



## Reporting from Proficy Historian

**XLReporter** generates Excel based reports from GE Intelligent Platforms' Proficy Historian (formerly iHistorian) using historical logged data.

The purpose of this document is to describe how to setup Proficy Historian for **XLReporter**.

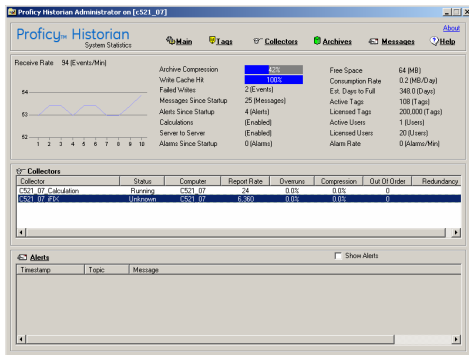
## Historical Data

With process data stored in a historian, the variety of reports that can be produced by **XLReporter** increases many fold.

In addition to raw values, informative metrics such as run times and statistics are obtained by simply selecting the tags and time frame of interest. e.g., hourly average, maximum and minimum for each hour of the day.

## Setting up Data Logging

Data logging in Proficy Historian is configured in the **Historian Administrator**. This is accessible from the Windows **Start** menu under the **Proficy Historian** program group.



Historian Administrator

Here, you can set up the data collectors and the tags to collect from your data sources.

## Client Configuration

**XLReporter** can be installed on any machine that is networked to the machine where Proficy Historian is installed.

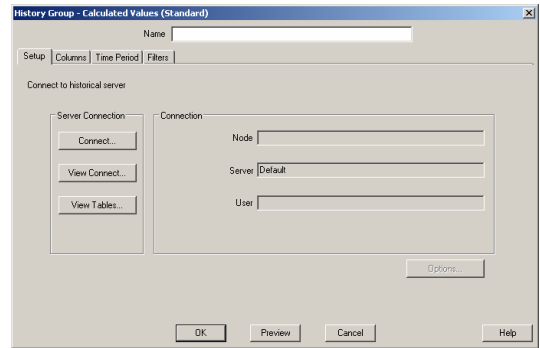
On the machine where **XLReporter** is installed, the Proficy Historian Client Tools must also be installed. These are available on the Proficy Historian installation CD.

As part of installing the client tools, Proficy Historian installs its OLE DB provider that gives third-party applications (like **XLReporter**) access to its data.

## Retrieving Historical Data

**XLReporter** accesses process values stored in the historian using a history group.

From **XLReporter's Project Explorer**, double click on **History Group** to list the groups already configured in the project. Select **New...** and select the type of group. The standard calculations are calculations performed by Proficy Historian whereas the advanced calculations are client-side calculated derived from samples retrieved from Proficy Historian.

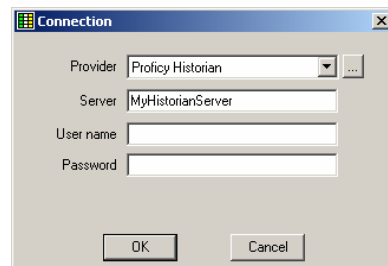


History Group Builder

After selecting the group type, the history group must be connected to the database. From the **Setup** tab, click **Connect...** to open the **Connection** window.

For **Provider**, select **Proficy Historian**.

For **Server**, specify the location where the Proficy Historian server resides. If this field is left blank, **XLReporter** attempts to connect to the default Proficy Historian server set in the **Historian Interactive SQL** program.



History Group Builder - Connection

If the server requires them, specify the **User Name** and **Password**. Click **OK** to return to the **Setup** tab.

On the **Columns** tab, select the tag **Name** and **Calculation** for each tag in the group.

On the **Time Period** tab, select the **Start Time**, **End Time** and **Interval** for the group. By default this is set to one hour intervals over the current day.

On the **Filters** tab specify any filtering to reduce the amount of data returned, or in the case of calculations, the amount of data factored into the calculations.

The **Preview** pushbutton at the bottom of the history group display can be pressed to preview the result of the current configuration.

Date	MIXER_ZONE1_TEMP	MIXER_ZONE2_TEMP	MIXER_SPEED	MIXER_RAMPRESSURE
3/30/2012	71.3938171396719	77.178934250896	33.1370187441928	64.6267203648885
3/30/2012 1:00:00 AM	78.1625200907389	49.0242134239604	36.6801065444946	73.1387713114421
3/30/2012 2:00:00 AM	63.688905264242	53.4562185841189	38.8911799694417	82.3010019938151
3/30/2012 3:00:00 AM	74.5661202748617	76.096496383444	50.6953378041985	88.9127839400331
3/30/2012 4:00:00 AM	78.5054092407227	65.9929971377055	54.0780683517456	90.6644298553467
3/30/2012 5:00:00 AM	72.0215874989828	63.6706188492635	53.4231788529585	86.944039788356
3/30/2012 6:00:00 AM	65.389522524902	53.5336832274882	59.6284706751906	79.0512536366781
3/30/2012 7:00:00 AM	71.5103735625876	74.3889140625	59.4726551055908	69.7432478588833
3/30/2012 8:00:00 AM	78.23282620493571	60.0908380580423	60.3853614717346	62.2715770085653
3/30/2012 9:00:00 AM	61.3350620484473	61.3104316389534	71.1325941721598	59.246310043335
3/30/2012 10:00:00 AM	70.8315608978271	56.1890864372253	77.1162390391032	61.7242600123088
3/30/2012 11:00:00 AM	77.7188284556071	56.4964746157328	77.6274737040202	68.8396073832194
3/30/2012 12:00:00 PM	72.8585931142171	62.9040375709534	73.2186347961426	78.1072875976563
3/30/2012 1:00:00 PM	60.1481925964356	60.267654800415	69.4468327565511	66.2893030820409
3/30/2012 2:00:00 PM	71.179417292277	76.4206968943278	70.5296145121256	90.5276397705078
3/30/2012 3:00:00 PM	77.832063802833	76.4182764889128	68.1329851786296	89.3417254130046
3/30/2012 4:00:00 PM	67.2665041605631	68.3305636723836	65.6417427698771	83.149344777425

*Preview*

Preview displays the data exactly the same way it will be written into the report.

## Alarm Data

The Proficy Historian can be configured to record alarm and event data. **XLReporter** can use alarm data in a report.

## Setting up Alarm Logging

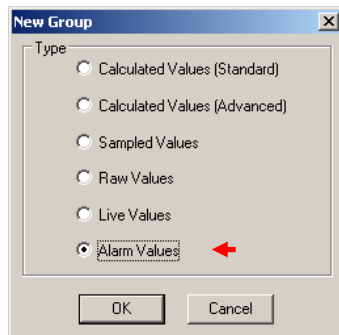
Proficy Historian collects alarm and event data from an OPC Alarm & Event compliant server, and stores it alongside Historian process data.

This configuration is done in the **Historian Administrator** that can be accessed from the **Proficy Historian** program group.

## Retrieving Alarm Data

Proficy Historian alarm data can be accessed by **XLReporter** by either a history group or a database group.

If a history group is used, be sure and select the group type to **Alarms**.



*History Group Builder for Alarms*

Under the **Setup** tab, connect to the database. The procedure is the same as that described in the historical data section.

Under the **Columns** tab, select any of the available Columns from the alarm database.

Under the **Filters** tab, specify filtering to limit the type or amount of alarms returned. You can filter based on any available column in the selected table/view. This includes filtering on time period, alarm type, tag name, etc.

Under the **Order** tab, specify the ordering of the returned alarm data.

The **Preview** pushbutton at the bottom of the database group display can be pressed to preview the result of the current configuration.

## Troubleshooting

If you are experiencing issues connecting to the Proficy Historian or retrieving data with **XLReporter**, you can use **Historian Interactive SQL** to validate the setup. This is provided as part of the Proficy Historian Client Tools.

To open, from the **Proficy History** program group, select **Historian Interactive SQL**. This opens the Historian Interactive SQL Login window.

To connect to the Proficy Historian, specify the server where the Historian resides and specify the User Name, Password and Domain if required. If connected successfully, the Historian Interactive SQL window appears.

A query can be entered into the window to retrieve data from the Historian. The query can be manually entered or can be copied from the Preview window of **XLReporter's History Group Builder** and pasted into this window.

Once the query is entered, select **View, Execute** to execute the query. If successful, the results appear beneath the query. Otherwise, an error message appears indicating what went wrong.

If the issues cannot be cleared up based on the error message, contact GE Intelligent Platforms technical support as this is demonstrating an issue with the Historian.