InTouch Setup

Reporting from InTouch

XLReporter generates Excel based reports from Wonderware's InTouch using current process values in the tag database, historical logs and alarm archives.

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

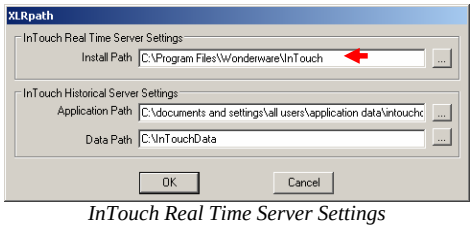
Process Values

XLReporter can take snapshots of the process values and add them to an existing report worksheet, periodically or on event. To prevent excessive build-up of information in a single worksheet, new workbooks and worksheets can be created automatically.

XLReporter Configuration

In order for **XLReporter** to retrieve process data from InTouch, the InTouch Window Viewer must be running and **XLReporter** must know where InTouch is installed.

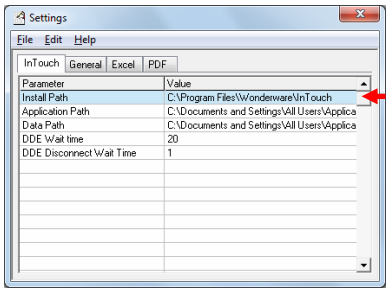
Whenever a new **XLReporter** project is configured and InTouch is set as the real time server, you are prompted for the InTouch installation path.



InTouch Real Time Server Settings

Under **InTouch Real Time Server Settings**, set **Install Path** to the directory where InTouch is installed.

In addition, this setting can be viewed and edited in the **XLReporter's Setting** program, under the **InTouch** tab.

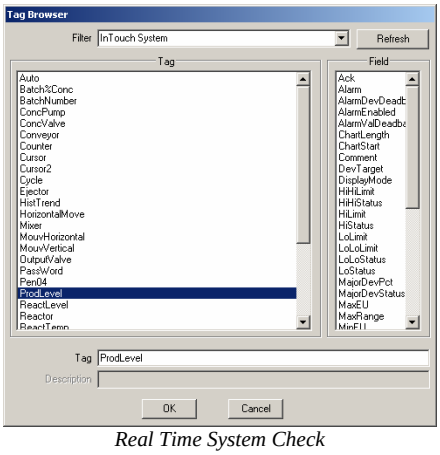


XLReporter Settings

Settings is accessible from **XLReporter's Project Explorer**.

Verifying the Real Time Connection

To verify that the InTouch real time interface is functional, open **XLReporter's Project Explorer**, from the **Tools** menu start the **System Check** application and select the **Real Time** tab. Select the top row under the Tag Name column and click the pushbutton named (…) to open the **Tag Bowser** window.



Real Time System Check

Select one or more tags and click **Read** to verify that they update with the current value.

Historical Data

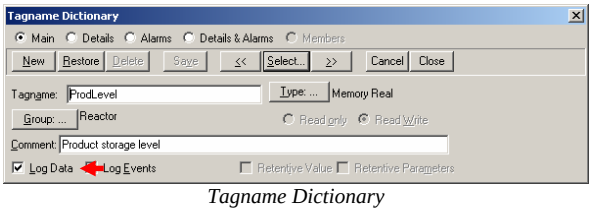
With process data stored in a historian, the variety of reports that can be produced by **XLReporter** increases many fold.

In addition to sample 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.

XLReporter performs time-weighted calculations on the historical data retrieved.

Setting up Data Logging

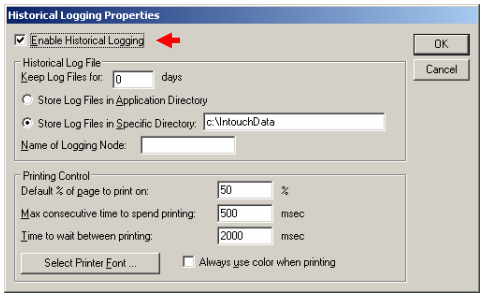
To set up data logging in InTouch, from the InTouch **Window Maker**, open the **Tagname Dictionary**.



Tagname Dictionary

For each tag you wish to log data historically, check the **Log Data** option.

In the InTouch **Window Maker**, expand **Configure** and select **Historical Logging** to open the **Historical Logging Properties** window.

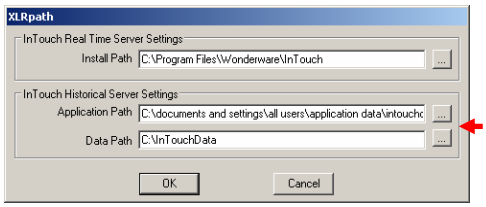


Historical Logging Properties

Check **Enable Historical Logging**. Once checked you can specify where the data log files are stored and how long to keep them. Historical log files have the file extension **.lgh*.

XLReporter Configuration

Whenever a new **XLReporter** project is configured and InTouch is set as the historical server, you are prompted for the InTouch application and data paths.



InTouch Historical Server Settings

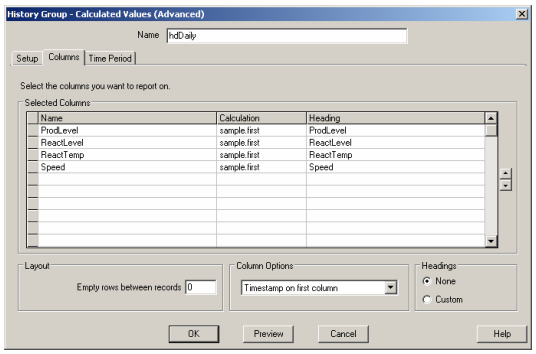
Under **InTouch Historical Server Settings**, set **Application Path** to the directory where the InTouch project is located. Set **Data Path** to where the InTouch history log files (**.lgh*) are being stored.

In addition, this setting can be viewed and edited in the **XLReporter's Settings** program, under the **InTouch** tab. **Settings** is accessible from **XLReporter's Project Explorer**.

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…**



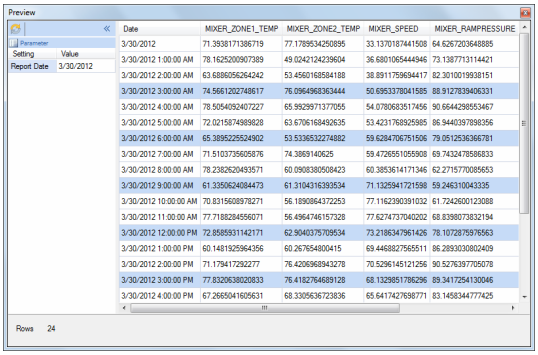
History Group Builder

On the **Setup** tab, you can specify the **Application Path** and **Data Path** if they are not the defaults set for the current project by clicking the **Connect** button.

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.

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



Preview

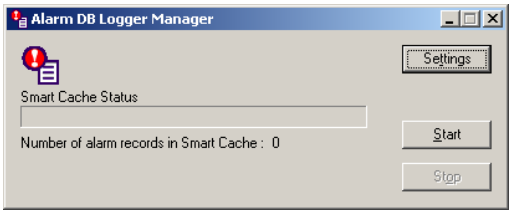
Preview displays the data exactly the same way it will be written into the report.

Alarm Data

Any tag in InTouch can be configured in the **Tagname Dictionary** to generate an alarm whenever it exceeds specified limits. The resulting alarms can be stored in a Microsoft SQL Server or MSDE database that **XLReporter** can use to retrieve alarm data for a report.

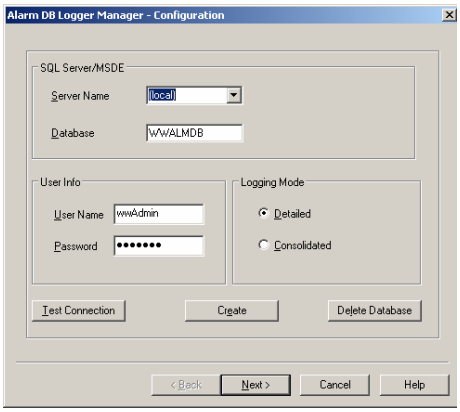
Setting up Alarm Logging

To set up InTouch alarm logging to a database, open the **Alarm DB Logger Manager**. This can be accessed from the Windows **Start** menu, in the **Wonderware** program group under **InTouch**.



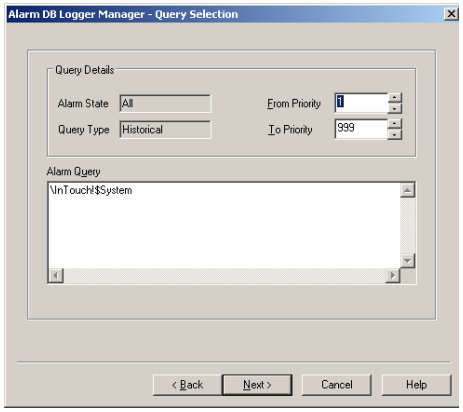
InTouch Alarm DB Logger Manager

Click **Settings** to configure alarm logging.



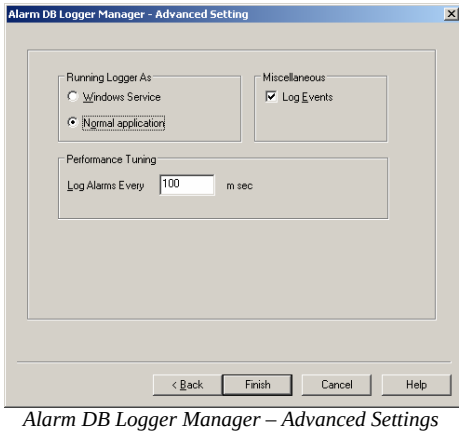
Alarm DB Logger Manager - Configuration

For **Configuration**, specify the Microsoft SQL Server or Microsoft Data Engine (MSDE) **Server Name** to log the alarms to together with the name of the **Database** to create, the **User Info** to connect to the server and the **Logging Mode**. When all is completed, click **Create** to create the database in the specified server. Click **Next**.



Alarm DB Logger Manager – Query Selection

For **Query Selection**, specify the priority of the alarms to log as well as the Alarm Query that determines which alarm groups to log. Each tag in the tagname dictionary can be assigned to an alarm group. Alarm groups can be viewed in the InTouch **Window Maker** under **Configure, Alarm Groups**. Click **Next**.



Alarm DB Logger Manager – Advanced Settings

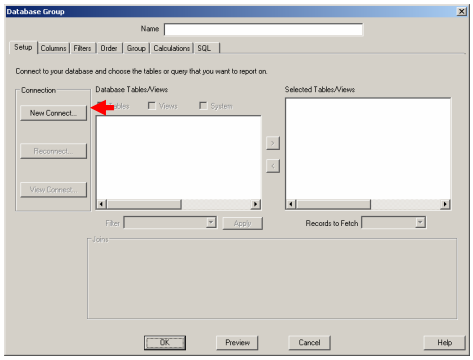
For **Advanced Settings**, specify how you want the logger to run and how the logger should collect alarms. Click **Finish** to return to the **Alarm DB Logger Manager**.

In the **Alarm DB Logger Manager**, click **Start** to start the logger. It will first export all the alarms stored in the **Smart Cache**, and then proceed to log each alarm to the database specified.

Retrieving Alarm Data

InTouch alarm data can be accessed by **XLReporter** by a database group.

From **XLReporter's Project Explorer**, double click on **Database Group** to list the groups already configured in the project. Select **New…** and select the type of group. The **Standard Query** returns data directly from the database whereas the **Cross Tab Query** cross-tabulates the data from the database.

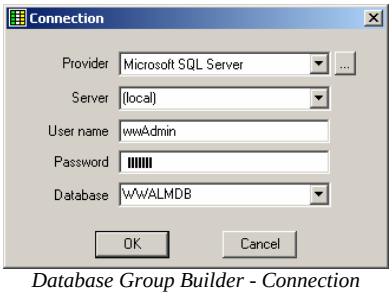


Database Group Builder

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

Set the **Provider** to **Microsoft SQL Server**.

For **Server** you can select the **Server Name** specified previously in the **Alarm DB Logger Manager**.

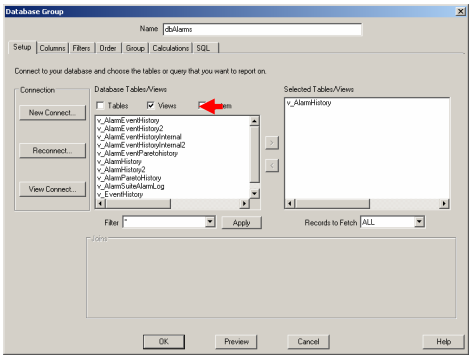


Database Group Builder - Connection

If the server requires a log on, enter a valid **User name** and **Password**.

Set **Database** to the name of the database you specified in the **Alarm DB Logger Manager**.

Click **OK** to return to the database group **Setup** tab.



Database Group Builder – Setup Tab

In the **Setup** tab, check **Views** to add the available views from the database to the list of **Database Tables/Views**. To retrieve alarm data, set **Selected Tables/View** to *v_AlarmHistory*.

Under the **Columns** tab, select the columns in the **v_AlarmHistory** view you wish to display on the report.

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

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

Under the **Calculations** tab, specify any client side summary calculations to bring into the report as part of retrieving the alarm data.

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