

## Using XLReporter with WinCC/PCS 7 History

### Overview

**XLReporter** takes historical values directly from the SIMATIC WinCC/PCS7 automatically to populate workbooks, periodically or on event, without needing Excel. The award-winning reporting software turns raw data into industrial metrics which are used for compliance, regulatory, improvements and operations.

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.

### Prerequisites

#### Verify License

In order to connect to the WinCC OPC-HDA server, a Siemens WinCC Connectivity Pack license must be installed on the machine where the server is running. Verify this license in the License Manager.

Note, the Connectivity Pack software does not need to be installed, just the license.

#### Verify Communication

Communication between the OPC server and an OPC client must be verified. **XLReporter** provides an independent OPC HDA client to verify connectivity and data retrieval from any OPC HDA server. This client is found on **XLReporter's** product CD under **Tools, OPC, OPC\_HDA**. It can also be downloaded from [www.SyTech.com](http://www.SyTech.com).

To run, double-click **SampleClientHDA.exe**.

Set **Server Name** to *OPCServerHDA.WinCC.1* (for WinCC) or *PCS7.OPCHDAServer.1* (for PCS7) and click **Connect**.

Click **Browse** to open the **Browse Dialog** window.

The easiest way to get a list of tags is to set **OPCHDA\_BROWSETYPE** to *OPCHDA\_FLAT*. Choose each tag to test by selecting it and clicking **Add**. When complete, click **Done** to return to the **HDA Client** window.

Click **Show Items** to display the selected tags in the left pane window. Click **Validate Items** then **Get Item Handles** to register these tags with the server.

Enter the **Start Time** and **End Time**. Note this is in UTC(Universal Time Clock) and click **Read Raw**. The raw values for each selected tag will appear on the left along with a timestamp and quality.

To read processed data, click **Aggregates**, select the appropriate aggregate (e.g., maximum, minimum, etc.) and click **Read Processed**. One minute calculations between the start and end time should appear for each selected tag.

If the client does not respond as described contact Siemens 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).

New Project

Step 1 : Specify the Project Name and its Location.

Project Name:

Project Off Line

Description:

Project Location:

< Back   Next >   Finish   Cancel

## Step 2

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

New Project

Step 2 : Configure the Connectors (data sources) of the Project.

**+ Add**   Modify   Delete   Catalog

Name	Provider	Description
*		

Select **Siemens SIMATIC, WinCC Historical Values** or **PCS7 Historical Values**.

WinCC Historical values

Connector Name:

Description:

Primary Server

Server Name:

Node:

Test Connection

Secondary Server

Server Name:

Node:

Test Connection

OK   Cancel

The connector requires a **Primary Server** which, by default has **Node** set to *local*.

## Remote Communication to WinCC/PCS7

If WinCC/PCS7 is installed on a workstation remote from the PLC then set the **Node** to an item in the dropdown list or enter an *IP address*.

The workstation must also have the OPC core components installed. To determine if the core components are installed verify the following file exists:

- 64 - bit OS C:\Windows\SysWow64\OPCEnum.exe
- 32 - bit OS C:\Windows\system32\OPCEnum.exe

If the components are not installed then they are provided in the tools folder of the installation or from [www.opcfoundation.org](http://www.opcfoundation.org).

## Verify Data Communication

**XLReporter** retrieves data from the **Data Connector** using a **History Group**.

From the **XLReporter Project Explorer** select, **Tools, Connector Groups**.

Select your *WinCC/PCS7 history* connector and then select **Add**.

- Set the **Type** *Raw Values* and click **OK**.

On the **Columns** tab of the group, select the tag **Name(s)**.

Select **Preview**, pick a *Start* date and click **Refresh**.