I. Introduction

The OPC Specification is a non-proprietary technical specification that defines a set of standard interfaces based upon Microsoft’s OLE/COM technology. The application of the OPC standard interface makes possible interoperability between automation/control applications, field systems/devices and business/office applications.

Most of the SCADA/HMI packages provide an OPC Interface. Making it possible to exchange data between different software packages, since they provide OPC Interface (Client and/or Server). InduSoft Web Studio provides both OPC Client and OPC Server modules compatible with OPC specification v1.0a and v2.0. Furthermore, it allows you to exchange data between InduSoft and any other OPC compliant system running in the same station (using COM) or in a remote station (using DCOM), if you have a TCP/IP connection between the stations. Moreover, InduSoft provides OPC Interface for each runtime version under Microsoft platform: Windows NT/2000 and Windows CE v3.00.

Tips: Additional information about OPC can be found in the web site www.opcfoundation.com.

The aim of this technical note is to describe, step-by-step, how to set up an OPC Interface between InduSoft Web Studio (OPC Server) and InTouch (OPC Client).

Note: This document was written based on InduSoft Web Studio v4.4+SP2 and InTouch v7.1, both running under Windows NT v4.0+SP6 operating system. Newer versions of any component should keep compatibility but the screen shots and the configuration interfaces can change. Further information regarding the configuration of each component can be found in the manufacturer documentation.
II. Configuration

1. Install InduSoft Web Studio an InTouch FactorySuite in a Windows NT/2000 station;

   Note: InTouch requires that the OPC Client module be installed separately, as an add-on module.

2. Open InduSoft Web Studio and create a new application (or open an existent one). Selection the Project – Status menu, select the Studio Scada OPC Server runtime task from the Execution Tasks tab, press the Startup... button and set it as Automatic. This way, whenever the application is started, the OPC Server module is started automatically.

3. Press the Run Application icon from InduSoft Web Studio Execution Control toolbar to start the OPC Server module.

   Tips: Notice that the OPC Server icon appear in the Windows tray bar (besides the system clock)
4. Start Wonderware’s OPCLink.

5. Click on the **Configure Topics** icon to open the Topic Definition window.

6. Click the **New...** button to add a new topic and configure it as follows:

   - **Topic Name**: This has to be a unique name by which this tag will be identified (e.g.: MyConnection).
   - **Node Name**: It is the name of the remote node the OPC Server is running on. This is left blank if the server is running on the same station.
   - **OPC Server Name**: This must be set to **Studio.Scada.OPC** to connect to InduSoft Web Studio OPC Server.
   - **OPC Path**: this is left blank when using the InduSoft Web Studio OPC Server.
Note: Don't worry that nothing will appear in the OPC path window. It must be kept in blank.

7. Once you have defined your topic you can test it using Wonderware's WWClient. Open WWClient and select Create for the Connections menu and configure it as follows:

- **Node**: It is only used if the OPC Server is running on another node on the Network.
- **Application**: Must be set to OPCLink.
- **Topic**: Will be the topic name you defined in OPCLink (e.g.: MyConnection)
- **Connection Type**: It will be DDE

Then hit the create button.
8. Next, select **Connect** from the **Connections** menu and select the **Item** menu option.

Here you will need to select one of your connections and define the item it is connected to. In this example, the connection is linked to the **BlinkFast** tag in InduSoft’s OPC Server. Please note that an “i” has to be placed in front of the tag name to define it as an integer. (“R” for a real, “S” for a string and so on). You must also define the tag type in the second drop box; in this case it is set to Integer. Once this is done click the **Register** and then the **Advise** button to view the data from the OPC server.

**Note:** Once WWClient is able to exchange data with InduSoft OPC Server, the rest of InTouch will also be able to exchange data with InduSoft Web Studio.

### III. Map of Revisions

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<th>Revision</th>
<th>Author</th>
<th>Date</th>
<th>Comments</th>
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<tr>
<td>0</td>
<td>Fabio Terezinho</td>
<td>Sep/28/2001</td>
<td>Initial revision</td>
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<tr>
<td>A</td>
<td>Bryan Morgan</td>
<td>Dec/11/2001</td>
<td>Removed unnecessary steps. The same Topic from InTouch OPC Link can be shared for several items.</td>
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