

**Description:** Guide to using ICONICS DDE OPC Server on a network

**OS Requirement:** Win 2000 Pro/Server, XP Pro, Server 2003

**General Requirement:** Two computers on the same domain or workgroup logged in using the same user. Your DDE client machine should have the ICONICS DDE OPC Server installed.

## Introduction

The Dynamic Data Exchange (DDE) OPC Server allows you to configure OPC Tags which acquire process data from DDE Servers. DDE 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

This document will walk you through the steps of setting up your DDE OPC Server to work within your network. For information on how to configure your local DDE server, please refer to the application note entitled *OPC Servers - Dynamic Data Exchange (DDE) OPC Server Quick Start*.

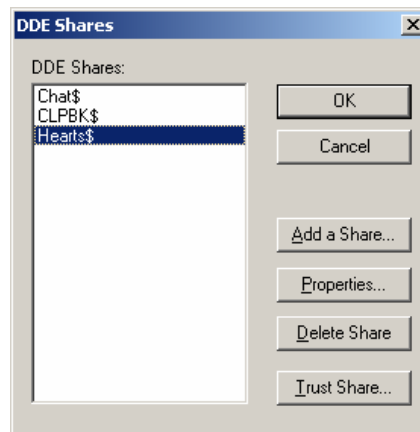
## Configuring DDEShare

1. You must configure DDESHARE on the DDE server machine to use DDE on the network.  
  
**NOTE:** You may have to enable and run the Network DDE and the Network DDE DSDM services in the services manager before you begin.
2. Go to Start → Run and type in “DDESHARE” (without quotes) and hit enter.
3. When the DDE Share window comes up, select Share → DDE Share...



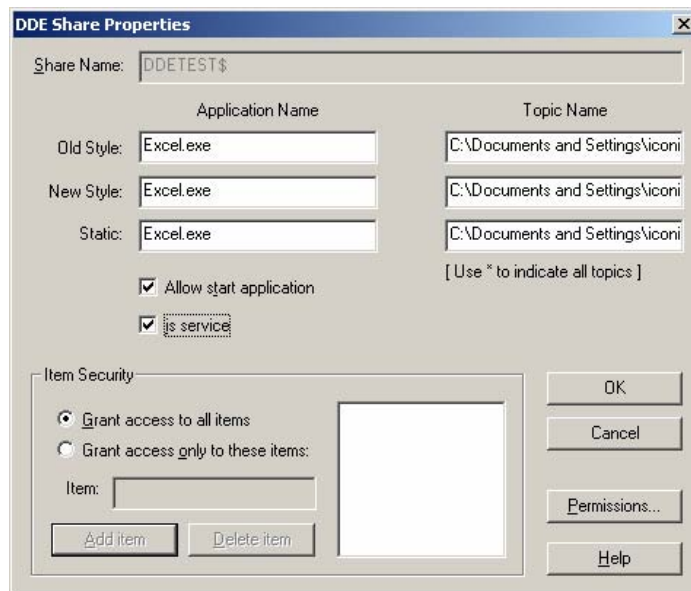
**Figure 1 - DDESHARE Configuration**

4. In the DDE Shares window, click on the “Add” button to add a new DDE Share.



**Figure 2 - Add DDE Share**

5. Give the DDE Share a name and connect to the MS Excel worksheet that you have created for your DDE Server. Your finished configuration should look similar to Figure 3.



**Figure 3 - DDE Share Properties**

**NOTE:** Share Name generally ends in a dollar sign (\$), but it’s not required.

**NOTE:** The Share Name in this example is “DDETEST\$”, the application is “Excel.exe”, and the Topic Name is “C:\[Book1]Sheet1”, you should change these according to your own preferences and settings.

6. Click on the “Permissions...” button and give Full Control Permission to Everyone in the Permissions window.

# OPC Servers – Dynamic Data Exchange (DDE) Server in a Network



APPLICATIONS NOTE

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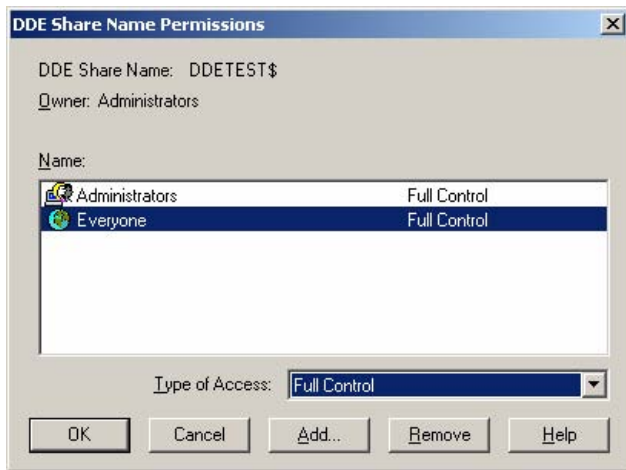


Figure 4 - DDE Share Name Permissions

- Click on “OK” until you are back in the DDE Share window.
- Highlight DDETEST\$ if it is not already highlighted, and click on the “Trust Share...” button.
- In the Trusted Share Properties window, check the options “Start Application Enable” and “Initiate to Application Enable”.

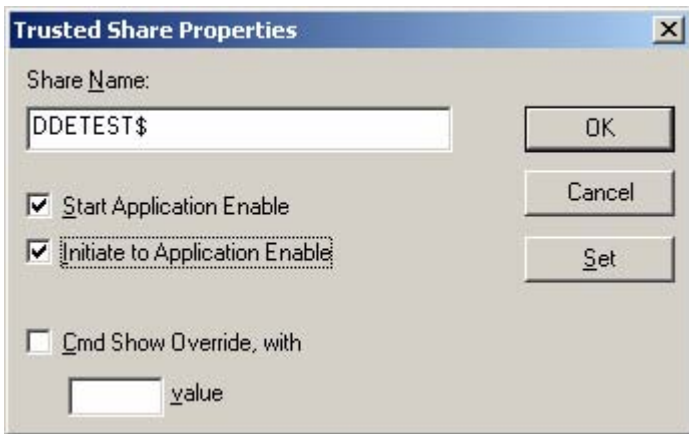


Figure 5 - Trusted Share Properties

- Click “OK” in the Trusted Share Properties and DDE Shares window.
- You can exit the DDE Share window if you like.

## Configuring DDE Client

- Open your DDE Server configurator by going to Start → Programs → ICONICS DDEOPC Server → DDEOPC Server
- Click on the New Tag  button to create a new tag.

- Give the tag a name and enter the link. The link should take the form “\\<Node>\NDDE\$|<DDEShare>!<Item>” where Node is the name of your DDE server computer.

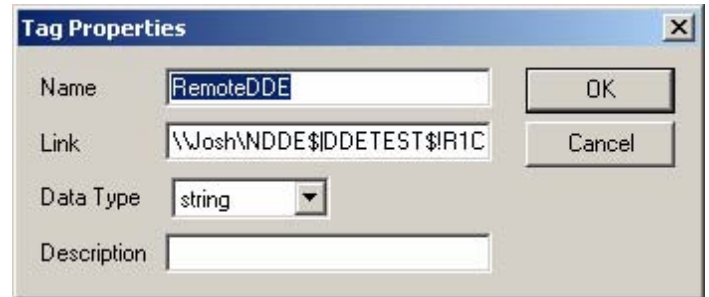


Figure 6 - Configuring Remote DDE Tag

- After you are done configuring your tag, select View → Monitor to see the value of the tag.
- Save the changes in the DDE OPC server. You can now use the unified data browser to look for the RemoteDDE tag.

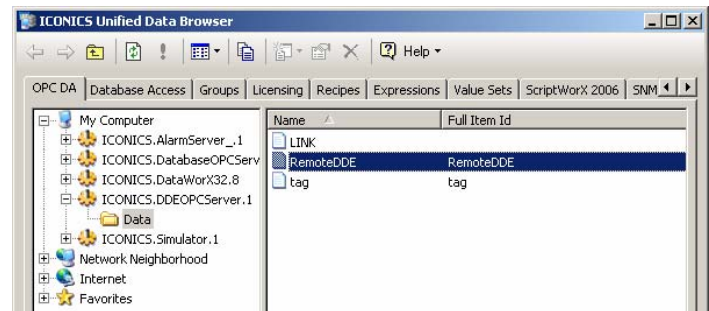


Figure 7 - RemoteDDE Tag in Unified Data Browser

## Workgroups v. Domains

Your computer may be in a domain or work group depending on your preferences. However, if you are using computers in a workgroup, you will be asked to login to the server machine in order to connect to DDE data if you are not logged in as the same user with the same password on the client machine. This log in is not required if you are using computers in the same domain or if you are logged into both the client and server machines using the same user with the same password.