

Troubleshooting DeltaV Connections

Overview

XLReporter supports connections to the DeltaV real-time and historical data sources. The following document details some of the common issues that can come about when utilizing these interfaces with XLReporter.

Common Issues

OPC Server Fails to Connect

When initially configuring the connection to DeltaV, click **Test Connection** to verify connectivity to the server.

If this fails, communication between the OPC server and an OPC client must be verified.

Real Time (OPC DA)

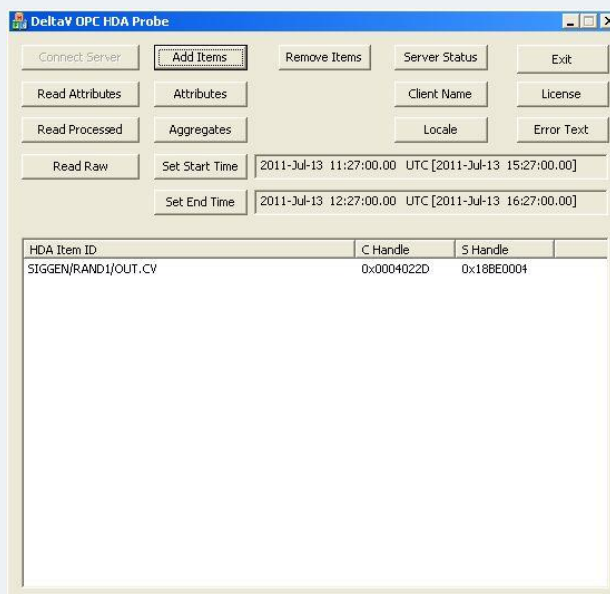
To verify connectivity to the Real-Time OPC DA, use DeltaV's **OPCWatchIt** application. To launch the application from the Windows Command prompt, enter `opcwatchit.exe`

- Verify **Server** is set to `OPC.DeltaV.1`. If it is not, click **Change Server** to select it.
- Click **Browse Path**, select a tag and click **OK**.
- Click **Read** to display real time values of the selected tag.

If OPCWatchIt does not respond as described, then contact the Emerson Automation Solutions Technical Support for help with troubleshooting as this issue is now outside of XLReporter.

History (OPC HDA)

To verify connectivity to the Historical OPC HDA, use the DeltaV's **HDAprobe.exe**. This application can be found in either `C:\DeltaV\bin` or `C:\DeltaV\DVUtilities` folders.



- Click **Connect Server** and select `DeltaV.OPCHDAsvr.1`.

If the connection fails it may be due to a lack of client licenses. Stop any application that may be accessing the historian server then attempt to connect again in **HDA Probe**. If connection is successful, click **License**. If **Licensed** is **No**, this means that only one client license is available.

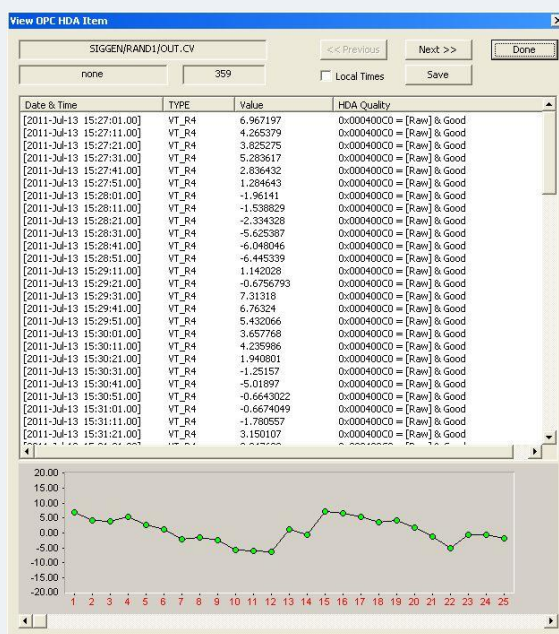
To verify data can be retrieved:

- Click **Connect Server** and select *DeltaV.OPCHDAsvr.1*.
- Click **Browse** to open the **OPC HDA Browse** window.
- Click **New Browser** to view a list of tags.
- Select a tag and click **OK**. That tag is now listed in the Add HDA Items window.
- Click **Add** to add the tag
- Click **Done** to return to the main DeltaV OPC **HDA Probe** window.

Now that a tag is selected, data can be read. Select the tag and click **Read Raw** to read the raw values recorded for the selected tag. This opens the **HDA Read Raw** window.

- Click **Set Start Time** and **Set End Time** to specify the time frame.
- By default, time is in UTC (universal time). Check **local** to convert to local time.
- Click **Read Raw**. If this is successful, **HR** displays Success.

To view the raw values, click **View Values**.



This opens the **View OPC HDA Item** window that displays the historical data for the tag selected as well as a graph. Click **Done** to close.

To retrieve processed values (e.g., averages, maximums, minimums, etc.) follow the steps above, but click **Read Processed** rather than **Read Raw**.

If the client does not respond as described, contact Emerson Automation Solutions Technical Support to troubleshoot and correct these issues.

Cannot Browse Tags

This can be caused by a communication issue between the server and XLReporter. As with the first common issue, communication between the OPC server and an OPC client must be verified.

Perform the steps detailed in the issue above. If the tags are not browsable in the sample clients, contact Emerson Automation Solutions Technical Support to troubleshoot this issue.

Data returned as ???, @@@, or

These symbols indicate an error in retrieving data.

??? - the quality of the value returned from the server is bad.

- the tag specified is not valid.

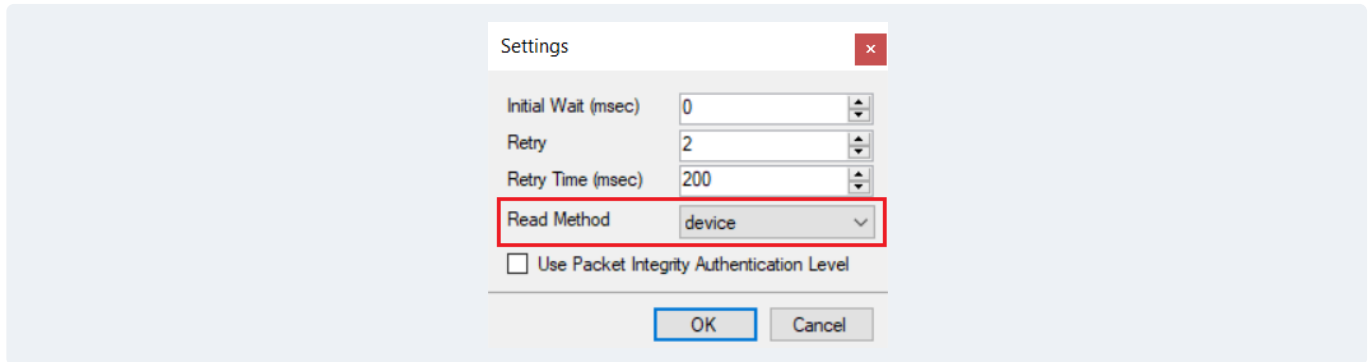
@@@ - the connection to the data server failed.

If the OPC value has bad quality, it will show in the sample client. Contact Emerson Automation Solutions Technical Support for assistance.

If the tag is not valid, attempt re-browsing to the tag. If the tag is not listed in either the XLReporter tag browser and the opcwatchit.exe browser (real-time) or HDAprobe.exe browser (history), contact Emerson Automation Solutions Technical Support for assistance.

If the tag is valid and returns a good quality value in **OPCWatchIt**, in **XLReporter's Project Explorer**, under the **Data** tab, open **Connections**. Modify the *DeltaV* connection.

Click **Settings**.



Make sure the **Read Method** is set to device.