



Wonderware

Application Note

Wonderware's WWRSLinx I/O Server

This application note is designed to help configure Wonderware's *WWRSLinx I/O Server* for use with Equustek's DL products. Wonderware's WWRSLinx I/O Server is designed to work with Allan-Bradley's RSLinx software. In order to use WWRSLinx with Allan-Bradley's RSLinx, the version of Allan-Bradley's RSLinx must have OPC and DDE connectivity. **RSLinx LITE does not have OPC and DDE connectivity and will not work with WWRSLinx.**

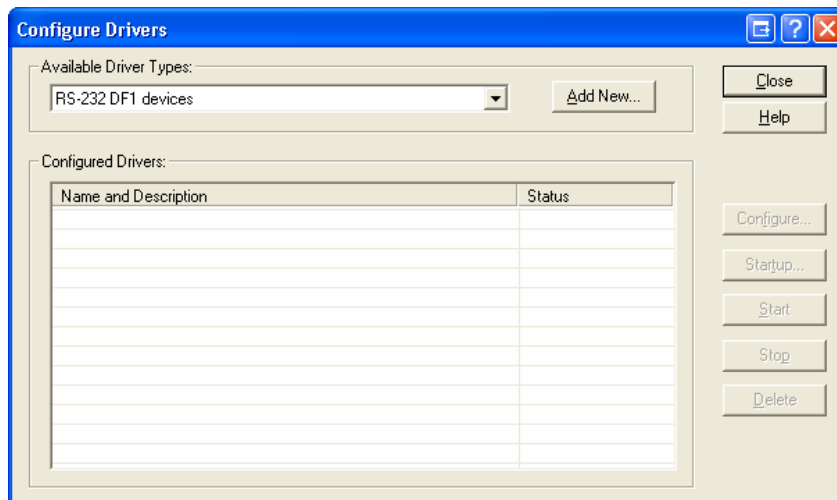
1 Configuring Allan-Bradley's RSLinx Software

Before using Wonderware's WWRSLinx software, Allan-Bradley's RSLinx software must be configured. The following sections are to help configure the communications driver, client application, and the DDE/OPC topic configuration.

1.1 The Communications Driver

The following steps are to help configure the communications driver needed to allow RSLinx to communicate with your DL product. Start up your RSLinx software before beginning the following steps.

1. From the top menu bar, select **Communications** and then choose **Configure Drivers**. The **Configure Drivers** window should appear as shown below.



- For the driver type, select **RS-232 DF1 devices** and then click **Add New**. A box should appear asking for the name you want to give to the driver. Type the name you want to give to your driver and click **OK**. The **Configure RS-232 DF1 Devices** window should appear as shown below.

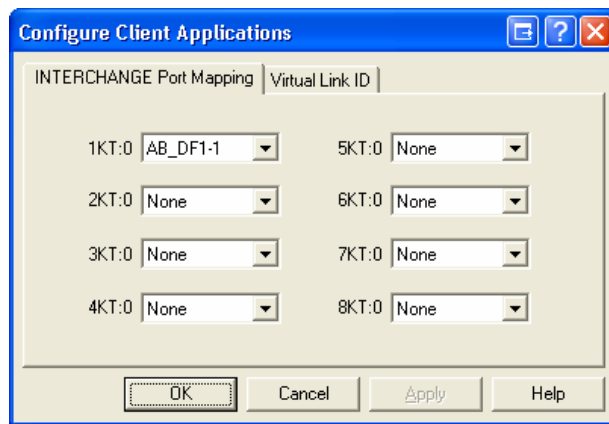
The screenshot shows a dialog box titled "Configure RS-232 DF1 Devices". The "Device Name" field contains "AB_DF1-1". The "Comm Port" dropdown is set to "COM1" and the "Device" dropdown is set to "1770-KF2/1785-KE/SCANpoi". The "Baud Rate" dropdown is set to "115200" and the "Station Number (Octal)" text box contains "77". The "Parity" dropdown is set to "None" and the "Error Checking" dropdown is set to "BCC". The "Stop Bits" dropdown is set to "1" and the "Protocol" dropdown is set to "Full Duplex". There is an "Auto-Configure" button and a "Use Modem Dialer" checkbox. At the bottom are "OK", "Cancel", "Delete", and "Help" buttons.

- In the **Configure RS-232 DF1 Devices** window, select the settings that you have configured your DL product to communicate with. *If using a DL4500 product, refer to the **DL4500 Hardware Quick Start** for setting up a virtual COM port using the ComPort Redirector.* Once all the settings are chosen, click **OK**. You should now see in the RSWho window the communication driver that was just set up. Put a checkmark beside Autobrowse at the top left corner of the window and all the nodes on your network should appear.

1.2 Client Application Configuration

This section deals with setting up the client applications so that Wonderware's WWRSLinx can communicate with Allan-Bradley's RSLinx software.

- From the top menu bar, select **Communications** and then choose **Configure Client Applications**. The **Configure Client Applications** window should appear as shown below.

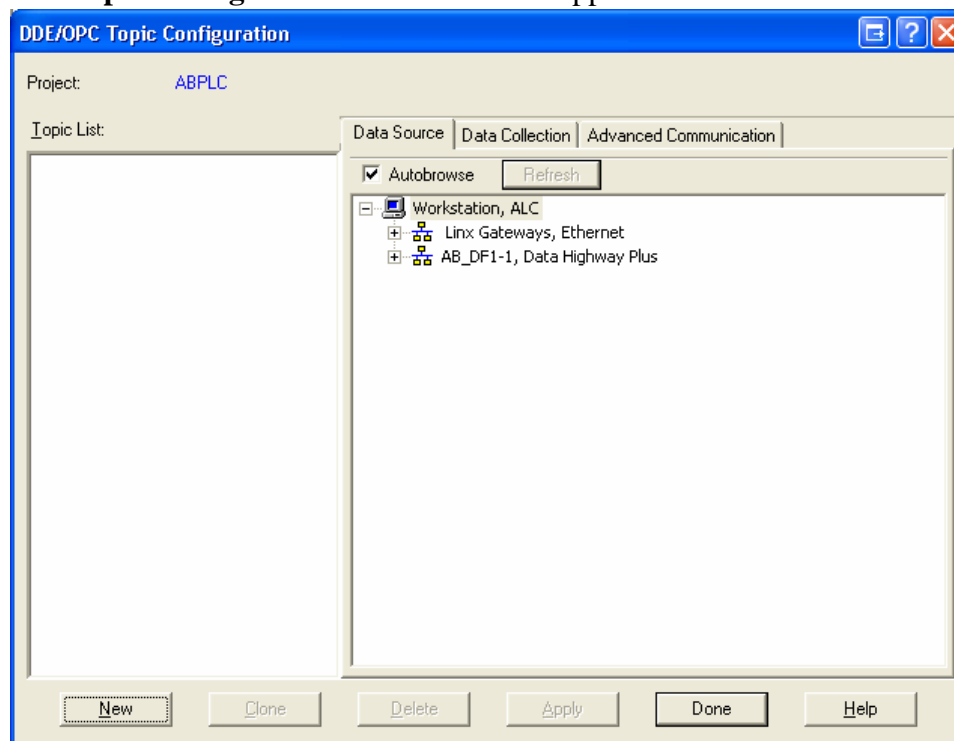


2. Under the **INTERCHANGE Port Mapping** tab, select the communications driver that was created in section 1.1. Once this has been selected, click the **OK** button.

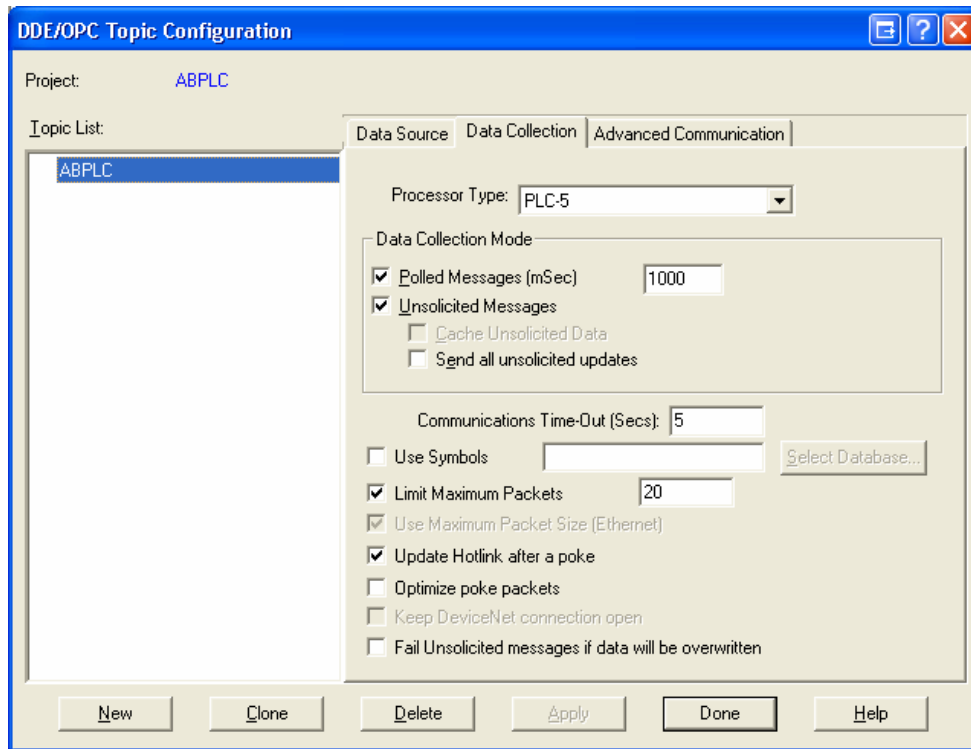
1.3 The DDE/OPC Topic setup

The following steps are to help set up the DDE/OPC Topic configuration for the use with Wonderware's WWRSLinx.

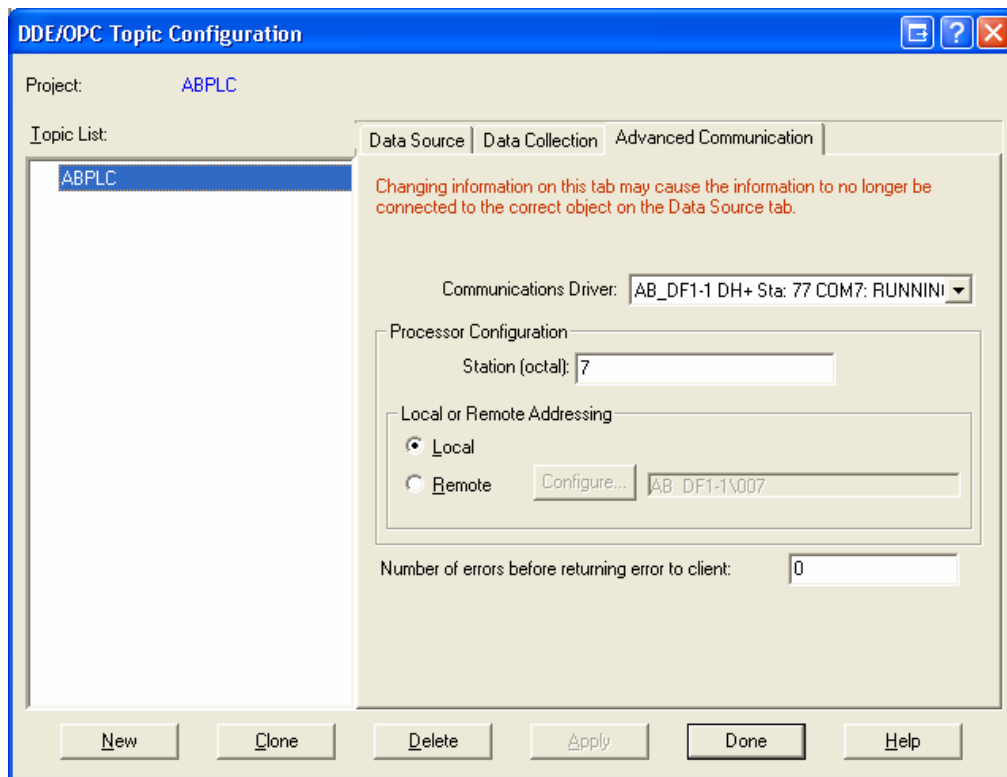
1. From the top menu bar, select **DDE/OPC** and then choose **Topic Configuration**. The **DDE/OPC Topic Configuration** window should appear as shown below.



- To add a new topic click the **New** button and enter the name of the topic (for example, *ABPLC*). With the new topic selected, click the **Data Collection** tab. You should see the following options.



- For the **Processor Type**, select the type of processor you want to connect to. After you have chosen the type of processor you want to connect to, make sure the following boxes are checked: Polled Messages, Unsolicited Messages, Limit Maximum Packets, and Update Hotlink after a poke. After all these settings are chosen, click **Apply**.
- After the **Data Collection** has been setup, select the Advanced **Communication** tab. You should see the following options.



- For the **Communications Driver**, select the communication driver that was created in section 1.1. Under **Processor Configuration**, select the station node address of the device (PLC, SLC, etc.) that you want to connect to. After these settings are chosen, click **Apply** and then click **Done**.

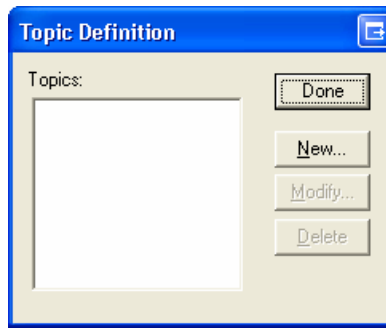
2 Configuring Wonderware's WWRSLinx Software

After Allan-Bradley's RSLinx has been configured, the next step is to configure Wonderware's software. The following sections are to help in configuring WWRSLinx.

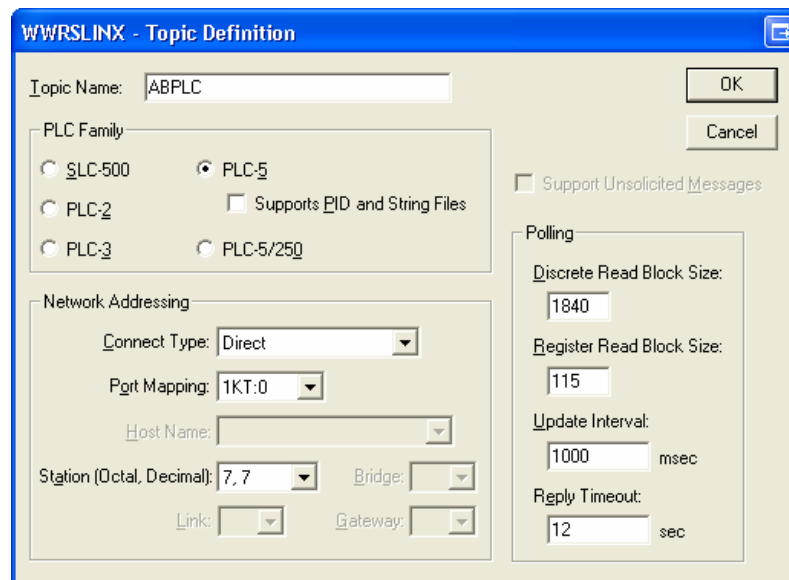
2.1 Setting up WWRSLinx

This section is to help in configuring WWRSLinx to be used with Allan-Bradley's RSLinx software. Start your WWRSLinx software before continuing with the following steps.

- From the top menu bar, select **Configure** and then choose **Topic Definition**. The **Topic Configuration** window should appear as shown below.



- To create a topic, click the **New** button. The **WWRSLINX – Topic Definition** window should appear as shown below.



- Once this window appears, fill in the following information. For the **Topic Name**, use the same name for the topic that was created in Allan-Bradley's RSLinx. Under the **PLC Family**, select the type of device you are connecting to. For the **Networking Addressing**, select **Direct** for the *Connect Type*, **1KT:0** for *Port Mapping*, and the station node address of the PLC for the *station*. After these settings are finished, click **OK**.

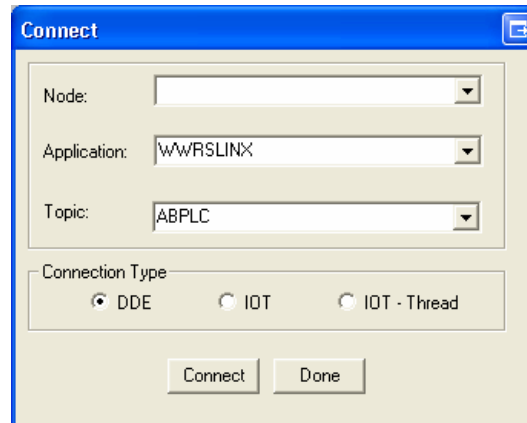
Note: WWRSLinx may adjust your **Polling** settings if they are outside the allowed limits.

- The **Topic Definition** window from step 1 will reappear with the new topic that was just created. Click the **Done** button to close this window. WWRSLinx is now setup.

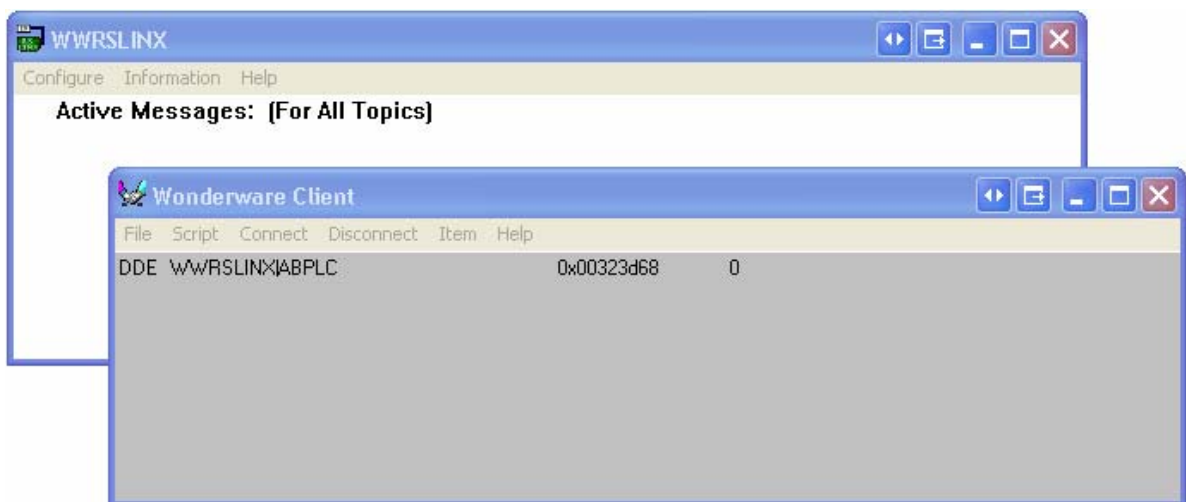
2.2 Setting up the WWClient software

This section is to help setup the WWClient to communicate with WWRSLinx. Open the WWClient before following the steps below.

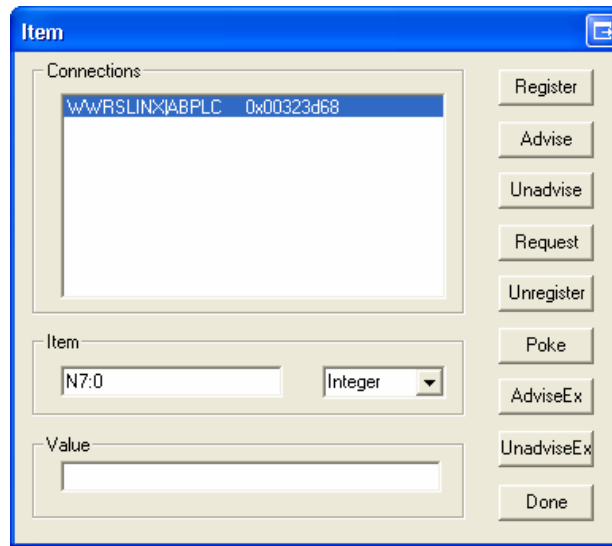
1. When the WWClient opens, the Wonderware *Logger* program opens as well. Minimize the Wonderware Logger, and click on the WWClient window to make it active.
2. From the top menu bar, click on **Connect**. The **Connect** window should appear as shown below.



3. On the **Connect** window, enter the following data. For the *Node*, make sure there is no value in the box, for the *Application*, enter **WWRSLINX**, for the *Topic*, enter the topic that was created in RSLinx, and for the *Connection Type*, select **DDE**. After these settings are entered, click **Connect**. You should see the following in the WWRSLinx and WWClient windows if you have connected successfully.



- To add an item, select Item from the top menu bar. The following window should appear.



- In the Item section, choose the item that you would like to add (for example, *N7:0*) and its type (integer, discrete, etc.).
- To add the item, click **Register** and then click **Advise**. The following should then appear in the WWRSLinx window and the WWClient window.

