

## Using XLReporter with Ignition Transaction Groups

### Overview

**XLReporter** takes historical values from the Ignition transaction groups 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.

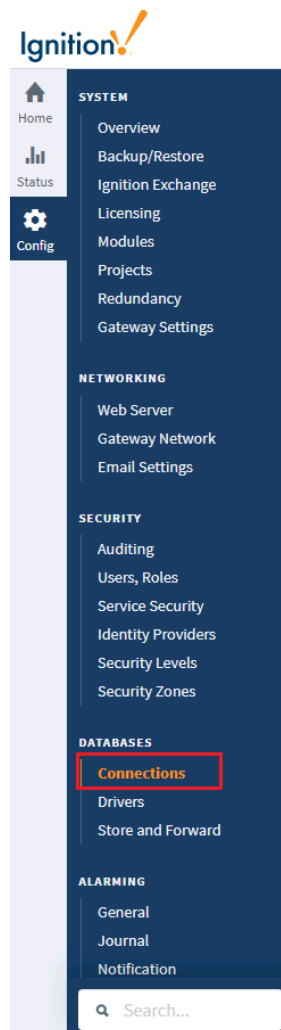
Complete reports are distributed automatically by email, FTP, file server and printers. With the Web Portal, reports are viewed or produced on-demand from any device supporting a web browser such as a mobile phone, tablet or desktop.

### Set Up Historical Value log

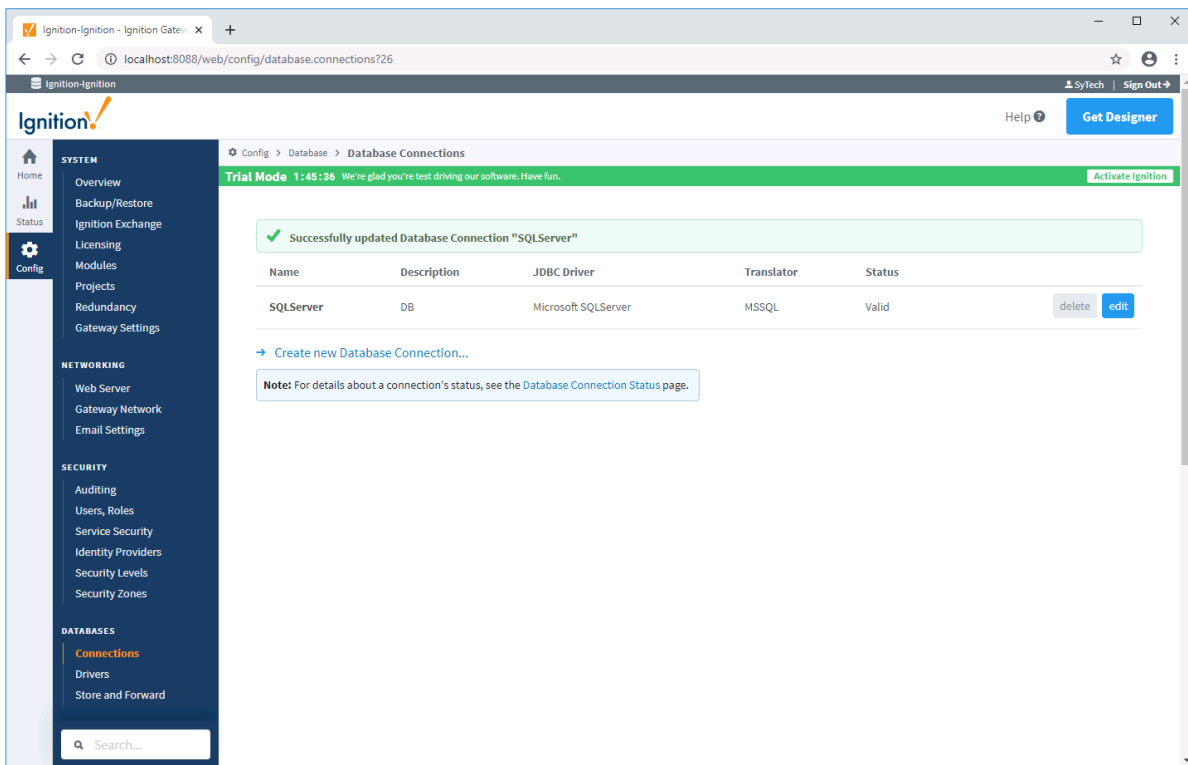
Ignition settings are available through a web browser. Open a web browser and navigate to:

*localhost:8088*

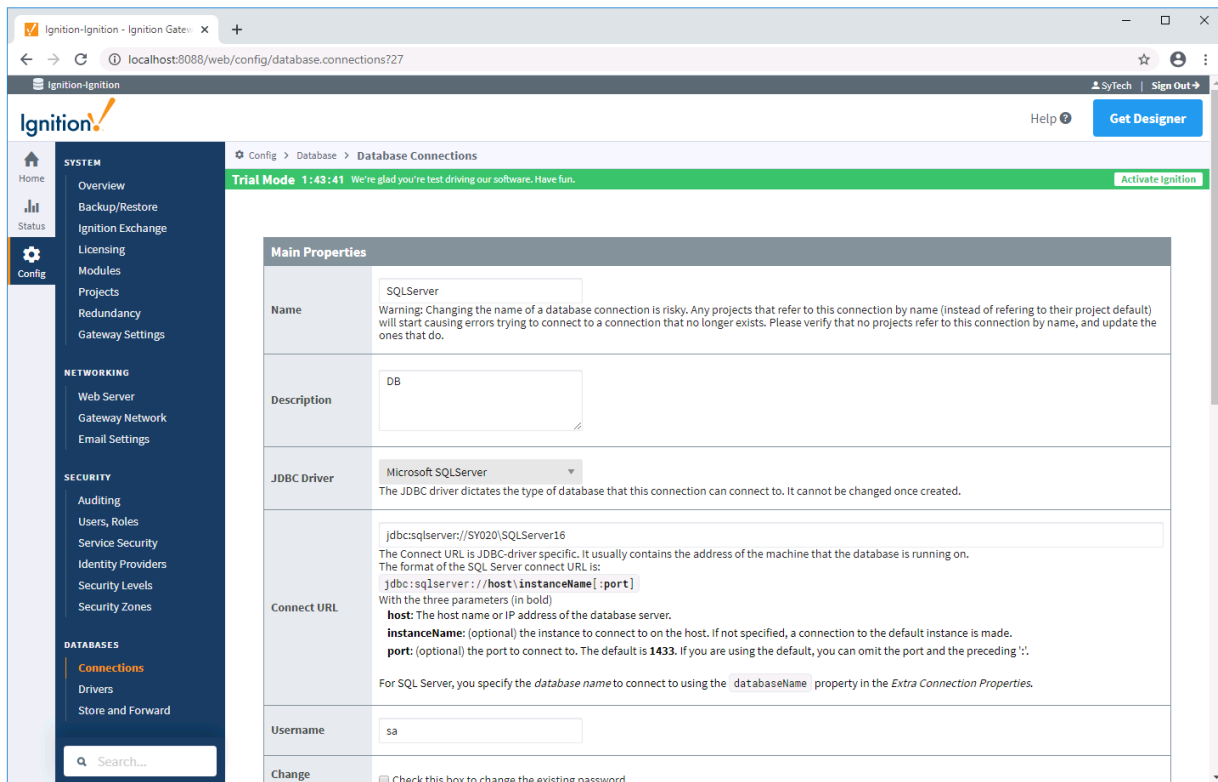
Log in to Ignition.



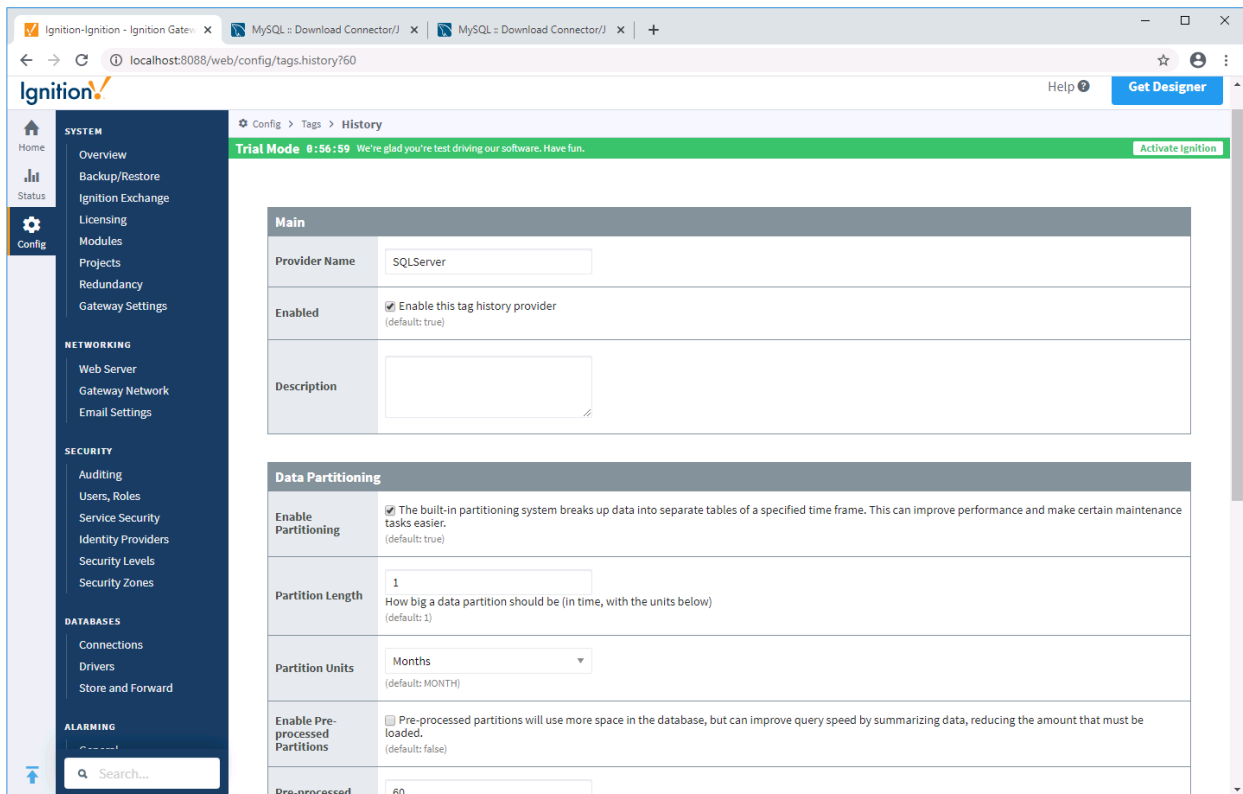
On the left, select **Config**, then under **Databases** select **Connections**.



- Click *Create new Database Connection...*



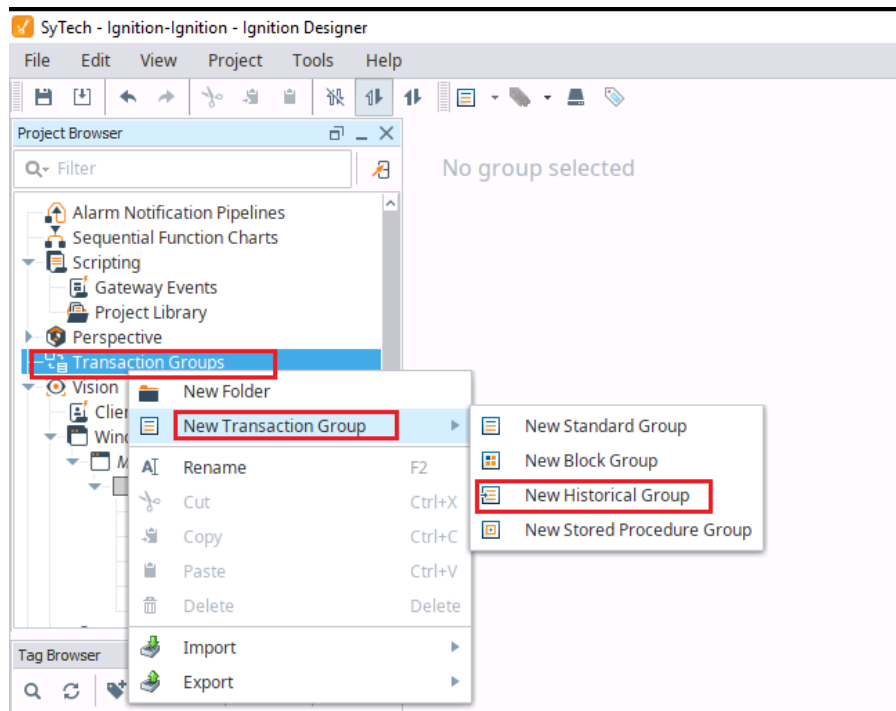
Make the connection to an available database like MySQL or Microsoft SQL Server/SQL Server Express. Under the **Configure** tab, on the left, click **Tags, History** and create a new **Historical Tag Provider**.



Inductive Automation recommends enabling **Partitioning** to make data retrieval faster. This is supported by **XLReporter** at any **Unit** and **Length** available.

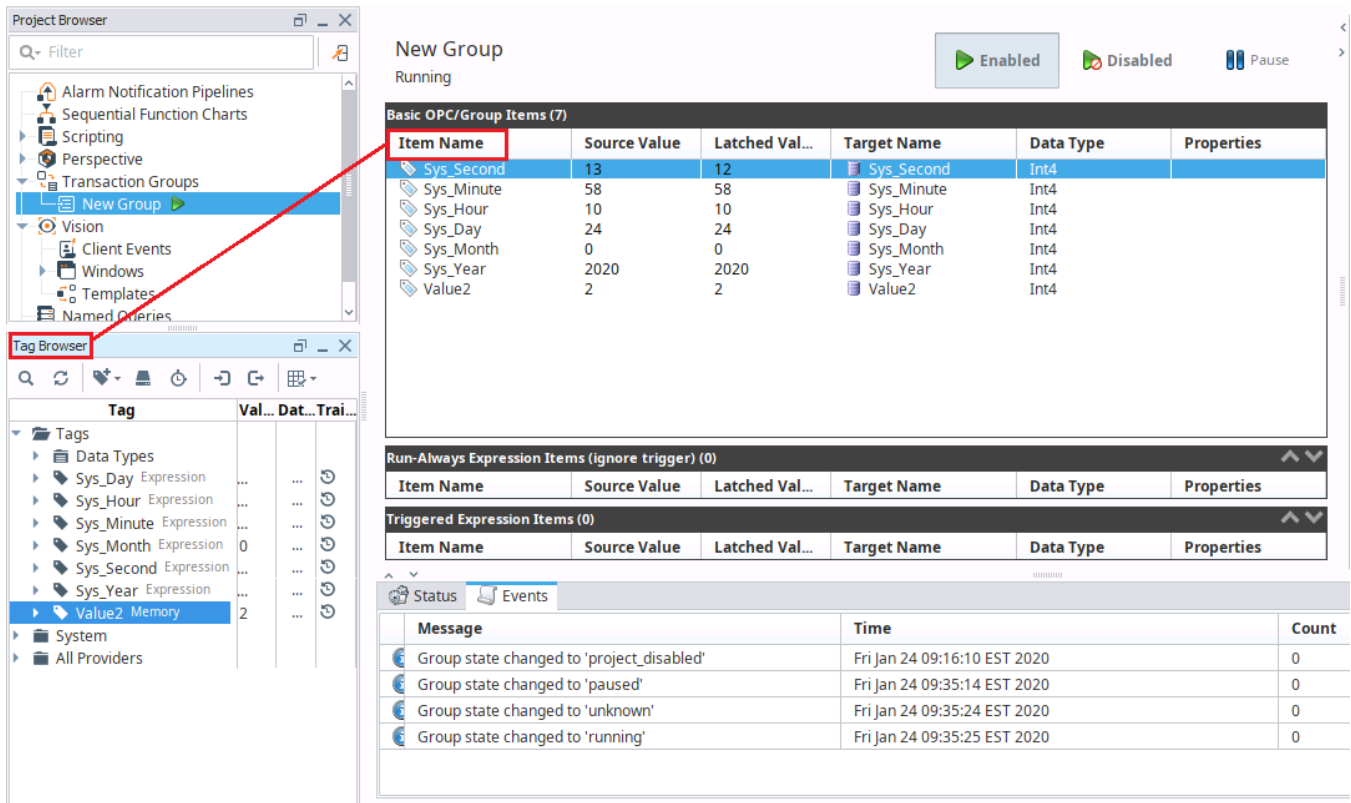
## Set up Transaction Group

Select the **Design Launcher** from the program group and launch the project.



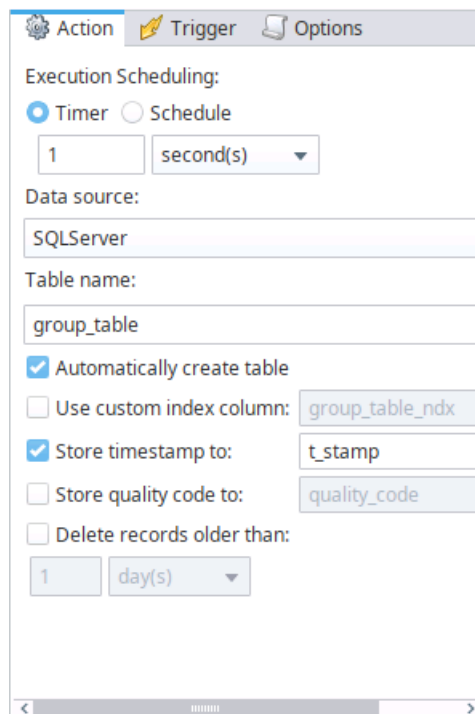
Under the **Project Browser** panel, right click **Transaction Groups** and select **New Transaction Group**, **New Historical Group**.

- Enter a **Name**.
- Click **Create Group**.



To add tags to the **Transaction Group** drag and drop the tags from the **Tag Browser** panel of the **Ignition Designer**.

Under the **Action** tab on the right,




- Set **Execution Scheduling** to the rate at which data should be collected for the group.
- Set **Data source** to the database connection configured.
- Set **Table name** to the name of the table to log to in the database.
- If the table specified does not exist, check **Automatically create table** to ensure it is created in the database.
- Check **Start timestamp** to and leave the setting as *t\_stamp*.

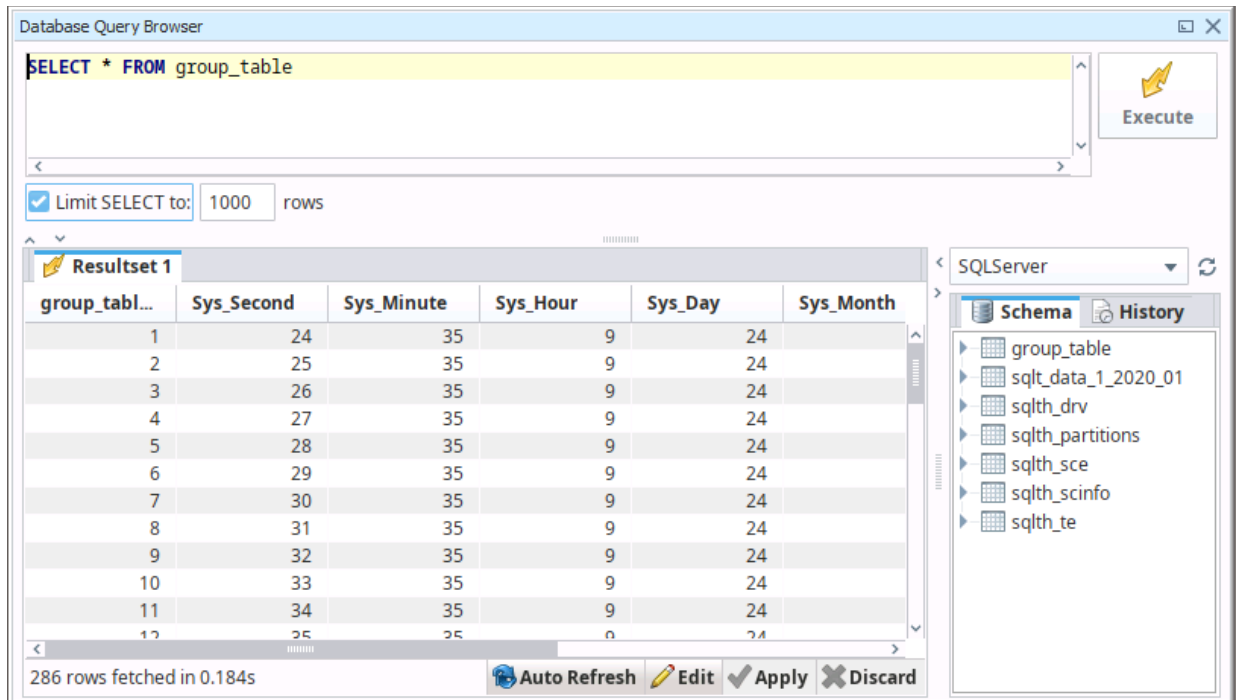
Click **Enabled** when finished.

## Prerequisites

### Verify Data Log

Select the **Design Launcher** from the program group and launch the project. Under the **Project Browser** panel, open the transaction group.

Under **Table name**, click the browse database option .



- Enter a simple query to test like:  
`SELECT * FROM GroupTable`  
Where *GroupTable* is the Table name as set under the **Action** tab of the group.
- Select **Execute** for the on the transaction table.

If no data is returned contact Inductive Automation technical support 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 (highlighted with a red box), Modify, Delete, Catalog
- Table with columns: Name, Provider, Description
- Table content: \*

Select **Inductive Automation**, **Ignition Transaction Group** values.

The screenshot shows the 'Ignition Transaction Group values' dialog box with the following fields and options:

- Connector Name:** Ignition\_Transaction
- Description:**
- Primary Database:**
  - Type:** Microsoft SQL Server
  - Data Source:** SY020\SQLSERVER16
- Table/Column:**
  - Table:** group\_table
  - Date Column:** t\_stamp
  - Date includes Time
  - Time Column:**
- Buttons: Settings, OK, Cancel

- Set **Primary Database** to the database where the transaction log is configured.
- Once connected, under **Table/Column** select the **Table** as configured in the Transaction Group.
- Set **Date Column** to *t\_stamp*.

# Verify the Data Connector

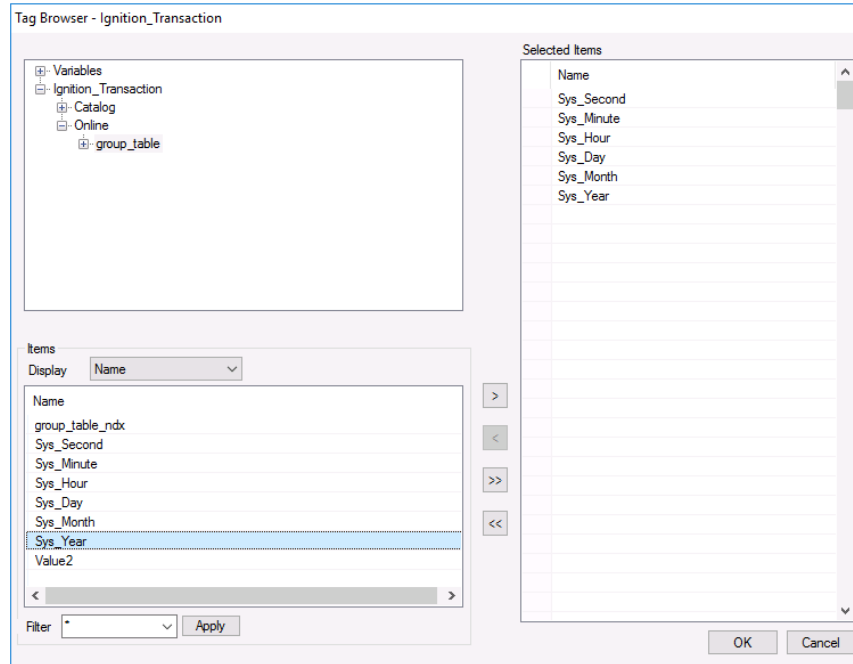
**XLReporter** retrieves data from the **Data Connector** using a **History Group**.

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

Select the *Ignition Transaction Group* 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**.

The screenshot shows the 'Preview' window. On the left, there are controls for 'Refresh', 'Stop', 'Date' (calendar icon), 'Start' (24 Jan 2020), and 'End' (25 Jan 2020). The main area is a table with the following data:

Date	Sys_Second	Sys_Minute	Sys_Hour	Sys_Day	Sys_Month	Sys_Year
1/24/2020 9:35:26 AM	24	35	9	24	0	2020
1/24/2020 9:35:27 AM	25	35	9	24	0	2020
1/24/2020 9:35:28 AM	26	35	9	24	0	2020
1/24/2020 9:35:29 AM	27	35	9	24	0	2020
1/24/2020 9:35:30 AM	28	35	9	24	0	2020
1/24/2020 9:35:31 AM	29	35	9	24	0	2020
1/24/2020 9:35:32 AM	30	35	9	24	0	2020
1/24/2020 9:35:33 AM	31	35	9	24	0	2020
1/24/2020 9:35:34 AM	32	35	9	24	0	2020
1/24/2020 9:35:35 AM	33	35	9	24	0	2020
1/24/2020 9:35:36 AM	34	35	9	24	0	2020
1/24/2020 9:35:37 AM	35	35	9	24	0	2020
1/24/2020 9:35:38 AM	36	35	9	24	0	2020
1/24/2020 9:35:39 AM	37	35	9	24	0	2020
1/24/2020 9:35:40 AM	38	35	9	24	0	2020
1/24/2020 9:35:41 AM	39	35	9	24	0	2020
1/24/2020 9:35:42 AM	40	35	9	24	0	2020
1/24/2020 9:35:43 AM	41	35	9	24	0	2020
1/24/2020 9:35:44 AM	42	35	9	24	0	2020
1/24/2020 9:35:45 AM	43	35	9	24	0	2020

At the bottom left, it says 'Rows 60'.