

## Using XLReporter with DeltaV Event Journal

### Overview

**XLReporter** takes historical values directly from the DeltaV Event Journal database automatically to populate workbooks, periodically, via VBA or on event, without needing Excel. The award-winning **XLReporter** history engine can return either raw or calculated Industrial metrics directly to the reports.

The DeltaV Event Journal is a Microsoft SQL Server database with event data logged by DeltaV.

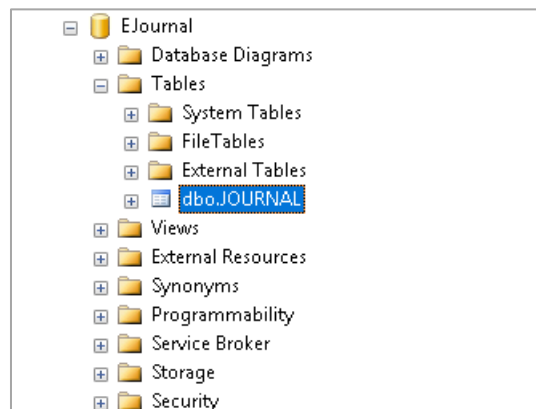
Distribute the reports by email, FTP, file server and printers. Enable **XLReporter's** Web Portal and access reports from any device supporting a web browser such as a smart phone or tablet.

### Prerequisites

#### Verify Database

To verify, open **Microsoft SQL Server Management Studio** and connect to the SQL Server instance where the Event Journal database is configured.

Once connected,



- Expand the **EJournal** database.
- Expand **Tables**.
- Select the **JOURNAL** table.

Right click the **JOURNAL** table and choose *SELECT TOP 1000 Rows*. This should display data from the table.

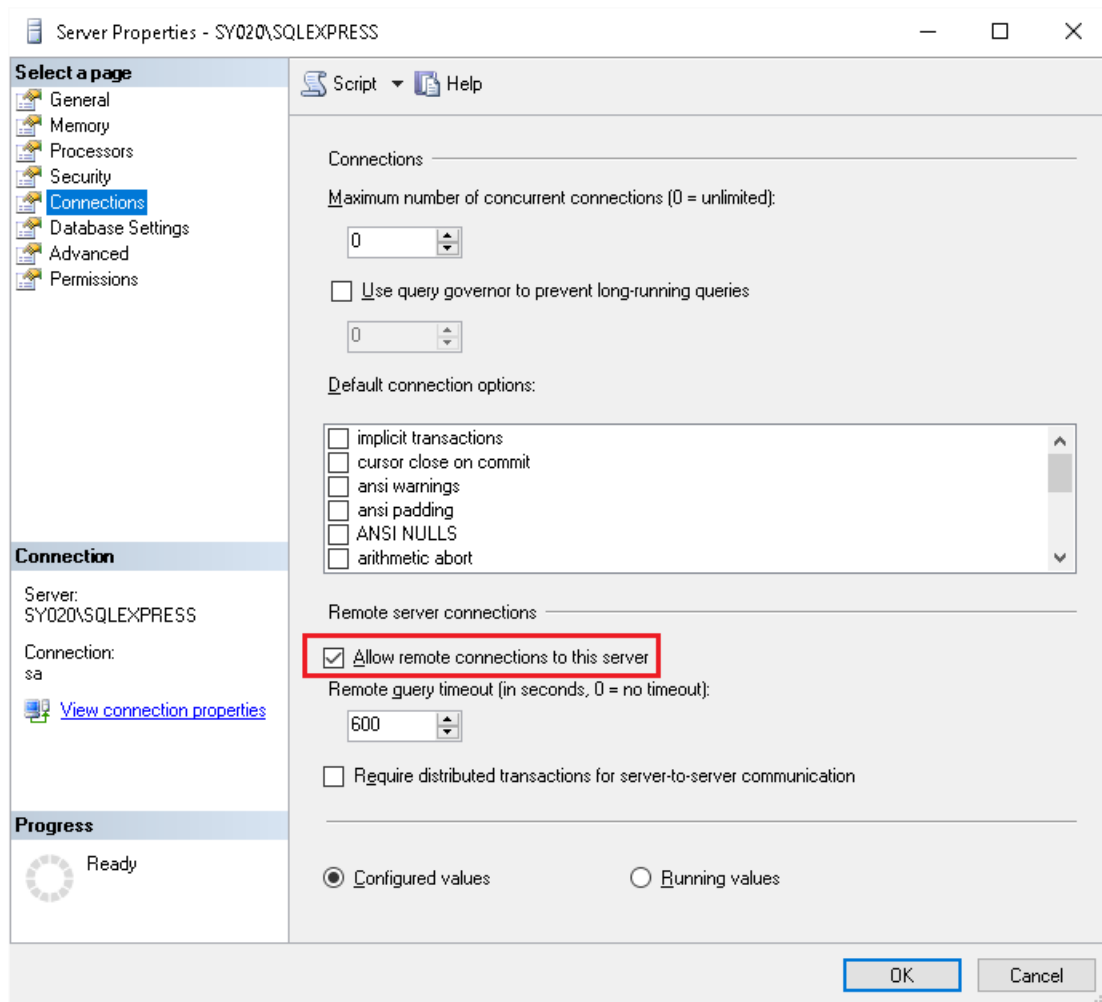
If the database or table does not exist, or no data is displayed, contact Emerson Automation Solutions technical support to troubleshoot and correct these issues.

### SQL Server Considerations

#### Remote Connection

In order for XLReporter to communicate to SQL Server remotely, remote server connections must be enabled in SQL Server. Open the SQL Server Management Studio and connect.

- Right click the server at the top of **Object Explorer** and select **Properties**.



- Under **Select a Page**, select **Connections**.
- In the **Remote server connections** section, check **Allow remote connections to this server**.

## Authentication

Emerson Automation Solutions recommends that the SQL Server instance allows Windows Authentication only. This means that to connect remotely the Windows user on the remote machine must be valid on the machine with SQL Server.

## Server Name and Port

Emerson Automation Solutions recommends that the SQL Server Browser Service not be running for the SQL Server instance containing the **EJournal** database. Therefore, when connecting remotely, the SQL Server Instance name must be manually entered. It will not appear in any list.

In DeltaV version 14.3 and above, the Port Number for the SQL Server instance containing the **EJournal** database is **55114**, which is not the default port of SQL Server.

## 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 a dialog box titled "New Project" with the subtitle "Step 1 : Specify the Project Name and its Location." It contains three input fields: "Project Name" with the value "XLR\_Project", "Description" with the value "Customer or Site name", and "Project Location" with the value "c:\XLRprojects". There is a checkbox for "Project Off Line" which is unchecked. At the bottom, there are four buttons: "< Back", "Next >", "Finish", and "Cancel".

## Step 2

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

The screenshot shows a dialog box titled "New Project" with the subtitle "Step 2 : Configure the Connectors (data sources) of the Project." It features a toolbar with icons for "Add" (highlighted with a red box), "Modify", "Delete", and "Catalog". Below the toolbar is a table with columns "Name", "Provider", and "Description". The table is currently empty, with a yellow asterisk "\*" in the first cell of the "Name" column.

Select **Emerson Automation Solutions, DeltaV Event Journal**.

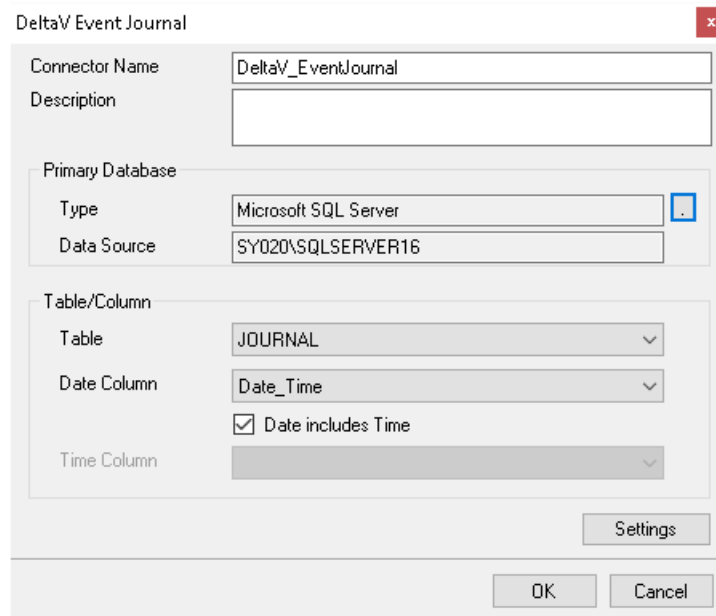
Under **Primary Server**, click the browse pushbutton (...) to connect to the database.

The screenshot shows a "Database Connect" dialog box. On the left is a list of database providers: Microsoft SQL Server, Microsoft Access, Microsoft Excel, MySQL, PostgreSQL, SQLite, Text Files, and Other (OLEDB/ODBC). The "Microsoft SQL Server" provider is selected. The main area contains the following fields: "Connection name" (Microsoft SQL Server), "Server name" (SY020\DELTAV\_CHRONICLE) with a "Refresh..." button, "Port number" (55114) with a "Use Default" checkbox, "Log on to the server" section with "Use Windows Authentication" selected, "User Name" and "Password" input fields, "Database" (EJOURNAL) with a "Refresh..." button, and a "Test Connection" button. A "Cancel" button is at the bottom right.

If XLReporter is installed on the same machine as the SQL Server containing the Event Journal database, all the information is filled out for you by default. Otherwise, with **Microsoft SQL Server** selected,

- Set **Server name** to the SQL Server instance with the DeltaV Event Journal. This will have to be manually entered.
- If DeltaV is version 14.3 or above, for **Port number** uncheck *Use Default* and specify *55114*. For older versions leave *Use Default* checked.
- Set the **Log on to the server** to *Use Windows Authentication*.
- For **Database**, select *EJOURNAL*.

Click **Test Connection** to verify the settings.



The screenshot shows the 'DeltaV Event Journal' configuration dialog box. It has a title bar with a close button (X). The dialog is divided into several sections:

- Connector Name:** A text box containing 'DeltaV\_EventJournal'.
- Description:** An empty text box.
- Primary Database:**
  - Type:** A dropdown menu set to 'Microsoft SQL Server'.
  - Data Source:** A text box containing 'SY020\SQLSERVER16'.
- Table/Column:**
  - Table:** A dropdown menu set to 'JOURNAL'.
  - Date Column:** A dropdown menu set to 'Date\_Time'.
  - Date includes Time:** A checked checkbox.
  - Time Column:** A dropdown menu that is currently empty.

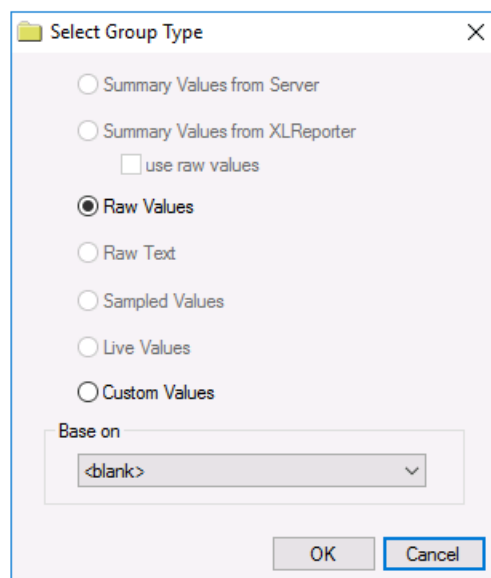
At the bottom right, there is a 'Settings' button. At the bottom center, there are 'OK' and 'Cancel' buttons.

Under **Table/Column**, set the **Table** to *Journal* and the **Date Column** to *Date\_Time*.

For more information on **Settings**, see the [Database Connectors](#) document.

## Verify Data Communication

To verify communication with the DeltaV Event Journal, open the **Project Explorer** and select the **Tools** tab. Open **Connector Groups**. Select your DeltaV Event Journal connector and then select **Add**.



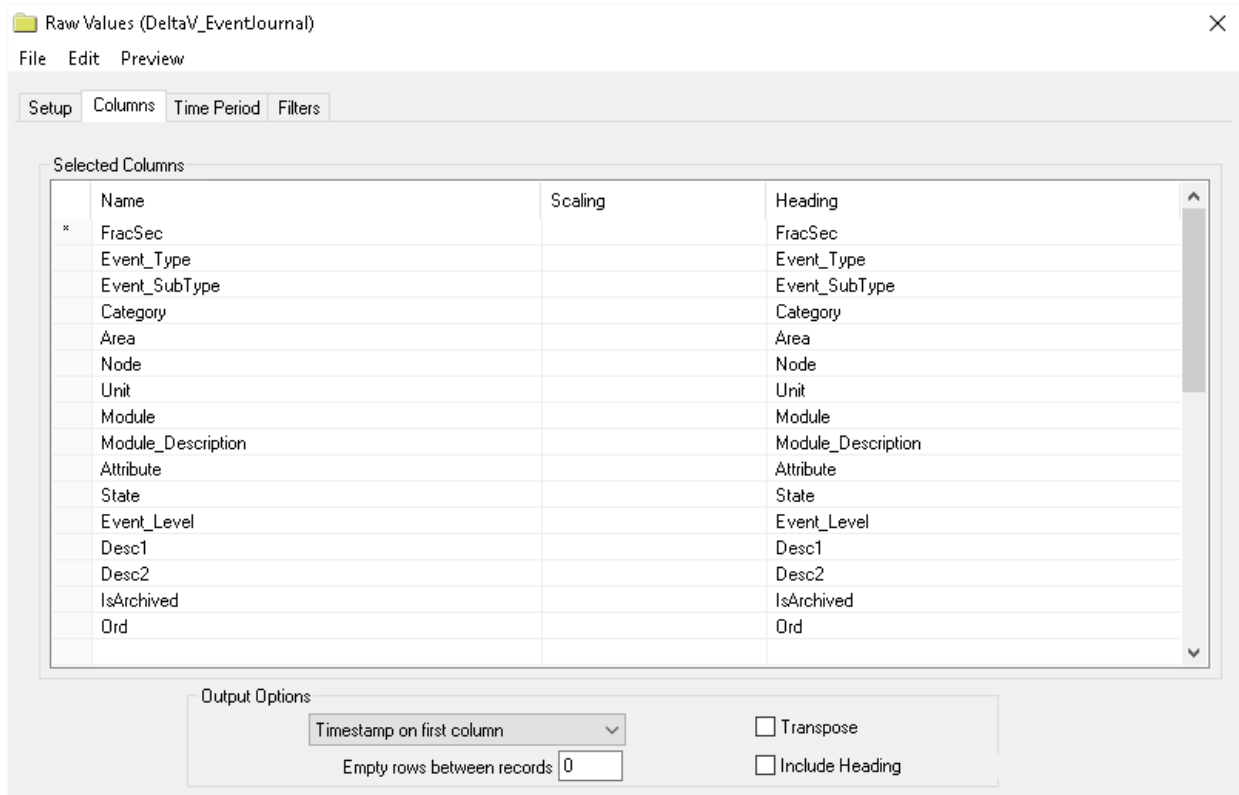
The screenshot shows the 'Select Group Type' dialog box. It has a title bar with a close button (X). The dialog contains the following options:

- Summary Values from Server
- Summary Values from XLReporter
  - use raw values
- Raw Values**
- Raw Text
- Sampled Values
- Live Values
- Custom Values

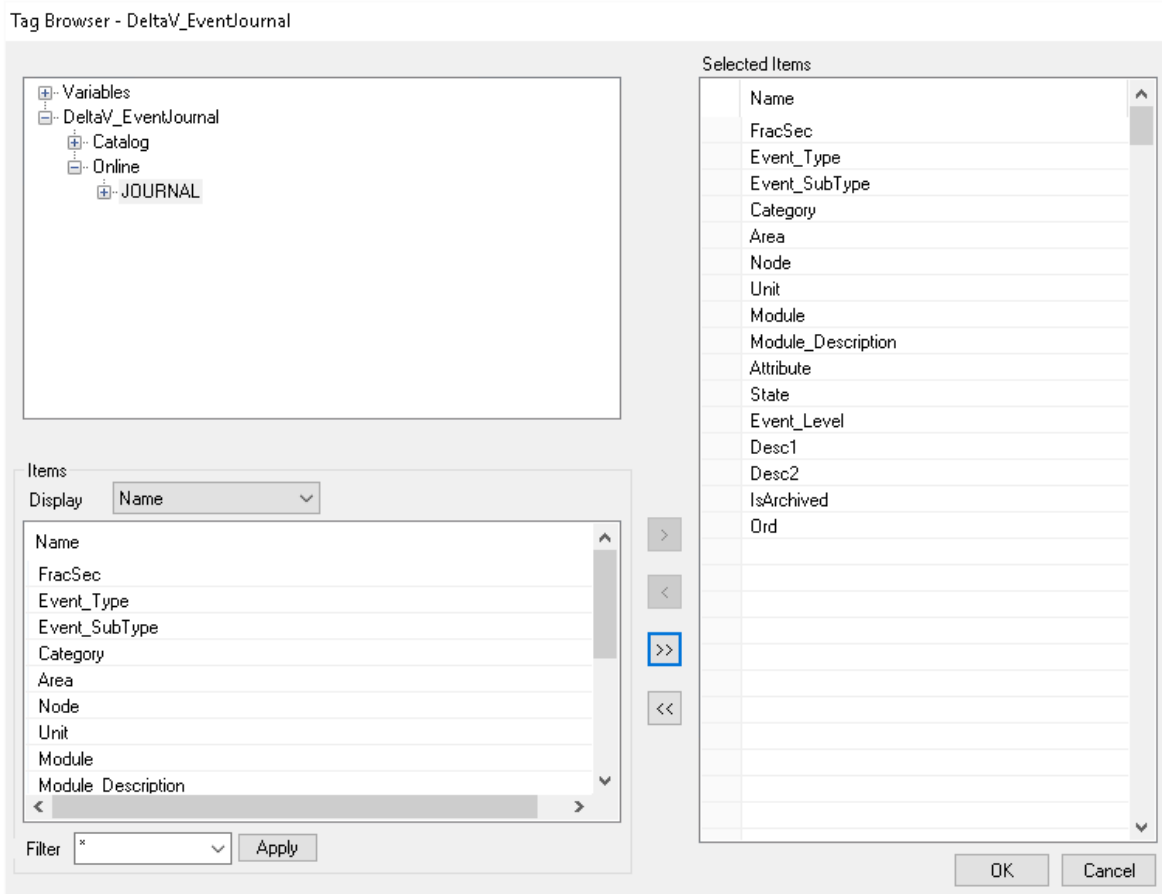
Below these options is a 'Base on' section with a dropdown menu set to '<blank>'. At the bottom, there are 'OK' and 'Cancel' buttons.

Set the **Group Type** to *Raw Values* and click **OK**.

On the **Columns** tab:



- Select the first row under the **Name** column
- Click the browse pushbutton (...)



- In the Tag Browser expand **Online, Journal** 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 with for which data has been logged. Click **Refresh** to view data. The first 60 records starting at the date and time specified should be displayed.