

Using XLReporter with GE Digital Alarms

Overview

XLReporter takes alarm values from the GE Historian 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.

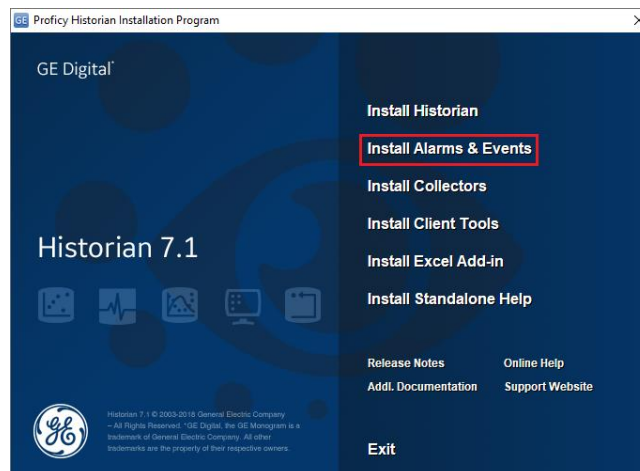
Complete reports are distributed automatically by email, FTP, file server and printers. With the Web Portal, reports are viewed or produced on-demand from any device supporting a web browser such as a mobile phone, tablet or desktop.

Set up Alarm Logging

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

Installation

To install, run **InstallLauncher.exe** as an **Run as Administrator**.



Select the **Install Alarm and Events** option in the historian installation wizard to install the **Historian Alarm Archiver** service.

During the **Maintenance** step of the installation,

- Set **Server Name** to the SQL Server instance where the alarms will be logged.
- Set **Database Name** to the name of the database in the SQL Server instance for alarms. If this database does not exist, it will be created along with the tables needed.
- Check the box for **Use Windows Authentication** to connect to SQL Server. The Windows user you are logged in as should have *sysadmin* permissions to the SQL server in order to create the database and the required tables.

Alarm Configuration

In order for Historian to log the alarms to the newly created database, a **Collector** must be pointed to the Alarm and Events **OPC Server PROGID**.

Open the **Historian Administrator** from the GE **Historian** program group.

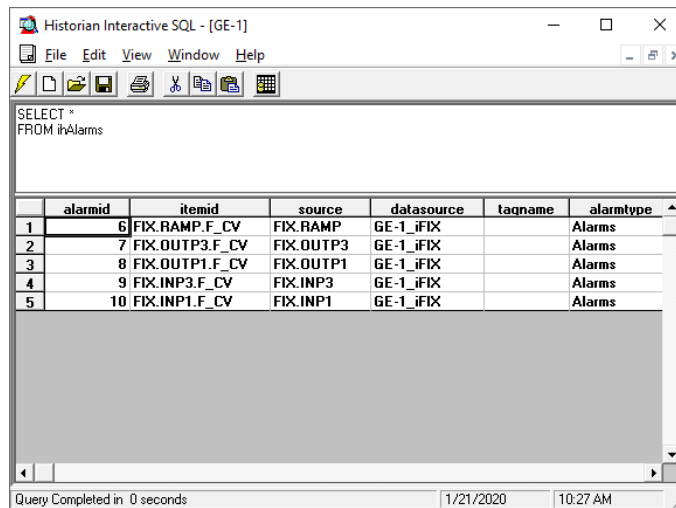
- Select **Collectors** at the top of the **Historian Administrator**.

- Configure the settings on the **General, Configuration, Advanced, and Redundancy** tabs to commence alarm logging

Verify the Alarm Data

To check that alarms are logging, open the **Historian Interactive SQL** utility from the Historian program group.

- Log into the Historian.



- At the top, enter the following query:

SELECT * FROM ihAlarms

- Click the  button to execute the query

The query should return any records logged to the ihAlarms table in the SQL Server database.

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:

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 **GE Digital, Historian Alarms**.

Historian Alarms

Connector Name: GE_Alarms

Description: GE-1 Alarm Data

Primary Database

Type: GE Historian

Data Source: GE-1

Table/Column

Table: ihAlarms

Date Column: Timestamp

Date includes Time

Time Column:

Settings

OK Cancel

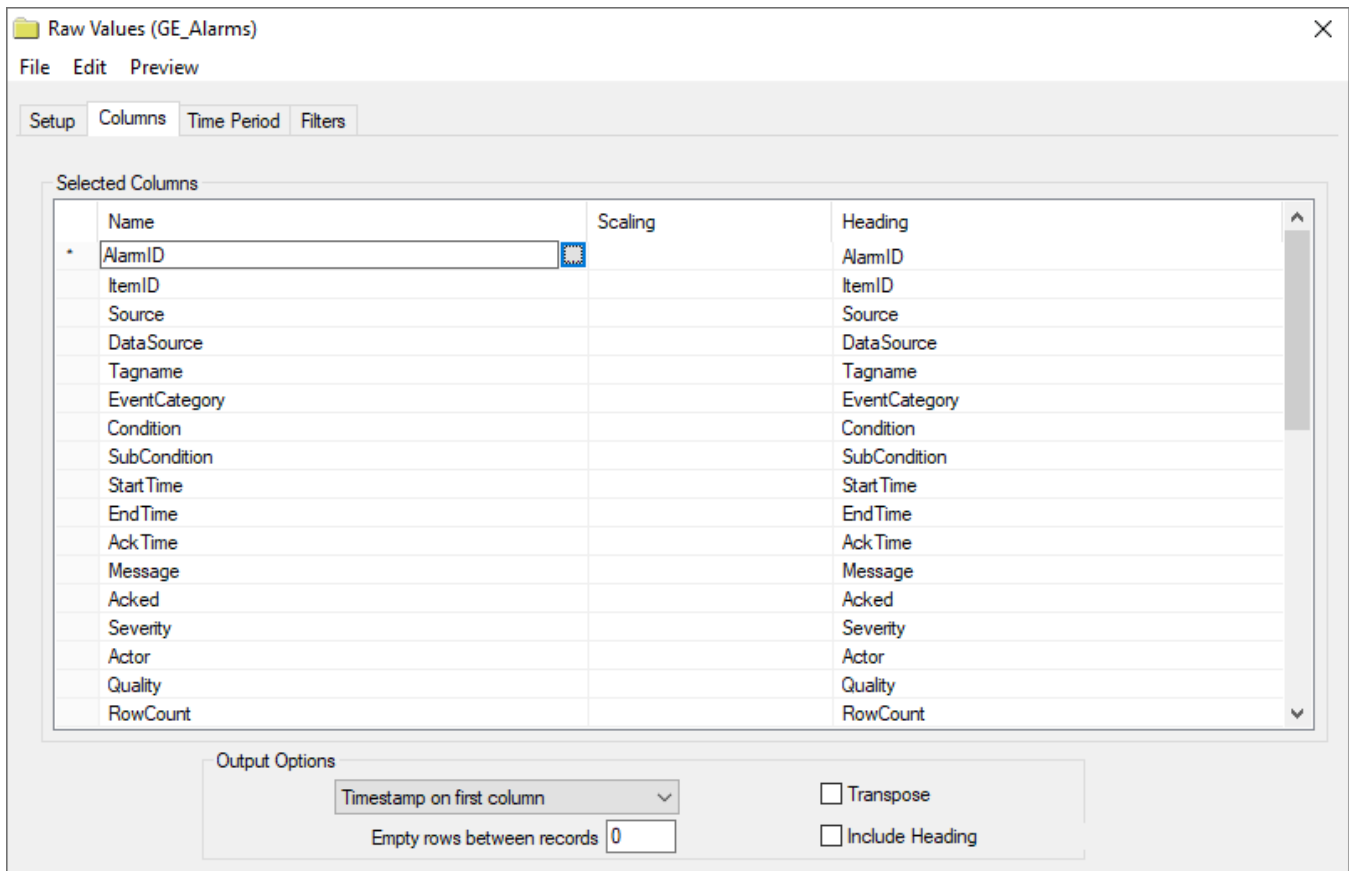
- In **Primary Database**, for **Type**, click the browse pushbutton [...] to define a connection to the alarm database.
- Set **Database name** to the name of the machine where the Historian is running. Alternatively, leave this setting blank to use the default server as configured in the Historian **Interactive SQL** application.
- Specify the logon credentials if required. Click **Test Connection** to verify the settings.
- Under **Table/Column** set **Table** to *ihAlarms*.
- Set **Date Column** to *Timestamp*. This column will be used for any timestamp filtering in the connector groups.

Verify Data Communication

To verify communication with the Alarms and Events Server, open the **Project Explorer** and select the **Tools** tab. Open **Connector Groups**. Select the **GE Alarms** 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, ihAlarms** 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 where alarms are recorded in the database. Click **Refresh** to view data. The first 60 alarms starting at the date and time specified should be displayed.