### OPC ToolWorX - OPC Server Redistributables

### Applications note

August 2004



**Description:** This document describes which files are necessary or optional for distribution with your OPC server. Many optional utilities are available to include in your OPC server installation, which will make the OPC server a much more user-friendly product.

**OS Requirement:** NT, 2000, XP, or Server 2003 **General Requirement:** Requires OPC ToolWorX v.3.1, and an OPC server that has been built in Visual Studio and is ready for distribution. You will also need a program such as InstallShield DevStudio v9.0 to create the installation for your OPC Server.

### **OPC Server Files**

For out of process or NT service OPC servers you must distribute **Server Runtime Name>.exe**. This file is the Runtime server for the OPC Server. It will be located in the **Runtime>/Release** directory for the OPC Server, after it has been compiled.

For in-process servers you must distribute **Server Runtime Name>InprocServer.dll.** This file is the Runtime server for the OPC Server. This file must be registered on the target system. It will be located in the **Runtime>/Release** directory for the OPC Server, after it has been compiled.

To support configuration of the server you must distribute: **Server Configurator Name>.exe.** This file will be located in the **Configurator>/Release** directory for the OPC Server, after it has been compiled.

It is recommended that a default database file be distributed with the OPC server: **<Database>.mdb** 

If the configuration application is not present then a preconfigured database file should be included with the OPC server. Otherwise, a blank configuration database can be provided and it can be left to the user to configure the database. This file may be found in the **CommonFiles** folder for the OPC Server.

# System Files

You will want to ensure that the end-user's computer is updated with recent copies of the following Microsoft system files: MFC42.dll, ATL.dll, MSVCRT.dll, and MSVCIRT.dll. These files should all be located in the <Windows>/System32 directory. The first two files must be registered. These files are available in the **Redistributables** subdirectory in the OPC ToolWorX 3.1 installation

## **OPC** Foundation Files

The following set of files should be updated to the latest that are available from the OPC Foundation: **OPCDAAuto.dll**, **OPCEnum.exe**, **opcproxy.dll**, **opccomn ps.dll**, and

**opc\_aeps.dll**. These files should be placed in the <Windows>/System32 directory.

The easiest and best way to update these files is to download the latest OPC Core Components Merge Module (.msm file) or Redistributable from the OPC website at:

http://www.opc foundation.org/WebUI/Downloads.aspx?CN=Core%20 Components

## XML-DA Support

If the server is designed to support XML-DA, then you must distribute:

#### ICONICS. Server Runtime Name > DA.asmx.

This file will be placed inside of a Virtual Directory so that it can be accessed over the Internet.

You will also need to install the **XML-DA Wrapper** with the OPC Server. The XML-DA Wrapper is available as a Merge Module (.msm file) which you can incorporate into your OPC Server installation. It is also available as a stand-alone installation (Setup.exe). All of these installation files are available in the **Redistributables** subdirectory in the OPC ToolWorX 3.1 installation

Please see the instructions for XML-DA for details about setting up XML-DA communications.

## **Communications Tools**

The DrDCOM and DataSpy utilities should be distributed with the OPC Server as useful tools for communications.

To redistribute DataSpy you must include the file **DataSpy.exe**, which is included in the OPC ToolWorX 3.1 installation directory.

To redistribute DrDCOM you must include the file **DrDCOM.exe** which is included in the OPC ToolWorX 3.1 installation directory.

These files are located in: <Install Directory>\OPC ToolWorX 3.1

# TraceWorX32 Support

A very useful feature to include with your OPC Servers is TraceWorX32 support. If TraceWorX32 support is enabled in your OPC Server, then you must distribute **TraceWorX.dll** with the OPC Server.

In addition, you should include the HTML user interface, which allows users to configure their TraceWorX32 logging options. The files for the User Interface are located in:



<Install Directory>\OPC ToolWorX 3.1\ReleaseTrace\User
Interface

## **OPC Admin Utility**

The OPC Admin utility may be included with any 3.1 OPC Server by distributing the **OPCAdmin.exe** program found in the Tools subdirectory of the OPC ToolWorX installation.

In addition, an **OPCAdmin.cmd** shortcut file must be distributed with the Admin utility, because this file will tell the Admin utility which server to connect to. An OPCAdmin.cmd shortcut file can be generated with the OPC Server, but it must be dynamically generated to contain the appropriate path for each target system. Here is some example InstallShield InstallScript code that is used to generate this file in the Modbus 3.1 installation. In this example, the OPCAdmin.cmd file is installed as a blank file and modified by this function:

function CreateAdminLink()

NUMBER nvFileHandle;

STRING AdminPath, CmdTxt;

begin

OpenFileMode(FILE\_MODE\_APPEND);

OpenFile(nvFileHandle, INSTALLDIR, "OPCAdmin.cmd");

CmdTxt = "" + INSTALLDIR +'OPCAdmin.exe"

ICONICS.ModbusOPCDA3.Manager.1';

WriteLine(nvFileHandle, CmdTxt);

CloseFile(nvFileHandle);

end;

The shortcut file will be located in the OPCAdmin directory for servers generated by the OPC ToolWorX 3.1 wizards. Note that this file will not be generated if you did not choose this option in the wizard.

### Help Files

It is recommended that you distribute help files with your OPC Server to assist users. You may redistribute the help files that are found in the OPC ToolWorX 3.1 installation, including those for the utilities DataSpy, DrDCOM, TraceWorX, and XML-DA.