc.com/products/opc-desktop-tools/opc-explorer.aspx
This link may be updated periodically, so if the link does not work please check http://www.matrikon.com for additional information.

Open Matrikon OPC Explorer.

Right click on the Add/Connect Server.

Click OK.

Click Add Tags.

Expand New_BACKPLANE_PC56_000 by clicking the plus sign at the New_BACKPLANE_PC56_000 branch, which will then show PC56_000.
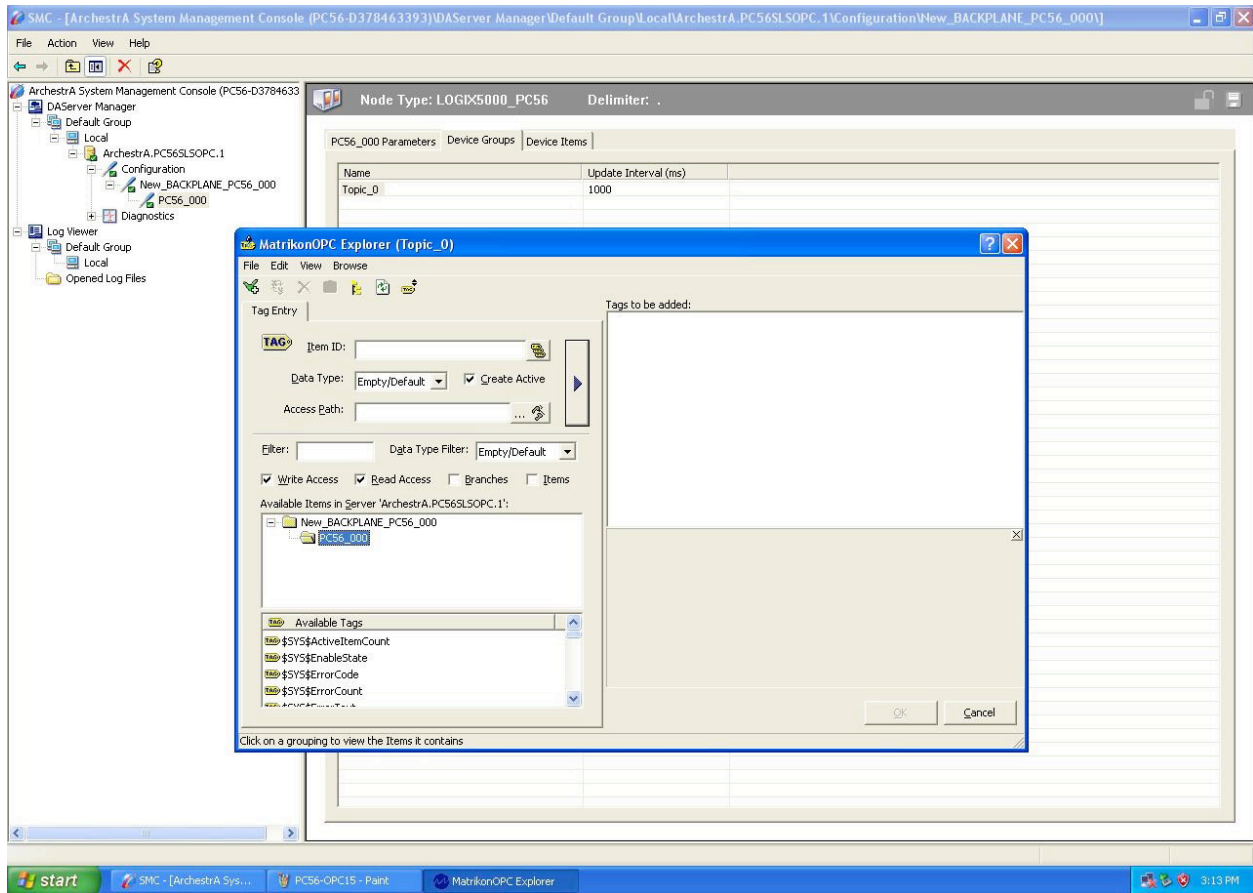
From the Available Tags list, choose a tag for Matrikon OPC Explorer to interrogate from the PC56-OPC/PC56-SLS. (In this example the WarmBoot tag was double-clicked.)
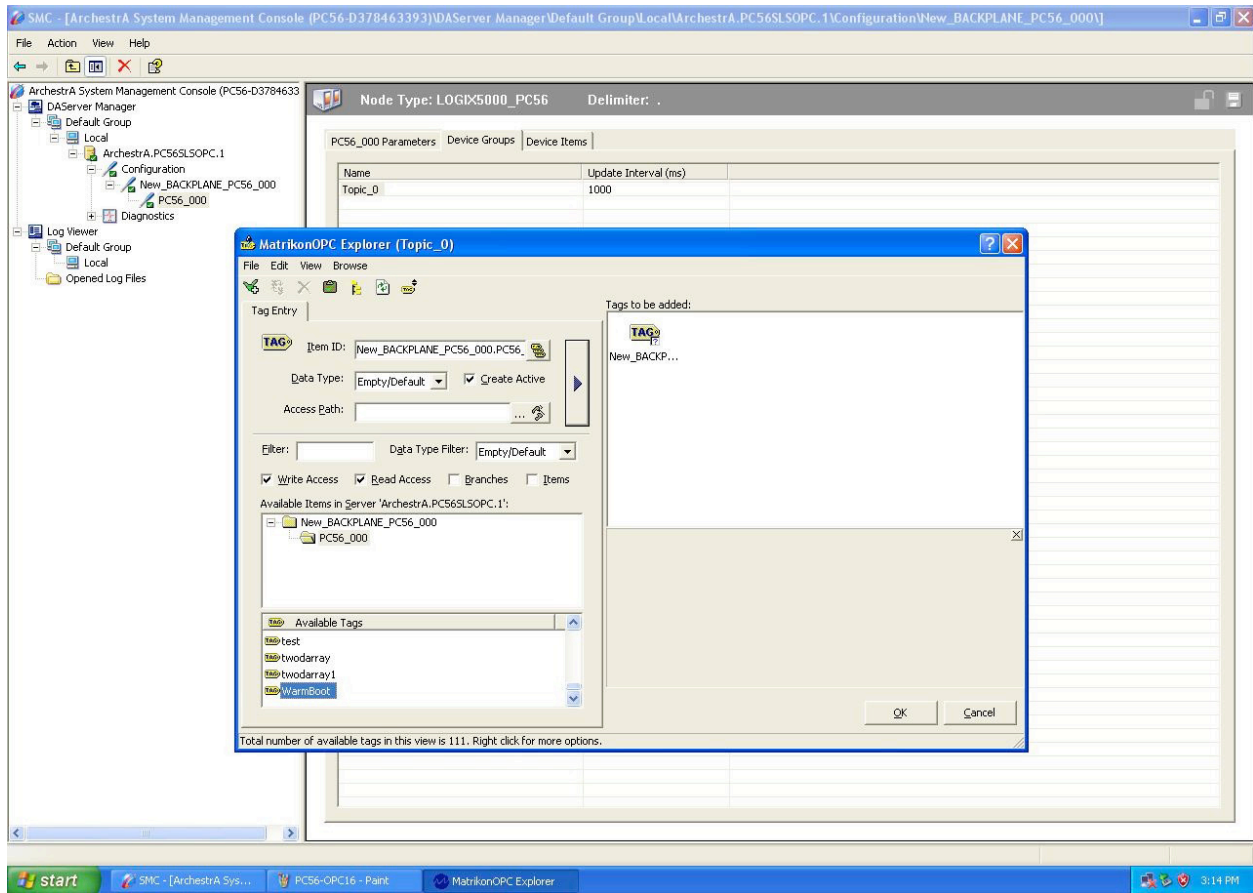
Right click on the Tag you have created in the Tags to be added: area. Click Validate Tag, and then click OK.
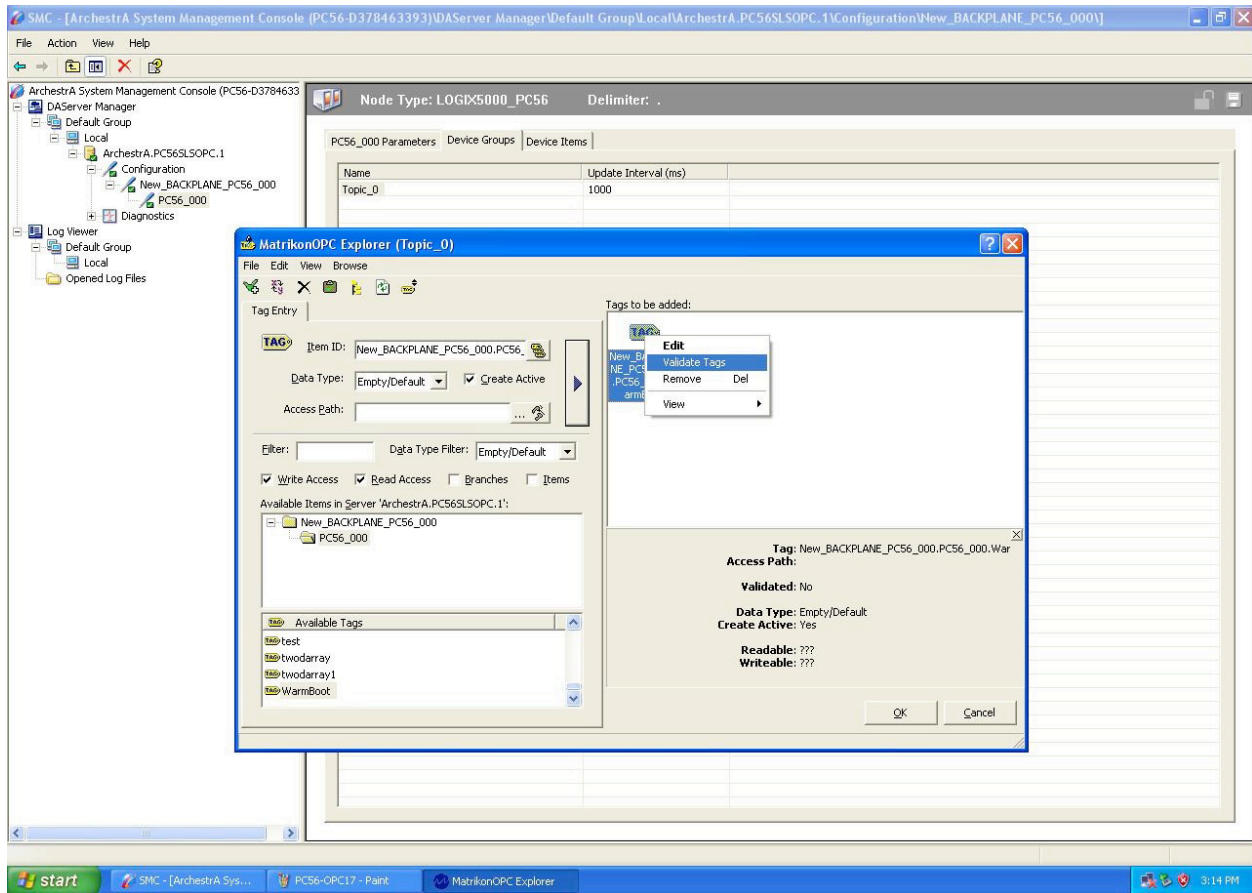
You have created a tag on Matrikon OPC Explorer.
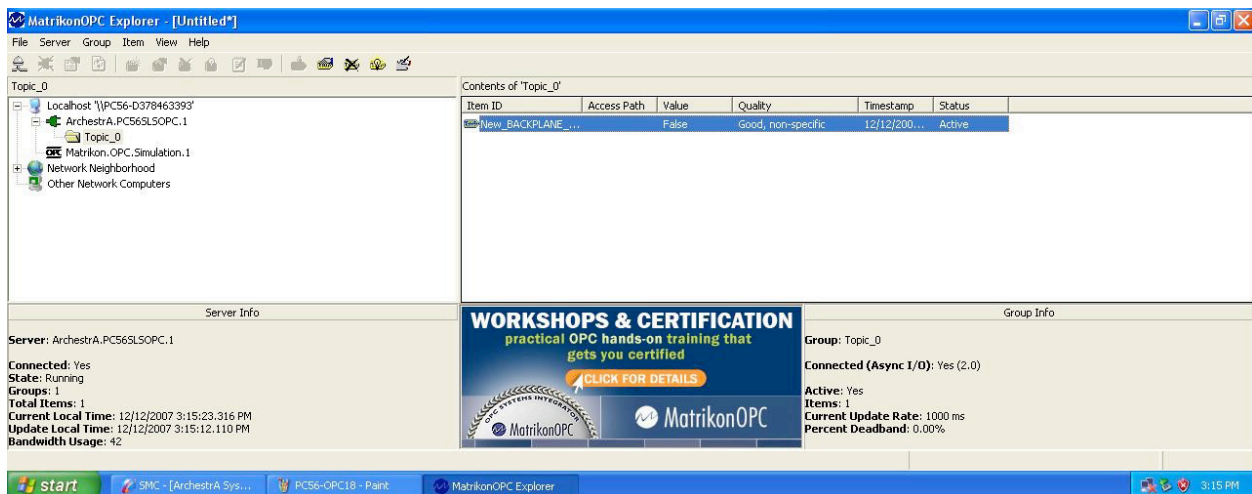
Testing Using OPC Test Client (Remotely)

Click on Start menu –> All Programs –> Rockwell Software –> RSLinx –> Tools –> OPC Test Client.
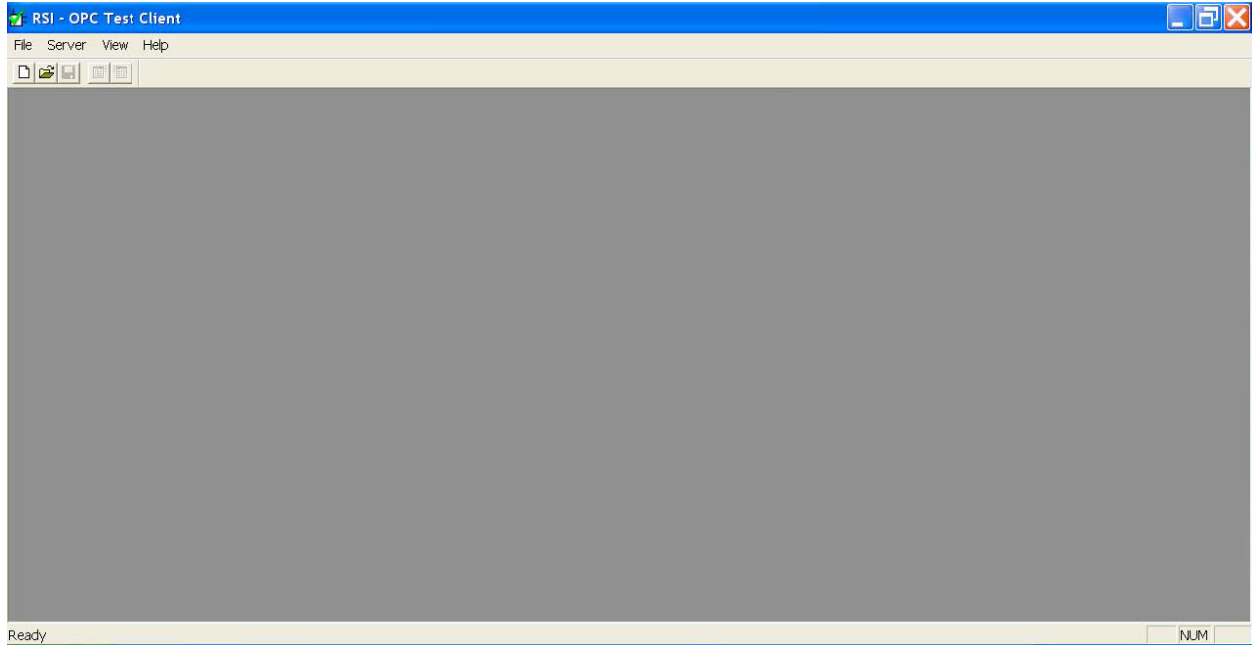
Go to the menu bar and click File –> New. Click Browse… .
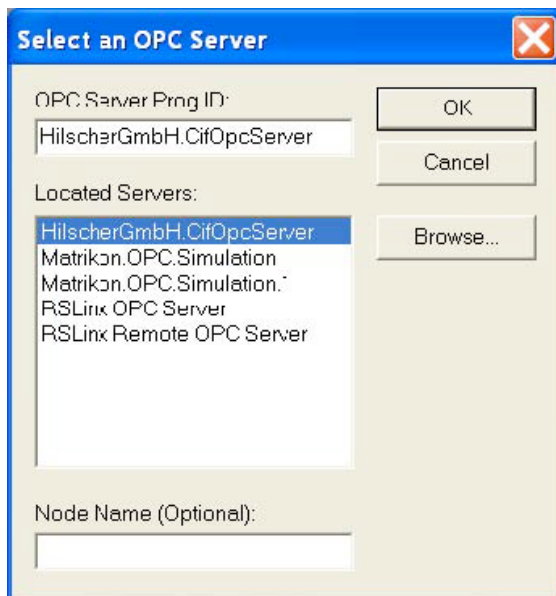
At Node type the IP address of the PC56-OPC, then click Connect.
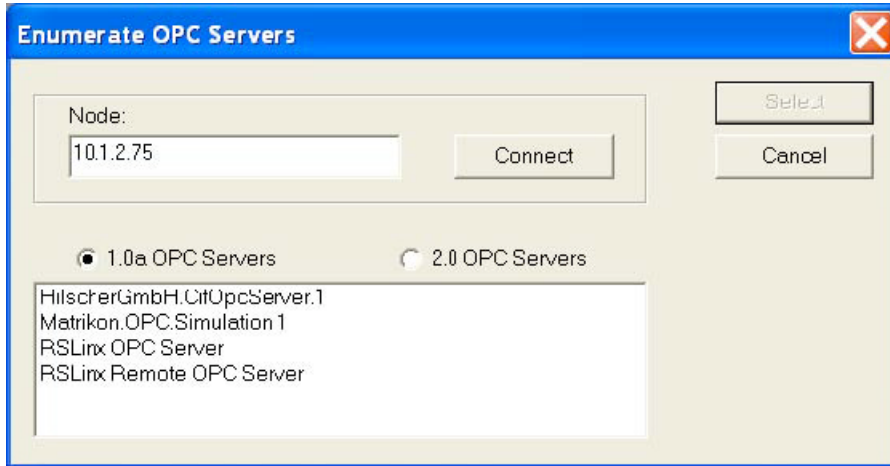
Choose the 2.0 OPC Servers. Highlight ArchestrA.PC56SLSOPC.1 then click Select.
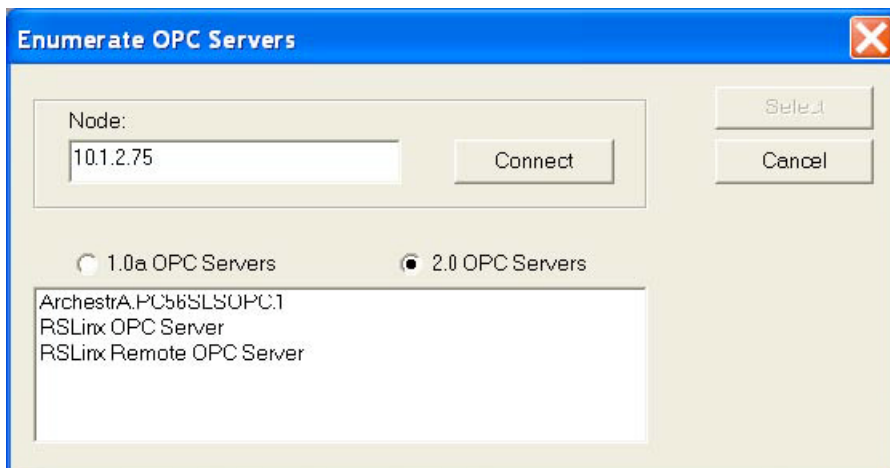
Click OK.
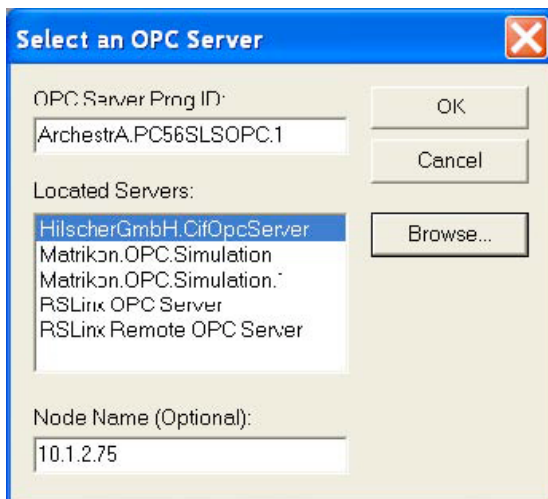
Go to the menu bar and click Group –> Add Group.
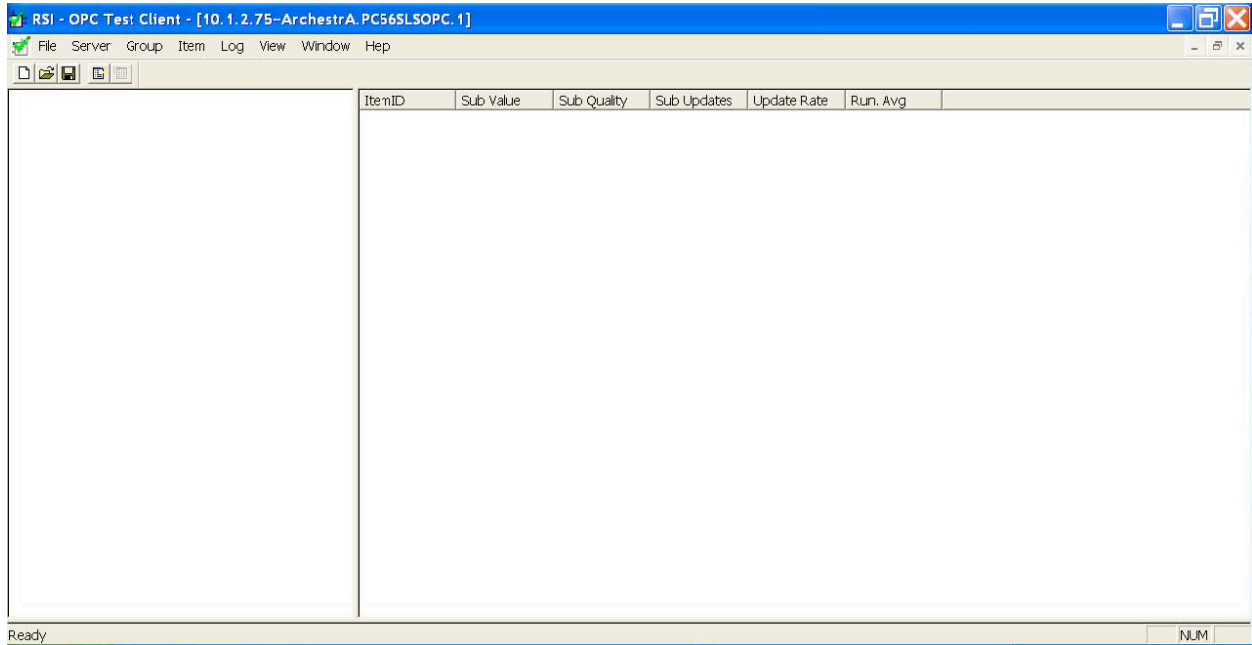
Type in the appropriate Group Name, then click OK.
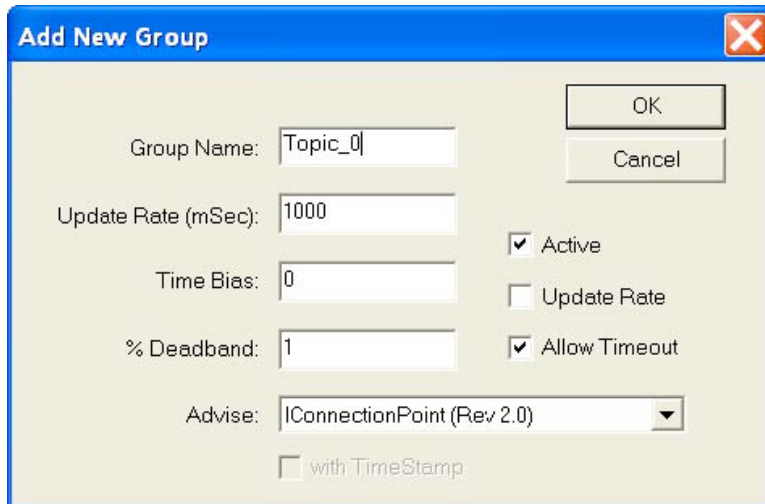
Go to the menu bar and click Item –> Add Item.
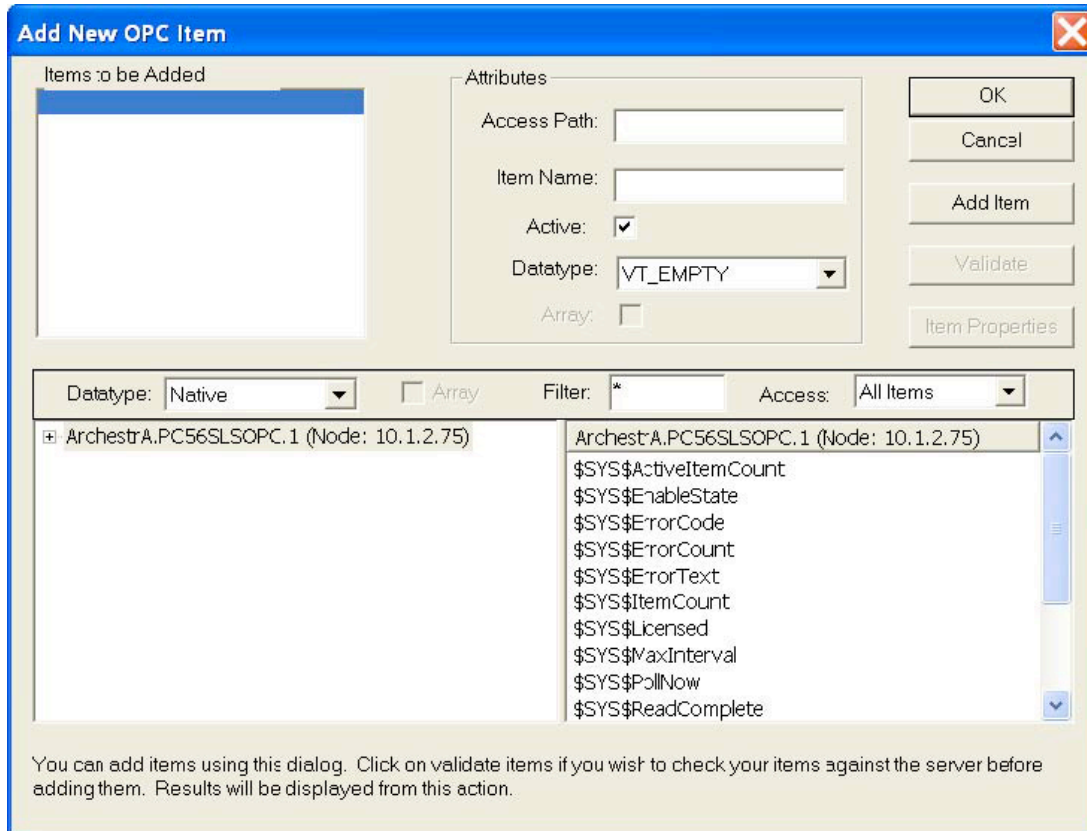
Open the ArchestrA.PC56SLSOPC.1 (Node: 10.1.2.75) branch, then open the New_BACKPLANE_PC56_000 branch. Highlight New_LOGIX5000_PC56_000.
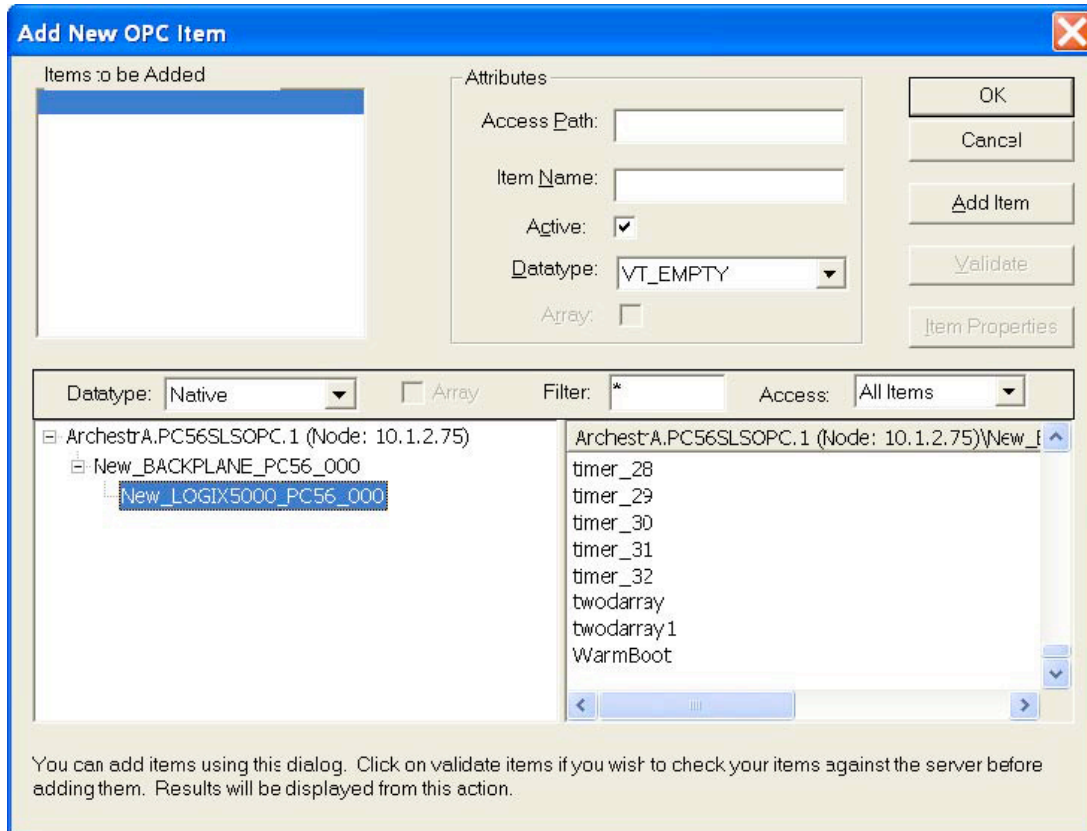
You'll need to type in the path and the item name in the Item Name: parameter, e.g. New_BACKPLANE_PC56_000.New_LOGIX5000_PC56_000.WarmBoot.

Click on Validate to check for the validity of the tag.
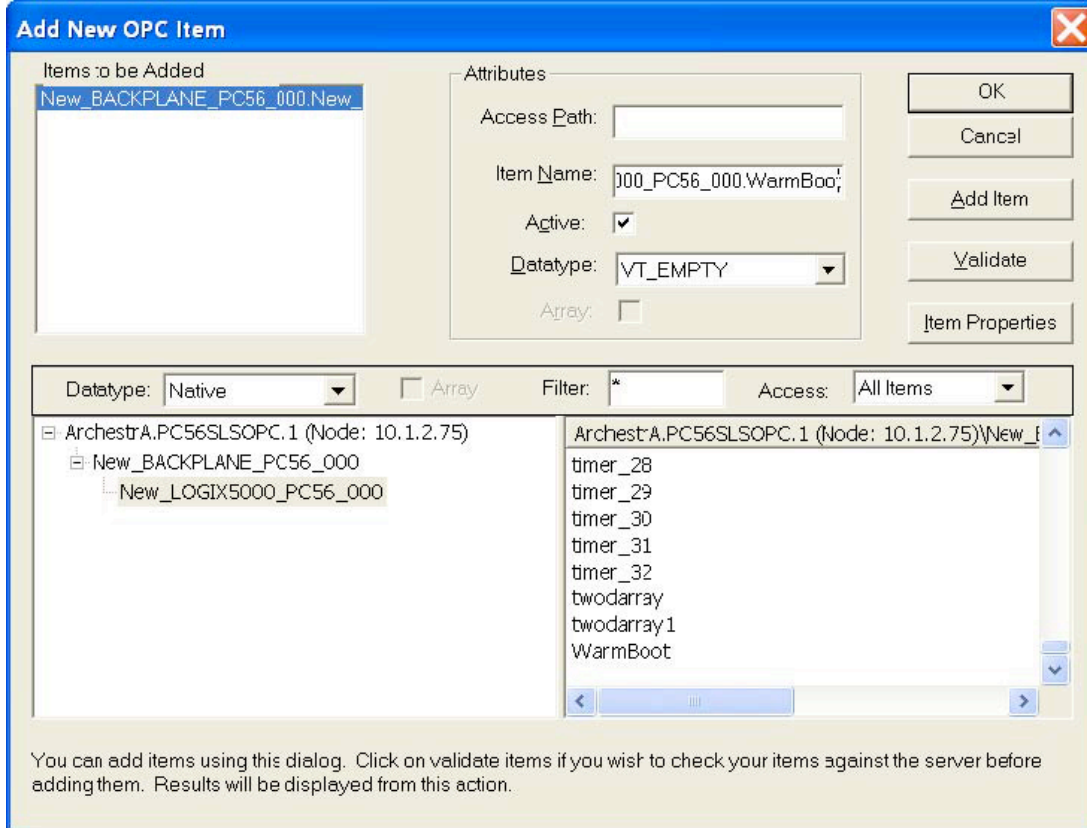
Click OK when you see the tag is valid.

Then Click OK on this window.

You have created a tag with OPC Test Client. Repeat this procedure for all other tags you want to test using OPC Test Client.

Conclusion

In this document you learned how to interrogate a tag from a ControlLogix processor to ProSoft's PC56-OPC/PC56-SLS modules to Matrikon OPC Explorer to OPC Test Client. If you need additional information, please contact us.

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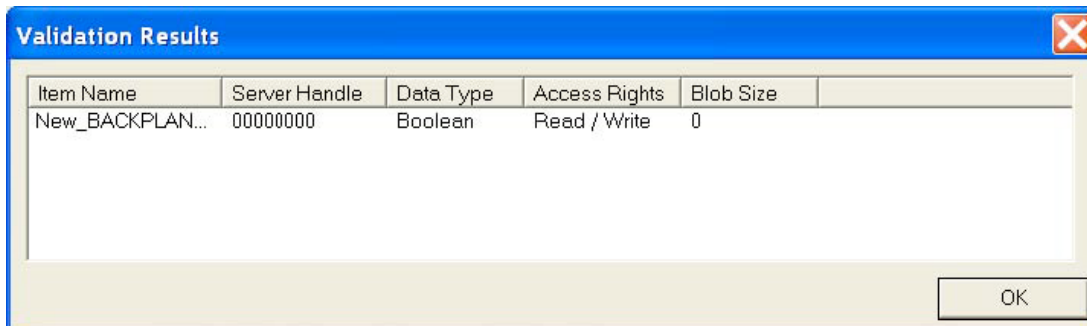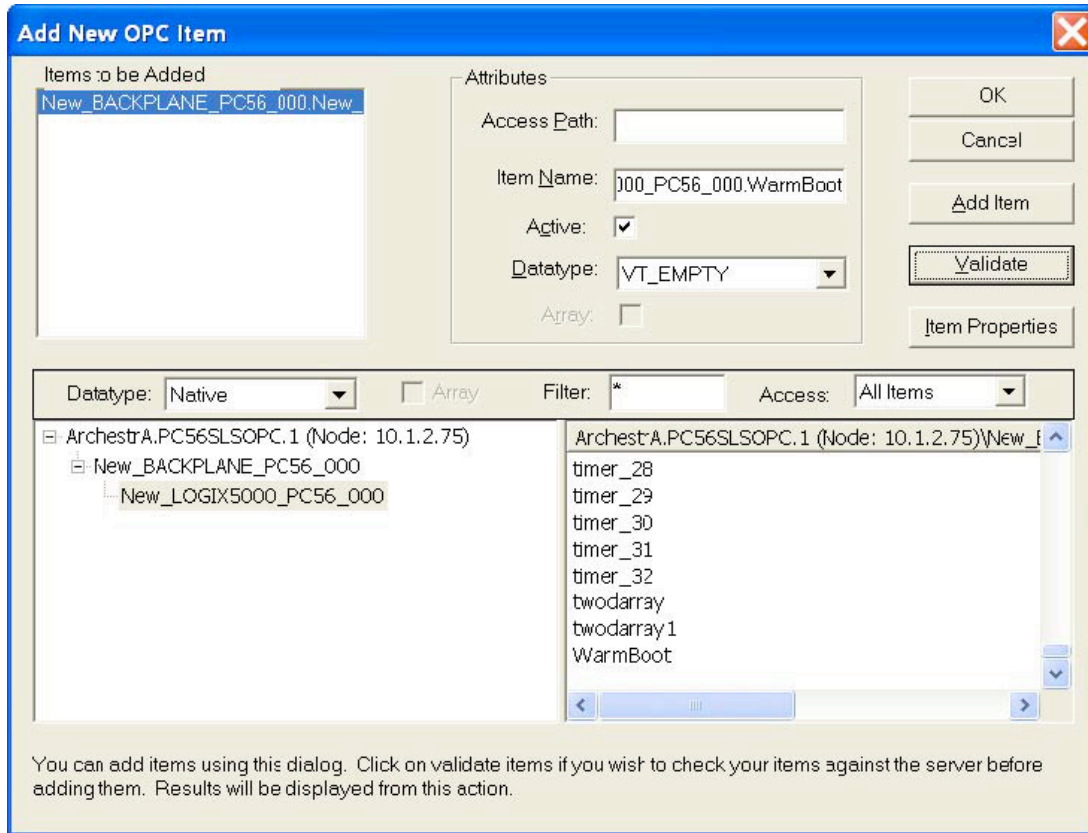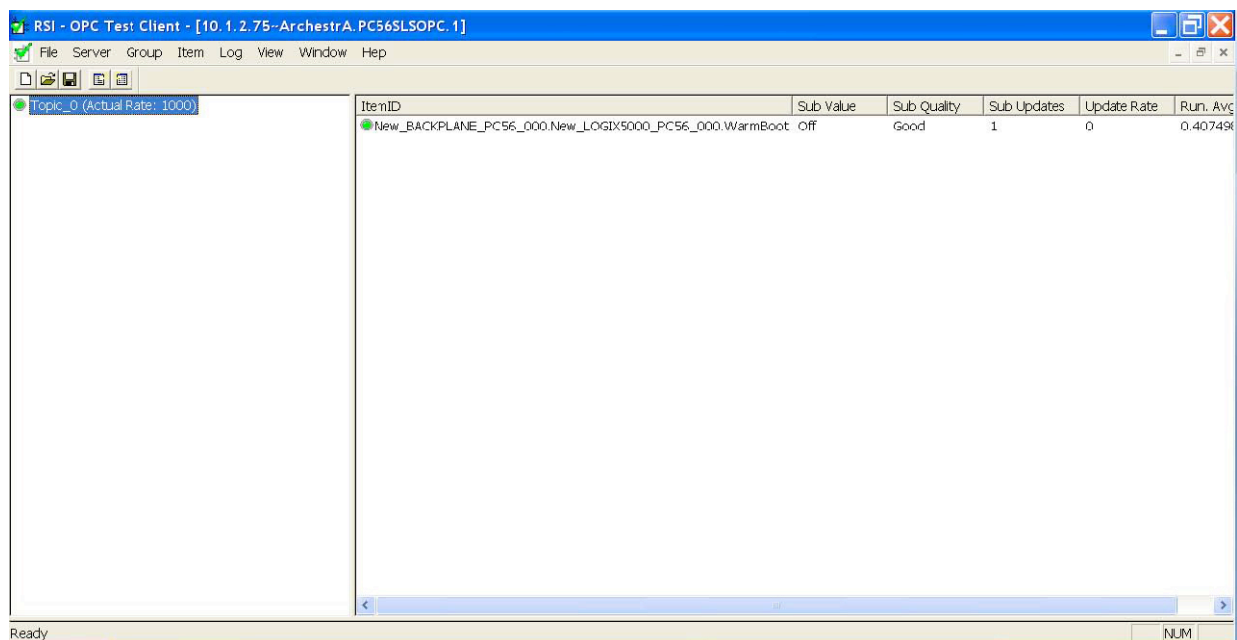asiapc@prosoft-technology.com
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