Tech Note 270
Configuring the DAS ABCIP Server (v.1.0) to Work With DDE/SuiteLink

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This Tech Note describes the steps required to get the DAS ABCIP server to communicate with a ControlLogix processor via Ethernet.

In addition, a DDE/Suitelink connection will be established to confirm that the DAS ABCIP configuration that is created in Part I of this Tech Note is valid.

NOTE: The default settings for each dialog box are used throughout this Tech Note to simplify the configuration. This includes any names, which are automatically generated but can be changed at any time (Right-click/Rename).

It is recommended that you understand the various settings in the DAS ABCIP Server in order to optimize your configuration to best suit your system, since each system is unique.

Before You Get Started

The following steps are required before you get started:

- Download and install the DAS ABCIP I/O Server from the Wonderware ESupport site.
- Set up a ControlLogix plc and connect it to the Ethernet network (LAN).
- Confirm connectivity to the ControlLogix plc by pinging it from the Command Prompt: Ping <IP Address><ENTER>. You should get four successful replies.

Part I: Setting up the Connection to the ControlLogix Backplane.

1. Open up the Wonderware DASControlClient located in Start/Programs/Wonderware/DAServer. The following figure shows the DAS Control Client window within the Microsoft Management Console:
2. Highlight and expand the **XXX.DASABCIP.1** icon's tree view. It is located under the **Local Node** in the DAS Control Client Tree pane.

The **Configuration** entry appears:

![Configuration Entry](image)

**NOTE:** For more information about parameter settings, please refer to the online help files included with the DAS ABCIP Server.

3. Right-click **Configuration** and select **Add PORT_CIP Object**:
NOTE: See the ABCIP online documents for more information on configuration options.

4. Leave the default settings and click **Apply**.

5. Right-click **New_PORT_CIP_000** and select **Add ENB_CLX_Object**.

A new connection is created (see the following figure).

The connection in this example uses the Ethernet module on the ControlLogix backplane (**1756-ENET**).

NOTE: In order to connect to the ControlLogix processor, you must have configured an IP Address for the 1756-ENET module. The address is entered within the **Host Name** field as indicated in the following figure:

6. Right-click **New_ENB_CLX_000** and select **Add BACKPLANE_CLX_Object**.
The new Backplane **New_BACKPLANE_CLX_000** is shown in the following figure:

7. Right-click **New_BACKPLANE_CLX_000** and select **Add LOGIX5000_CLX_Object**.

The following figure shows the **New_LOGIX5000_CLX_000**:

The basic configuration of the communication to the ControlLogix Backplane is now complete.

**NOTE:** The following step is critical in order to setup your Suitelink/DDE connections.

8. Select the **Device Groups** tab.

9. You will see a blank tab field where you can add your Topics. Right-click anywhere within the **Device Groups** tab field to create a new topic.

When successfully created, the topic name will appear on the right-hand side of the DASControlClient Tree Pane.
In the following figure, the topic created is called **Logix1**:

10. Highlight **XXX.DASABCIP.1**. You will be prompted to save the configuration.

11. Click **Yes**.

12. Right-click **XXX.DASABCIP.1** and select **Configure As Service/Auto Service**:

13. The server icon should now have an x symbol next to it (see the previous figure).
14. Right-click **XXX.DASABCIP.1** and select **Activate Server**.

You should now see a **Check** symbol next to the server icon. You now have a diagnostic entry in order to check the activity of the DAS Server.

Part II: Testing a Suitelink/DDE Connection Using WWClient

**Create a DDE/Suitelink Connection to the DAS Server**

1. From wwClient, click **Connections/Create**.

2. Enter the information shown in the following figure:

   ![Create Connection](image)

   - **Node**: localhost
   - **Application**: dssabcip
   - **Topic**: Logix1
   - **Connection Type**: DDE

3. If this is a local connection, select **DDE**. If connecting over the network, select **IOT**.

4. Click **Create**, then **Done**.
Add an Item in wwClient

1. Click **AdviseEx** after adding a valid item.

![Item window](image)

2. Click **Done**.

You should see the following screen showing a Good connection to ABCIP, and an item showing Good quality (0x00c0):

![Screen showing Good connection](image)
3. Verify the active topic/item by drilling down to the **Diagnostics** entry within the DASControlClient Tree pane.

4. Highlight the **Device Group** icon:

![Diagram showing DASControlClient interface with Device Group highlighted and Logix1 active item in the right-hand pane.]

You will see **Logix1** and one active item in the right-hand pane of the DASControlClient (see previous figure).

You are now finished setting up the DAS ABCIP server. In addition, you can configure your other DDE/Suitelink clients including InTouch.

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