



DDE OPC Server 2.x Quick Start

APPLICATIONS NOTE

January 2003

Description: Quick Start for configuring and connecting to DDE OPC Server 2.x.

OS Requirement: The operating system required is Win XP/2000/NT/95/98/Me.

General Requirement:

The DDE OPC Server allows you to configure OPC Tags which acquire process data from DDE Servers. DDE is Dynamic Data Exchange which was used in the beginning of Windows era in order to allow inter process communications between various windows programs.

Capabilities:

- OPC Server acts as a DDE client in respect to the communications with a DDE Server.
- OPC Clients can connect to DDE links without even configuring the OPC DDE Server.
- Supports OPC DA Specification v1.01a and v2.0
- Configuration Export/Import CSV (comma separated variable format) for bulk editing tag lists in for instance Text Editors or MS-EXCEL.
- OPC tags can be scaled and have ranges
- Online configuration

Use the DDE OPC Server

To use the DDE OPC Server, the following steps have to be completed.

1. First install the OPC DDE Server. You do not need to configure it at all.
2. Start MS-Excel as your DDE Server.
3. Copy a DDE-Link to the Windows clipboard. In Excel you would select a cell in your spreadsheet and select **Edit, Copy** from the menu.
4. Start your OPC Client, for instance **GraphWorX32** and place a process point on your display.
5. Click on **OPC Tags...** and use the tag browser to browse to your DDE OPC Server as shown in figure 1.
6. The **Data** folder contains a **LINK** item which automatically provides you the correct OPC Tag when you click on it.
7. You will see a tag like **ICONICS.DDEOPCServer.1\Excel|Sheet1!R2C1**
8. Click **OK** to confirm your selection.
9. Start **Runtime!**

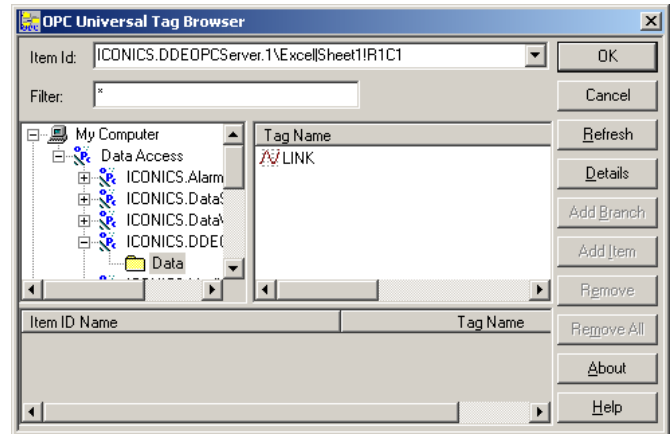


Fig.1 OPC Tag Browser shows available DDE link.

You could configure more OPC Tags if you like. The syntax of the tag is

ICONICS.DDEOPCServer.1\ddeServer|ddeTopic!ddeItem

Alias Names for the DDE links

You could also configure the DDE OPC Server and give the DDE links meaningful names. The next example demonstrates how you could configure a **Temperature** and **Pressure** tag

1. Start the **OPC DDE Configurator**.
2. Select **File, New** from the menu.
3. Select the **File, Save As** and specify **myDDE.dde** as the name for your configuration file.

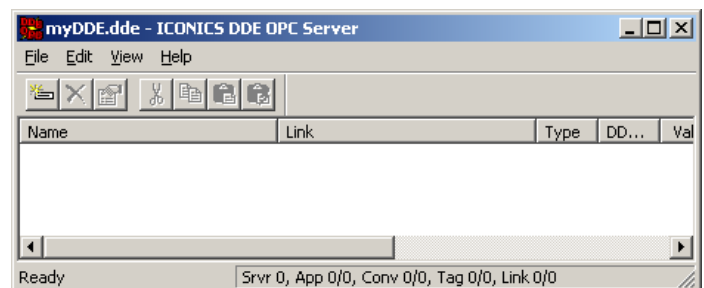


Fig.2. OPC DDE Configurator

4. Select **Edit, New...** from the menu.
 - a. Specify the name **Temperature**
 - b. Specify the Link **Excel|Sheet1!R1C1**
 - c. Specify the data type **Float**
 - d. Click **OK**



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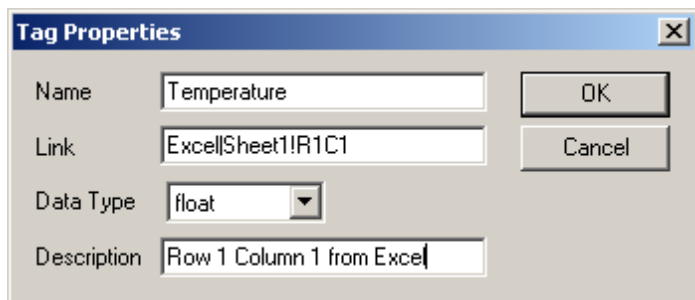


Fig.3. Temperature tag settings

5. Let's make another tag available. Select **Edit, New...** from the menu.
 - a. Specify the name **Pressure**
 - b. Specify the Link **Excel|Sheet1!R1C2**
 - c. Specify the data type **Float**
 - d. Click **OK**
6. Select **File, Save**
7. Select **View, Monitor** to monitor the process values.

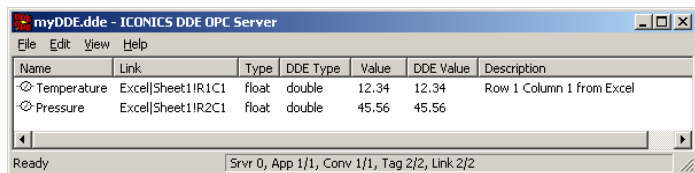


Fig. 4. Monitoring live process data

8. Select **File, Exit**
9. Select **File, Save** from the menu

OPC Clients can now browse to the OPC Server and access the values. Below the OPC Tag Browser is shown which allows you to select the OPC Tags.

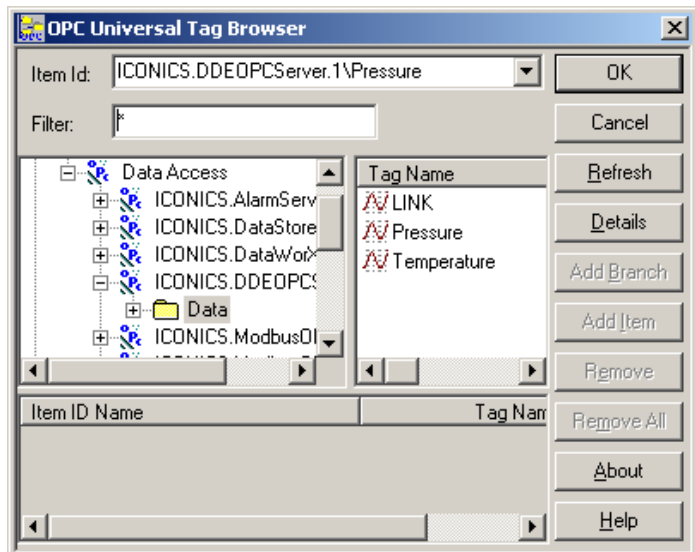


Fig. 5. Tag Browser shows alias names for the DDE links.