# CaoOPC Quick Tour

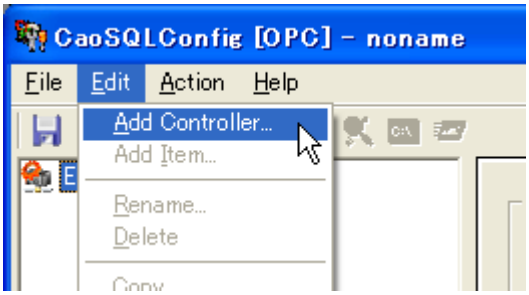
December 12, 2007 Update
DENSO WAVE Inc.

[Contents]



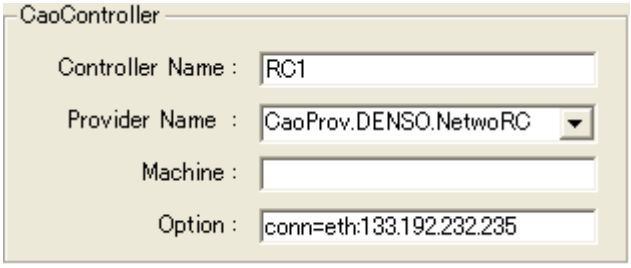
## 1. Configuration of CaoOPCConfig

1. From the Start menu, click [All programs] – [ORiN2] – [CAOOPC] – [CaoOPCConfig]
2. From the Menu bar, click [Edit] – [AddController].




3. Enter a desired Controller name (Letters and numeric values only. Symbols of ¥, $, #, :, ! cannot be used.).
   Example: “RC1”
4. Enter controller information to CaoController in the Controller tab.

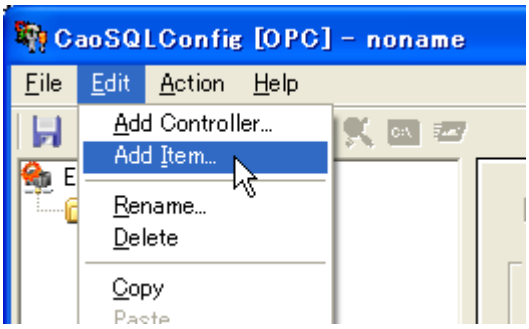
   Controller Name : <any name (null is allowed)> A name assigned in step3 (previous step) is automatically set.
   Provider Name : CaoProv.DENSO.NetwoRC
   Computer Name : <null>
   Option : Conn=eth:<IP address> Example:"Conn=eth:133.192.232.235"




For other details, please refer to "CaoOPC Users Guide."

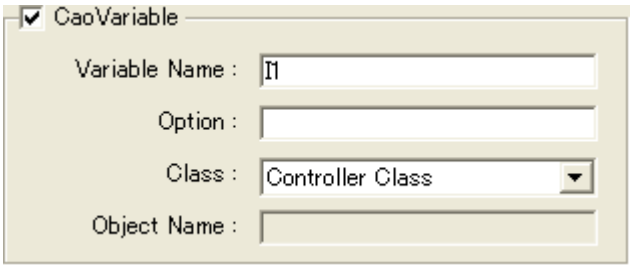
5. From the Menu bar, click [Edit] – [Add Item…].

[Note] Without setting step 5 to 7, still you can add Item dynamically by using OPC client tool.




6. Enter a desired Item name. (Letters and numeric values only. Symbols of ¥, $, #, :, ! cannot be used.).
   Example : "Item1"
7. Enter Item information in CaoVariable in the Item tab.

   Variable Name : <any name (depends on provider)> Item name entered at Step6 is a default.
   Option : <null>
   Class : "Controller Class"
   Object Name : <null>




For other details, please refer to "CaoOPC Users Guide."

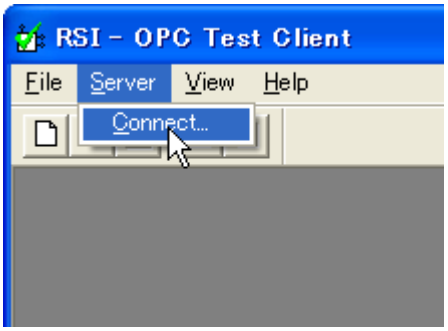
8. Save the setting as any file name and exit.

## 2. Connection with a commercial OPC client tool with CaoOPC

This chapter explains how to access controllers and items configured with CaoOPCConfig from commercial OPC client tools, by using CaoOPC as a server.

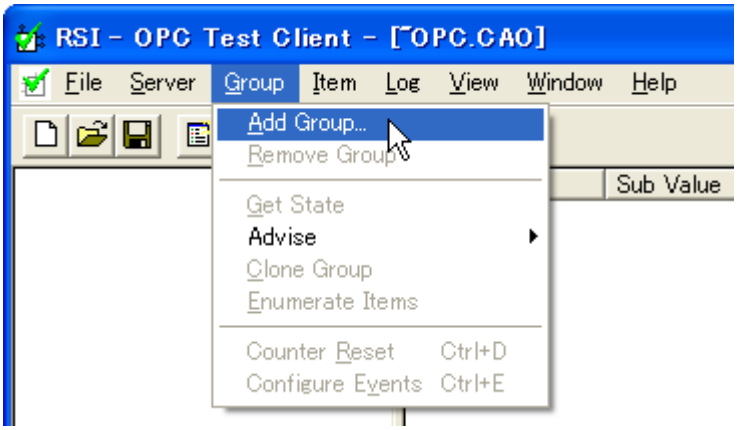
This example uses “OPC Test Client” from Rockwell Automation as a commercial OPC client tool. For details of “OPC Test Client”, refer to “OPC Test Client” manual.

1. Start “OPC Test Client”.
2. From the Menu bar, click [Server] – [Connect…].

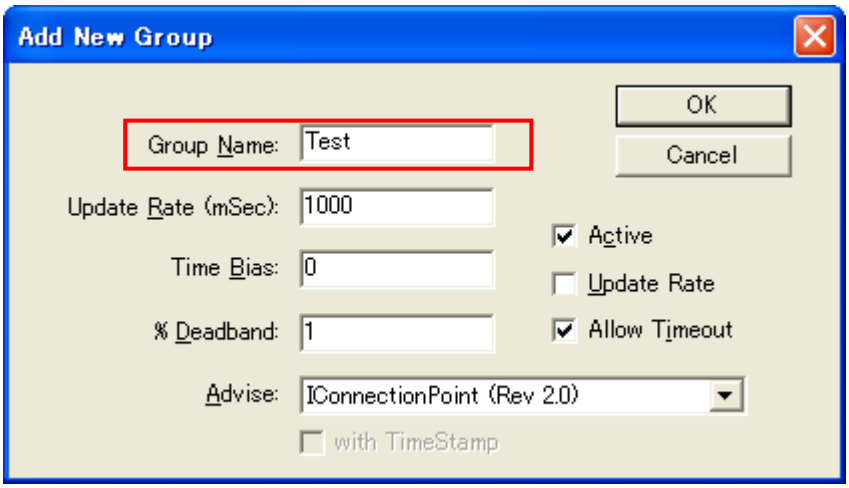



3. “Select an OPC Server” dialog is displayed. Select “OPC.CAO” in “Located Servers” list.

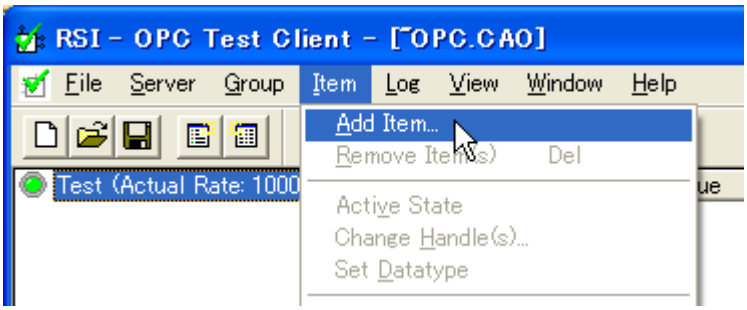

4. Once “OPC Test Client” window is displayed in OPC.CAO server, from the Menu bar, click [Group] – [Add Group].



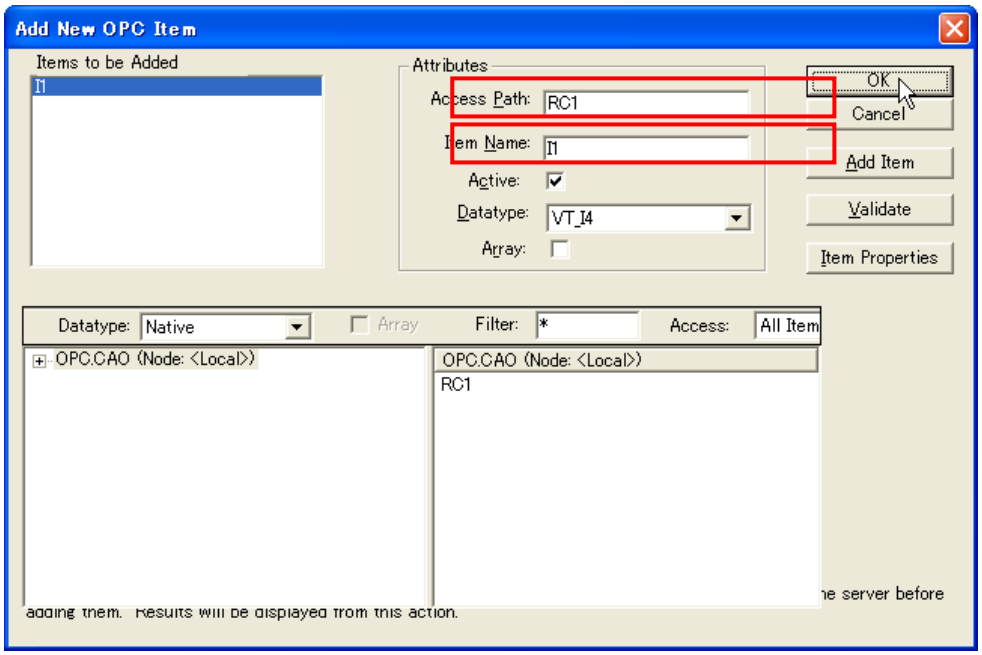

5. “Add New Group” dialog is displayed. Enter “Test” in the Group Name textbox.
   For other settings, please refer to OPC Client Tool manual.




6. To add items to “Test” group that you have just created, from the Menu bar, click [Item] –[Add Item…].

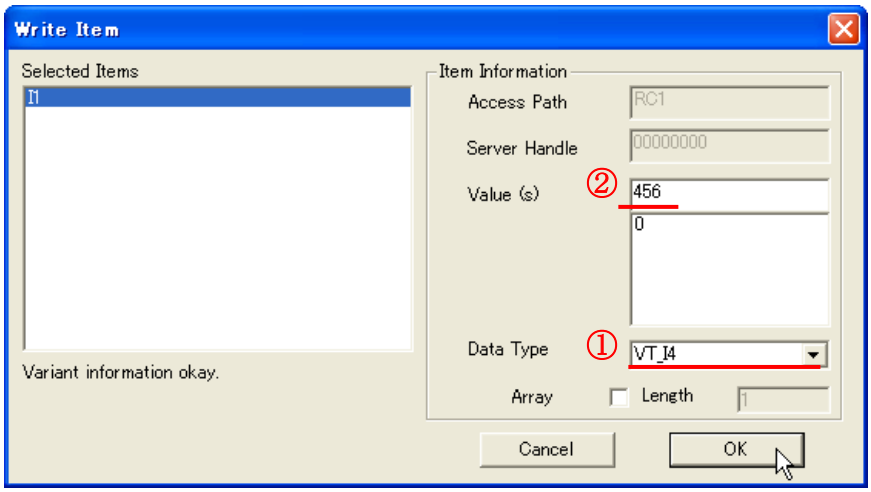



7. “Add New OPC Item” dialog is displayed. Enter “RC1” in the Access Path textbox. This is the controller name assigned in ”1 Configuration of CaoOPCConfig”. Specify an item to access in Item name. In this example, enter “I1”.

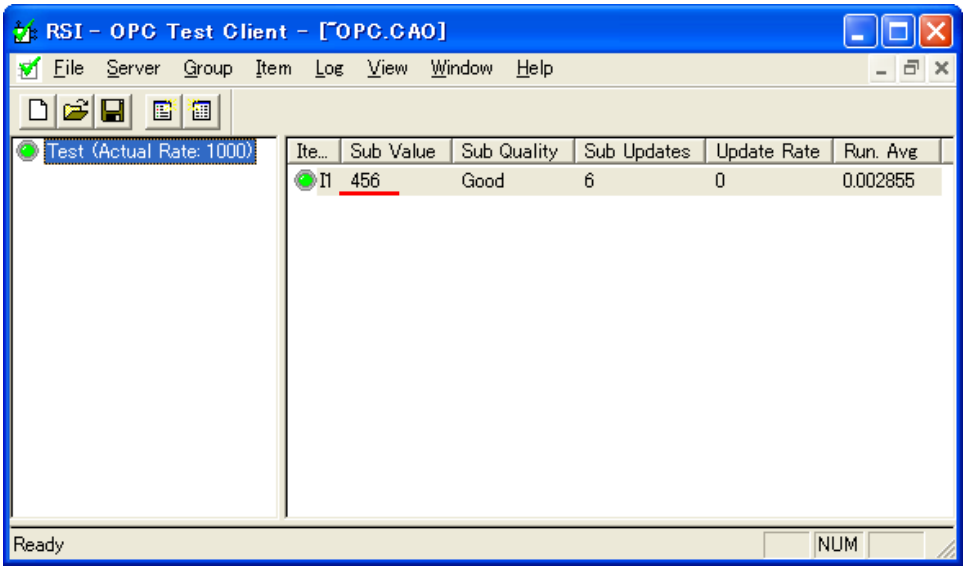



Click “OK” to complete.

8. Once the registration completes, check if “I1” is successfully added in “OPC Test Client”. Also check that this item has successfully retrieved the value of “Item1” on controller “RC1”, which has been configured in “1 Configuration of CaoOPCConfig”.
9. Select “I1”. From the Menu bar, click [Item] – [Sync Write].
10. “Write Item” dialog is displayed. First, from the Data Type selection, select [VT_I4]. Next, on the Value (s) textbox, enter “456”. Be sure to observe this order (select “Data type” first, and then enter “Value”).




11. Click “OK”, and confirm that the value of item “Item1” of controller “RC1” is set as “456”.

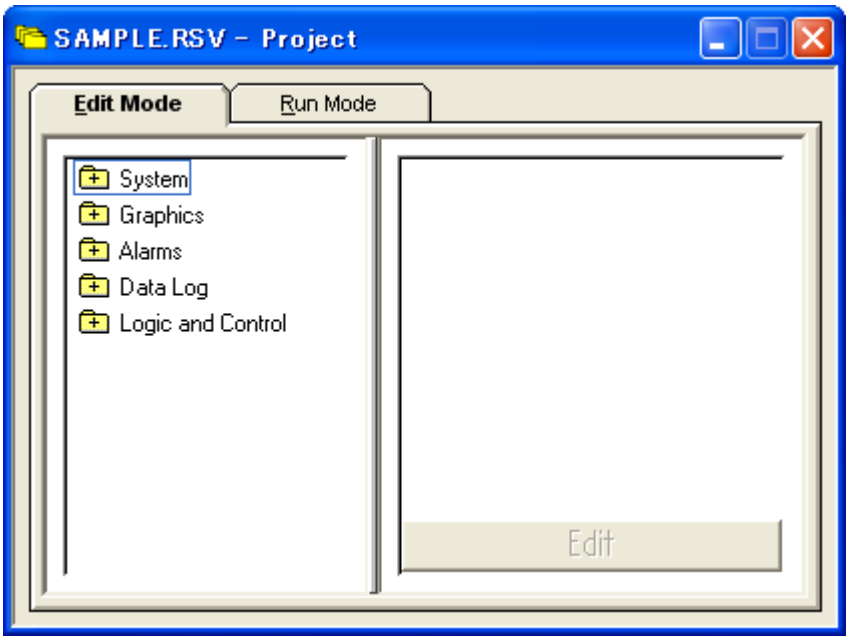

RSI - OPC Test Client - [OPC.CAO]
File Server Group Item Log View Window Help
Test (Actual Rate: 1000)
Ite... Sub Value Sub Quality Sub Updates Update Rate Run. Avg
I1 456 Good 6 0 0.002855
Ready
NUM

# 3. Connection of RSView to CaoOPC

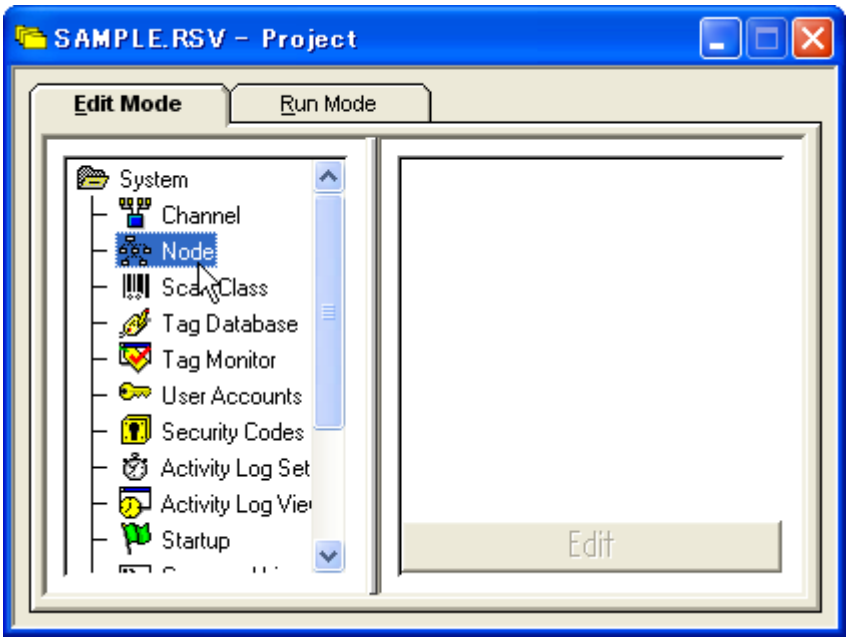
This chapter explains how to access controllers and items configured with CaoOPCConfig from commercial software RSView 32, by using CaoOPC as a server.

For details on the RSView32 software of Rockwell Automation, Inc., please refer the manual for the software.

1. Start “RSView32.”
2. From the Menu bar, click [File] – [New…], and then enter “sample” as a project name to create a new project.
3. “SAMPLE.rsv – Project” window is displayed.

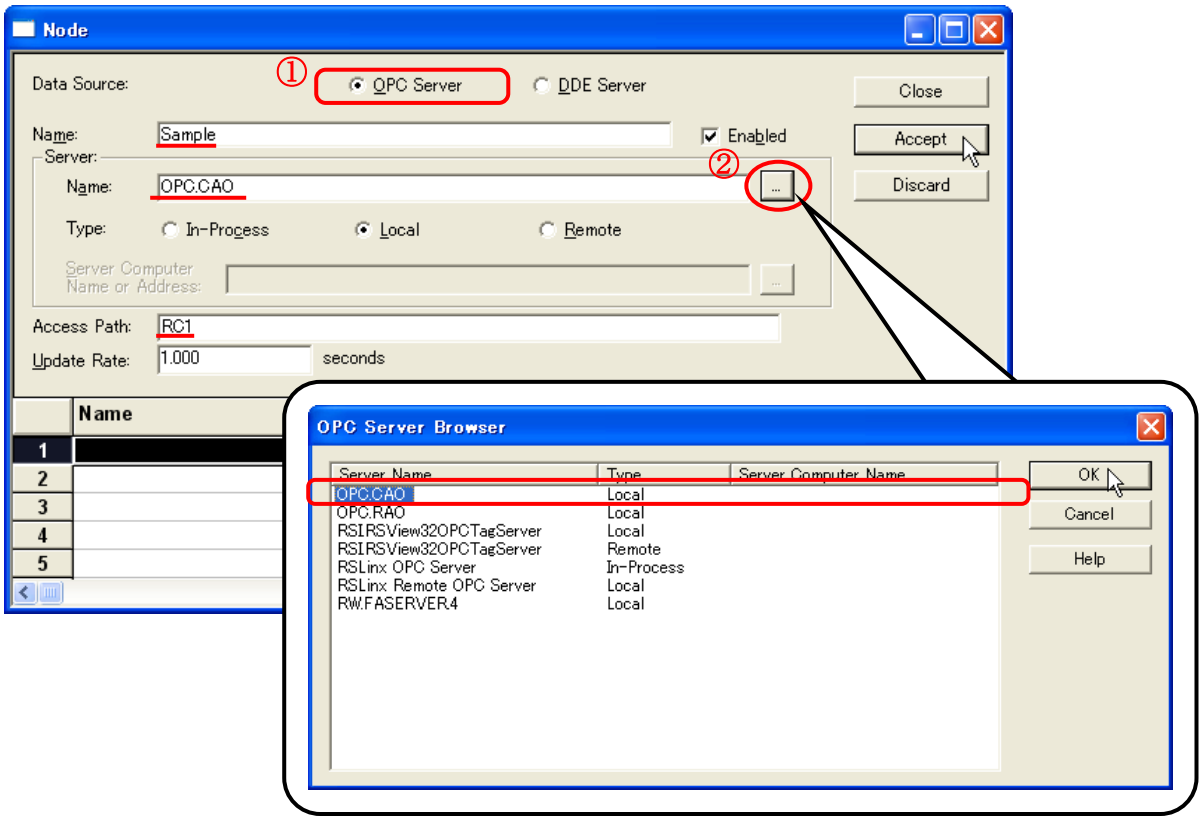



4. Double-click “System” to open, and then select “Node.”




5. Double-click “Node” to open “Node” window.

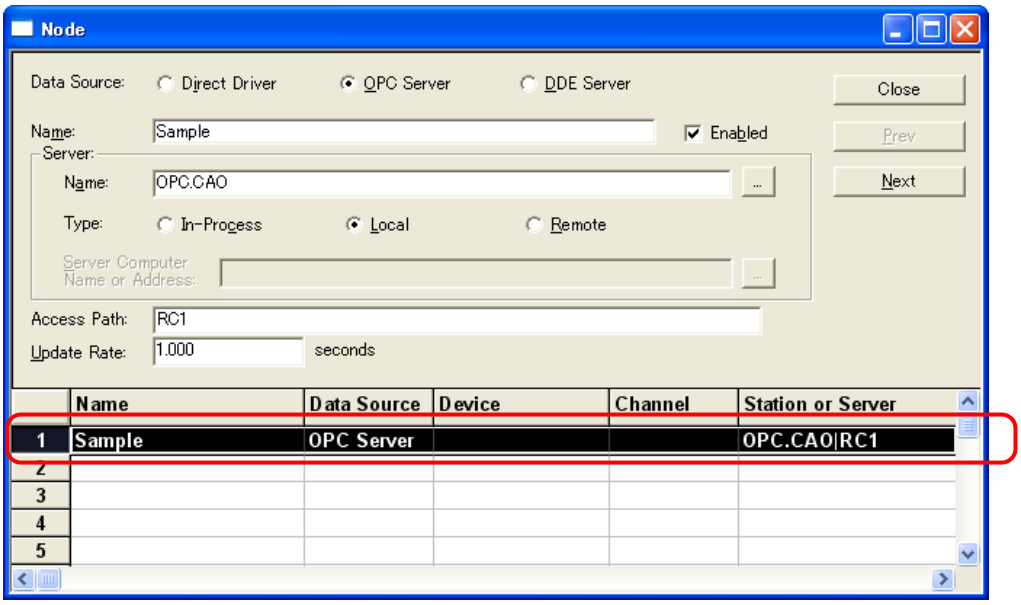
   Select ”OPC Server” for “Data Source”.



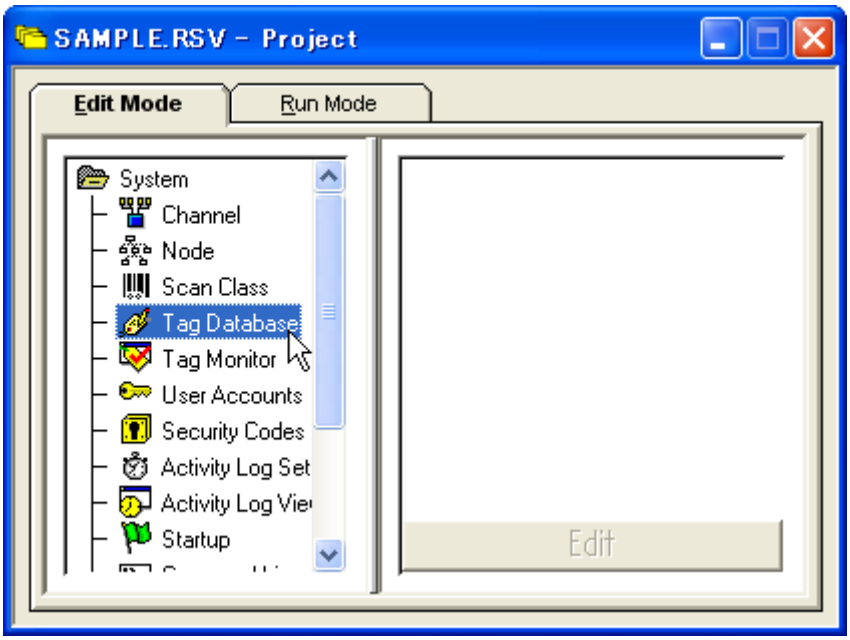

In “Server” area, click […] button next to “Name” field to select OPC Server.

In OPC Server Browser window, select OPC.CAO, and then click “OK”.

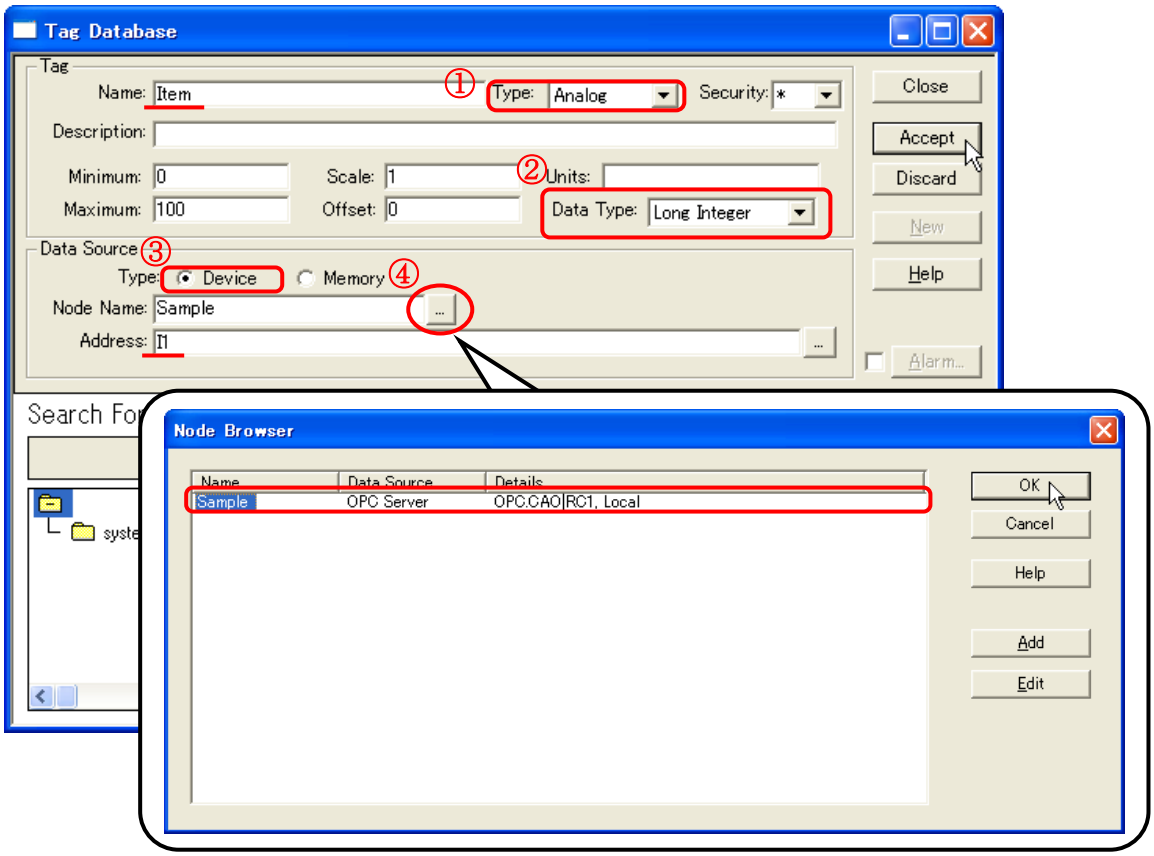
After setup “Node” window, click “Accept”, and then “Close.” The picture below is after clicking “Accept.”




6. On the Edit Mode tab, from the System folder, double click “Tag Database.”

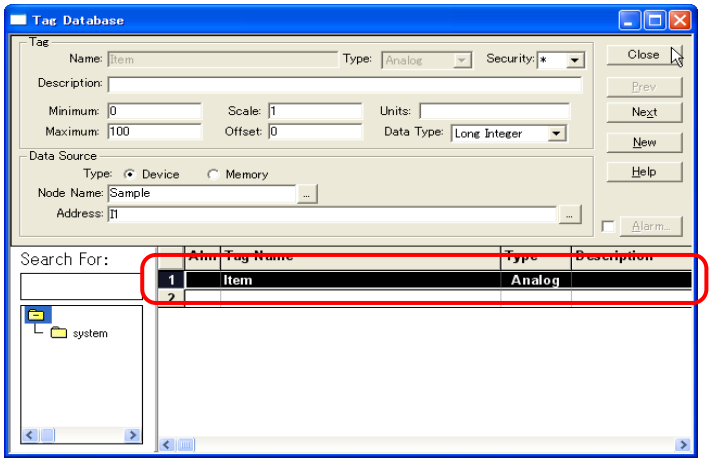



7. “Tag Database” window is displayed. On the Tag pane, enter a Tag name, select “Analog” from the Type selection, and then select a data type from the Data Type selection. In this example, select “Long Integer” for the Data Type, because the target device variable type is “Integer.”

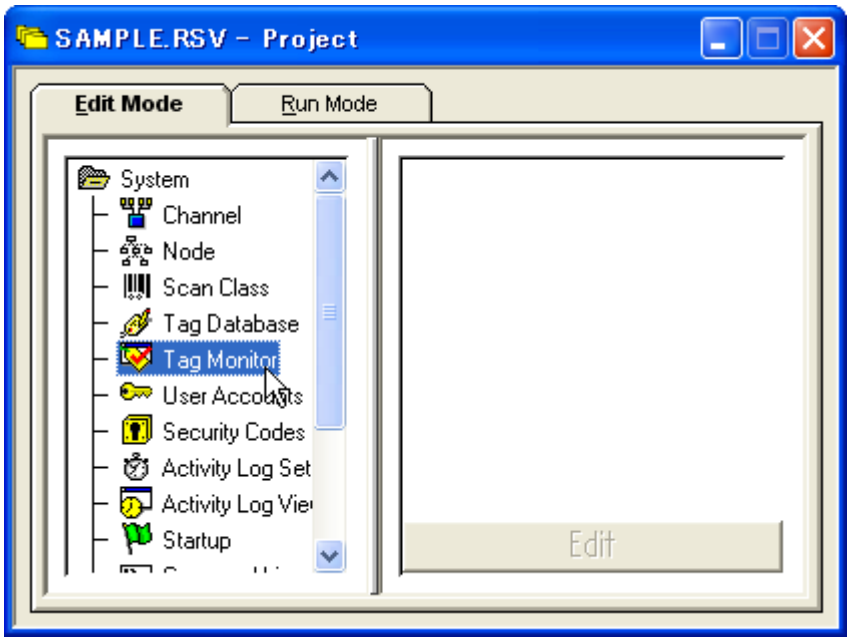



On the Data Source pane, select Device from the Type selection. Click the [...] button next to Node Name. "Node Browser" window is displayed. You will see the name of the node added in steps 4 and 5. Select the added node. On the Data Source pane, in Address textbox, enter a Variable Name of the Item that has been configured in CaoOPCConfig.

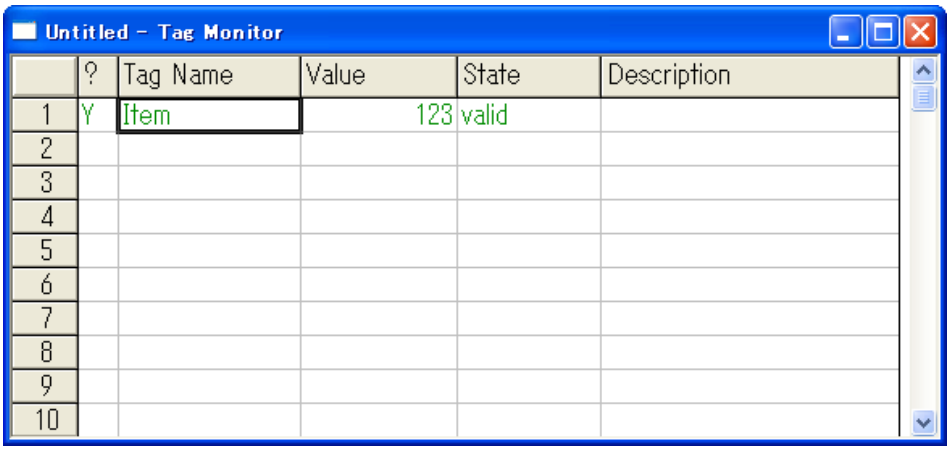
8. Click "Accept", and confirm that the Tag is added as shown below. Click "Close."




9. On the Edit Mode tab, from the System folder, double-click "Tag Monitor."




10. "Untitled - Tag Monitor" window is displayed. Put the cursor on "Tag Name", and then enter "Item". If the software is correctly communicating, the device variable value configured in CaoOPCConfig will be displayed in a few seconds.




The above example only monitors "Tag" data though, you can also utilize the "Tag" data for other purposes, such as "Graphic". For details, please refer to the RSView32 manual.