

Using XLReporter with DeltaV Advanced Continuous Historian

Overview

XLReporter takes historical values from the Emerson Automation Solutions DeltaV Advanced Continuous Historian automatically to populate workbooks, periodically, via VBA or on event, without needing Excel. The award winning history engine of **XLReporter** can return either raw or calculated Industrial metrics directly to the reports.

Distribute the reports by email, FTP, file server and printers. Enable **XLReporter's** Web Portal and access reports from any device supporting a web browser such as a smart phone or tablet.

Setup DeltaV

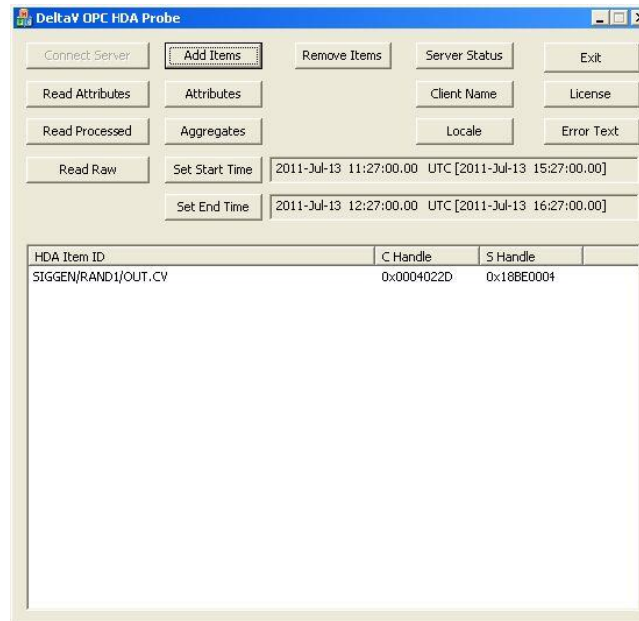
The DeltaV Advanced Continuous Historian requires the PI OPC Server to be installed on the Application Station in order for **XLReporter** to retrieve historical data. The PI OPC Server is available from OSIsoft (or Emerson retailer).

Prerequisites

Verify History Data

To verify history data is being collected use the HDAprobe application provided with DeltaV.

To run, browse to *C:\DeltaV\bin* or *C:\DeltaV\DVUtilities* and double-click **HDAprobe.exe**.

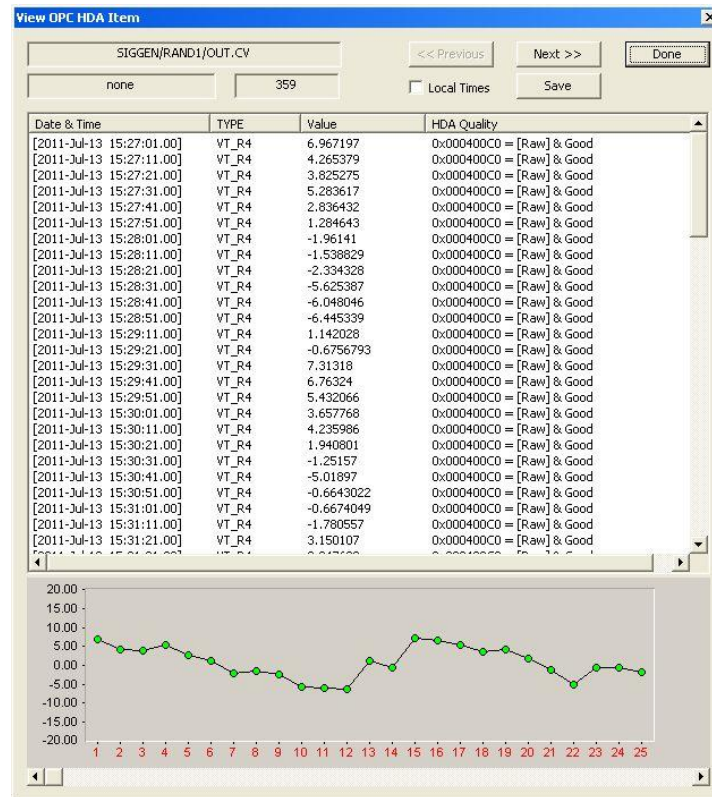


- Click **Connect Server** and select *OSI.HDA.1*.
- Click **Add Items**. This opens the **Add HDA Items** window.
- Click **Browse** to open the **OPC HDA Browse** window.
- Click **New Browser** to view a list of tags.
- Select a tag and click **OK**. That tag is now listed in the Add HDA Items window.
- 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 for it. 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.

Create a Project

From the **XLReporter Project Explorer** select **File, New** to start the **Project Wizard**. This will give step-by-step instructions on creating a project

Step 1

- Enter a **Project Name** and **Description** (optional).

The screenshot shows the 'New Project' dialog box with the following fields and options:

- Project Name:** XLR_Project
- Project Off Line
- Description:** Customer or Site name
- Project Location:** c:\XLRprojects

Buttons at the bottom: < Back, Next >, Finish, Cancel

Step 2

- Configure the data connector, click **Add**

The screenshot shows the 'New Project' dialog box with the following elements:

- Step 2 : Configure the Connectors (data sources) of the Project.**
- Buttons: + Add, Modify, X Delete, Catalog
- Table with columns: Name, Provider, Description
- Table content: *

Select **Emerson Automation Solutions, DeltaV Advanced Continuous Historian.**

The screenshot shows the 'DeltaV Advanced Continuous Historian' configuration dialog box with the following fields and options:

- Connector Name:** DeltaV_AdvHistorian
- Description:** (empty)
- Primary Server:**
 - Server Name:** OSI.HDA.1
 - Node:** local
 - Test Connection button
- Secondary Server:**
 - Server Name:** OSI.HDA.1
 - Node:** local
 - Test Connection button
- Buttons: OK, Cancel

The connector requires a Primary Server. Set the **Node** to *local* unless DeltaV is on a remote machine in which case the Node is selected from the dropdown list or entered manually as an IP address.

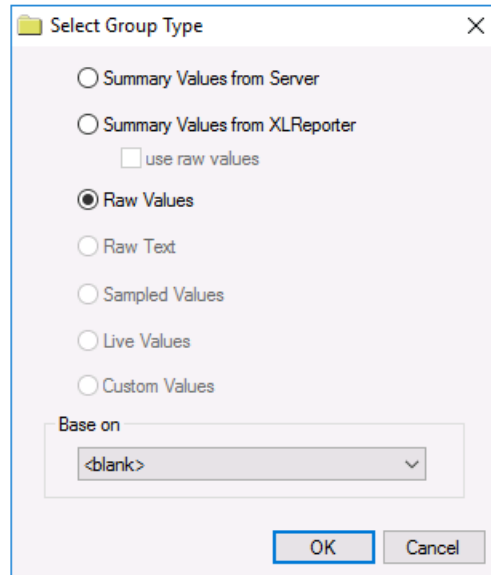
Remote Communication to DeltaV Advanced Continuous Historian

In order for XLReporter to communicate to DeltaV Advanced Continuous Historian, the workstation where XLReporter is installed must also have the OPC core components installed. To determine if the core components are installed verify the file `C:\Windows\SysWow64\OPCEnum.exe` (Windows 64 bit Editions) or `C:\Windows\System32\OPCEnum.exe` (Windows 32 bit Editions) exists on the computer.

If the components are not installed then they are provided in the tools folder of the installation or from www.opcfoundation.org.

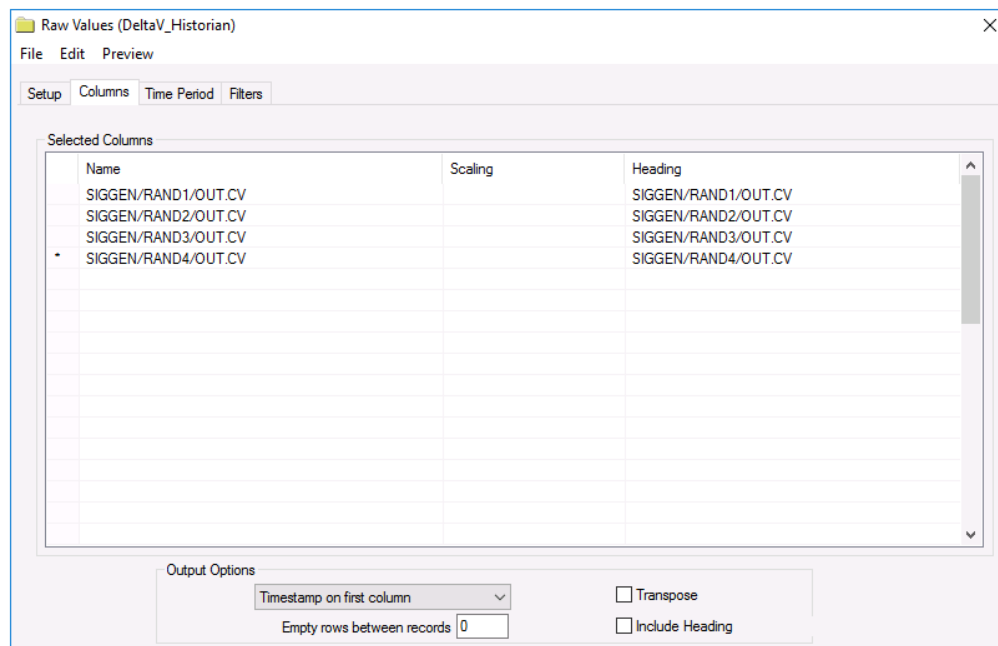
Verify Data Communication

To verify communication with DeltaV Advanced Continuous Historian, open the **Project Explorer** and select the **Tools** tab. Open **Connector Groups**. Select your DeltaV Advanced Continuous Historian connector and then select **Add**.



Set the **Group Type** to *Raw Values* and click **OK**.

Under the **Columns** tab:



- Select the first row under the **Name** column
- Click the browse pushbutton (...)
- In the Tag Browser expand **Online** and add **Items** from the lower left.
- Click **OK** to add these to the group.

To retrieve data, select **Preview**. In the **Preview** window, use the data picker to select a date and time with for which data has been logged. Click **Refresh** to view data. The first 60 records starting at the date and time specified should be displayed.