DSDATA SERVER OVERVIEW

PC-DSDATA

The DSData Server allows you to use many standard Windows software packages to quickly and easily exchange data with your *Direct*LOGIC PLC. In the past, if you wanted to use a personal computer to access PLC data, you either had to purchase an HMI package or spend many hours learning the PLC communications protocol. With the DSData Server, you can now use packages such as Excel or Visual Basic as a "window" to the PLC for either control or data acquisition. The DSData Server also provides the powerful feature of Object linking and embedding for Process Control (OPC). The DSData Server works with all of our PLC product families (DL05, DL06, DL105, DL205, DL305 and DL405.)

Features

- OPC Server: fully OPC compliant
- Windows 9x/2000/XP/NT4 user interface features
- Sub-topic support
- Event logging
- NickName support
- System items
- 32-Bit communication server

New for DSData version 4.0

Version 4.0 adds support for the following new PLCs:

- D0-06xx, where xx is model type
- D2-260 CPU

Software upgrades

PC-DSDATA-UPG

Any release that contains major feature enhancements will be subject to the normal upgrade charge in effect at that time.

Note: The upgrade will only update any packages that are already installed on your system.

Read data from the PLC directly into a spreadsheet cell

Standard spreadsheet graphs are automatically updated with real time PLC data

Create "Buttons" to write data to the PLC.

Write you own mini reports that are automatically updated with real time PLC data!

Excel spreadsheet

Spreadsheet asks:

What's in V2000?

DDE Command sent

DDE information returns

DSData Server

I'll ask the PLC!

PLC protocol

PLC protocol

PLC

You need V2000?

V2000=0000 0000 0001 0100 (decimal 20)

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OPC operation

OPC consists of a standard set of interfaces, properties, and methods for use in process control and automation applications. It is based on Microsoft's OLE (Active X), Component Object Model (COM and Distributed Component Object Model (DCOM). These technologies define how individual software components can interact and share data.

The DSData Server provides a link or bridge between your OPC Client (HMI, etc.) and your PLC(s). Use the DSData Server tools to build a communications link to the PLC. Once configured, the DSData Server runs like any other Windows application as it handles the requests to exchange data with the PLC.

DSData server with Visual Basic

The DSData Server and the Professional Edition of Visual Basic for Windows (3.0 or higher) is a great combination for building a more graphical approach for data acquisition or control. Visual Basic allows you to create screens with graphic symbols, such as slider bars, gauges, buttons, flashing text, etc. There are standard shapes available that can be modified to allow more complex graphic symbols to be created.

You can use the DDE commands to tie these objects directly to the PLC data using the following methods:

- Use the commands in a Properties box
- Use the commands in a subroutine

Use with spreadsheets

Many popular spreadsheet packages support OPC/DDE. You can either read data from the PLC or write data to the PLC by using OPC/DDE commands. There are primarily two ways that you can use these commands in a spreadsheet:

- Embed the commands in a Formula (read only)
- Embed the commands in a Macro (read or write)

Spreadsheet formulas are probably the easiest and fastest way to read data. You simply enter a cell formula with the proper OPC/DDE syntax and the data update begins. This is often called a 'hot link' because no manual action is required to initiate the data exchange. You can even tie the formulas to bar charts, etc., to create your own graphic display.

Macros provide additional flexibility since you can use them to read or write data. Also, many packages even allow you to create buttons and other objects that can be tied to a macro. You can then click on the button to trigger the read or write operation.
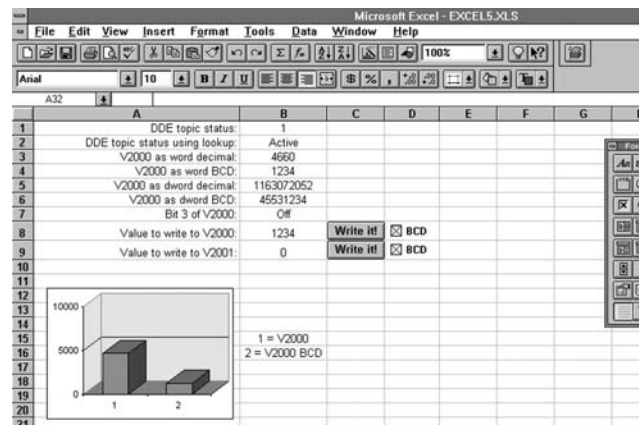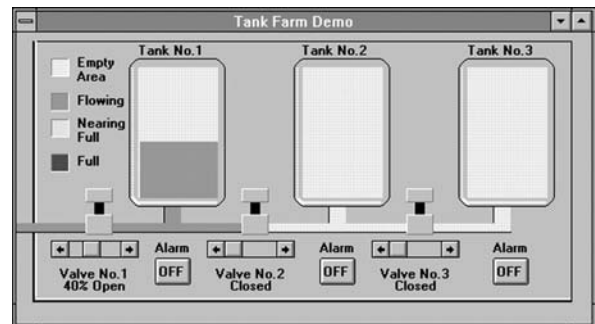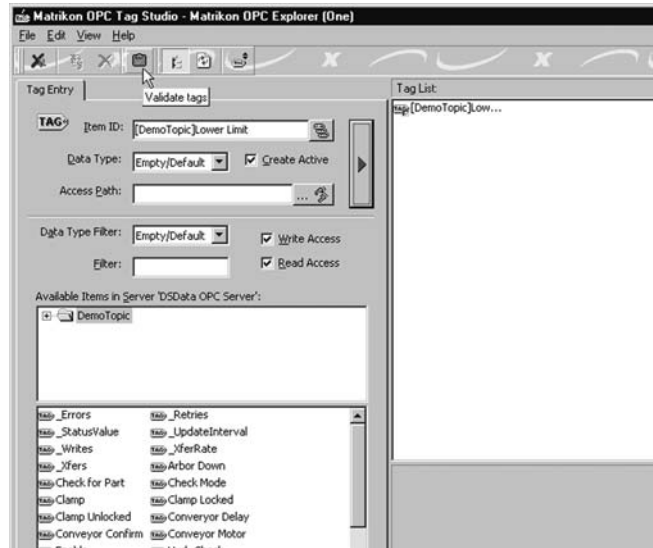
1-800-633-0405

Example Formula
=DSData|DemoTopic!'V2000:B'

Example Macro

WriteDataBtn_Click Macro

```
Sub     WriteDataBrn_Click( )
        Channel = DDEInitiate
        ("DSData", "DemoTopic")
        Set Data = Cells (8.2)
        DDEPoke Channel,  "V2000", Data
        DDETerminate Channel
End Sub
```