

Using XLReporter with DeltaV Event Journal

ISA-18.2 Alarm Management Compliance

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.

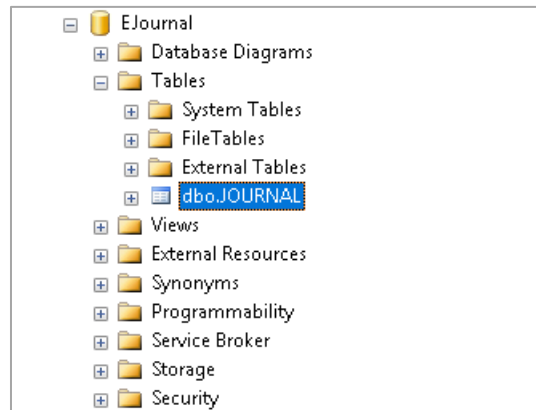
The DeltaV Event Journal is a Microsoft SQL Server database with event data logged by DeltaV.

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.



- 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.

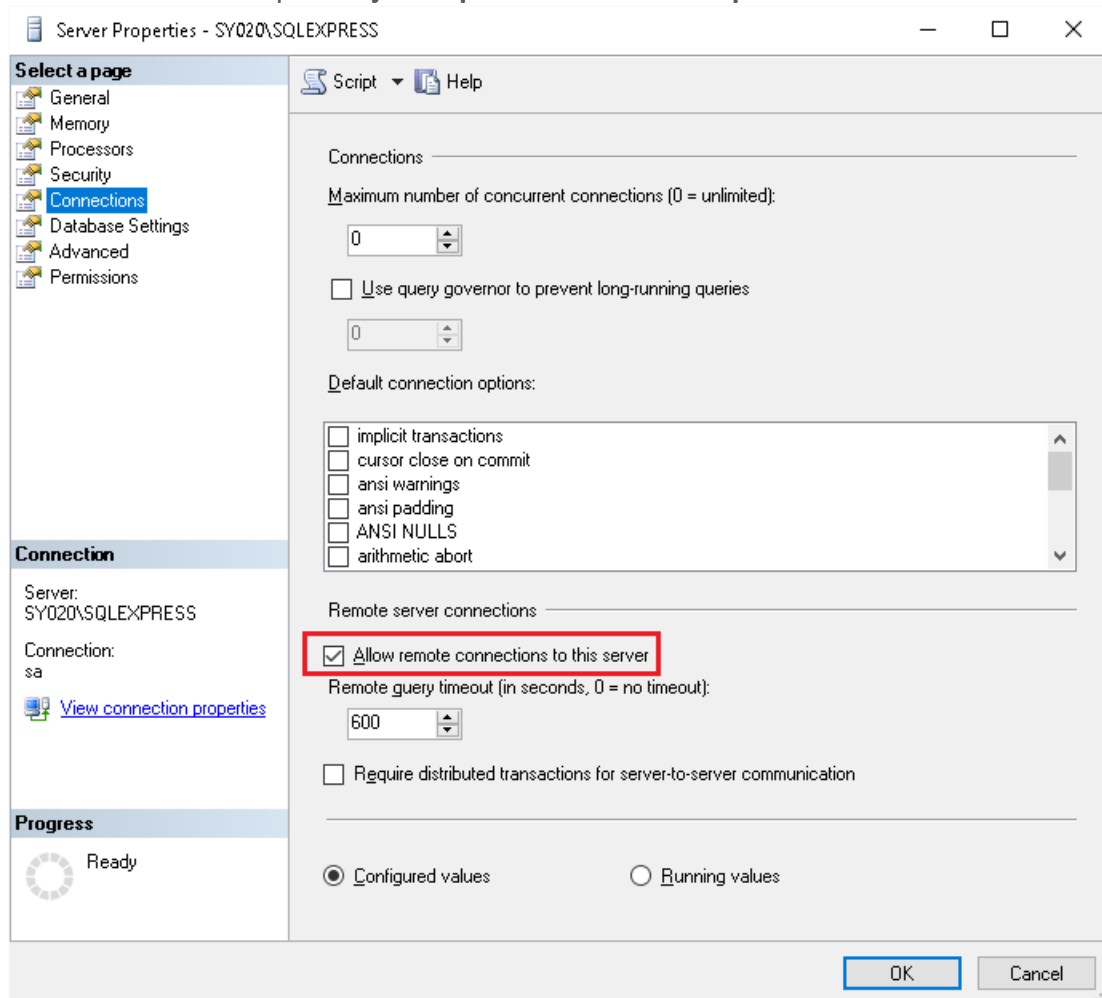
If the database or table does not exist, or no data is displayed, contact Emerson Automation Solutions technical support to troubleshoot and correct these issues.

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.

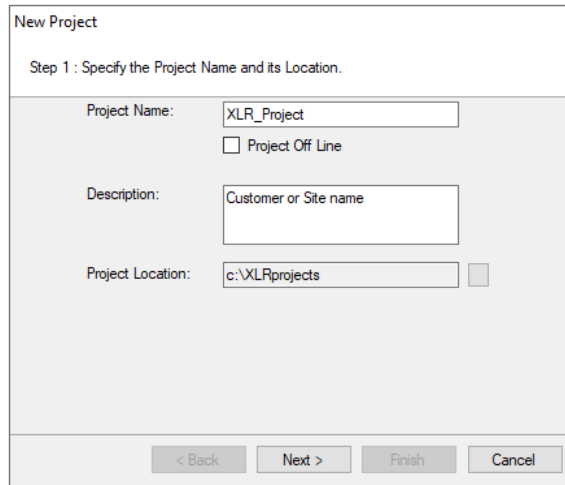
In DeltaV version 14.3 and above, the Port Number for the SQL Server instance containing the **EJournal** database is **55114**, which is not the default port of SQL Server.

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

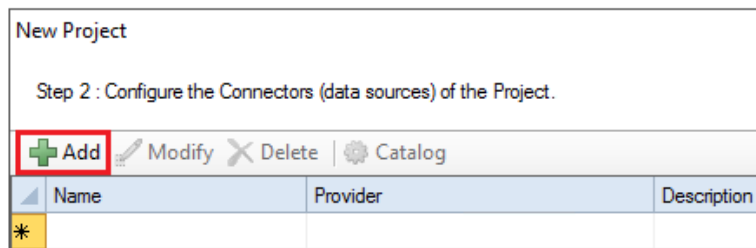
- Enter a **Project Name** and **Description** (optional).



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 text "XLR_Project", "Description" with the text "Customer or Site name", and "Project Location" with the text "c:\XLRprojects". There is a checkbox labeled "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**

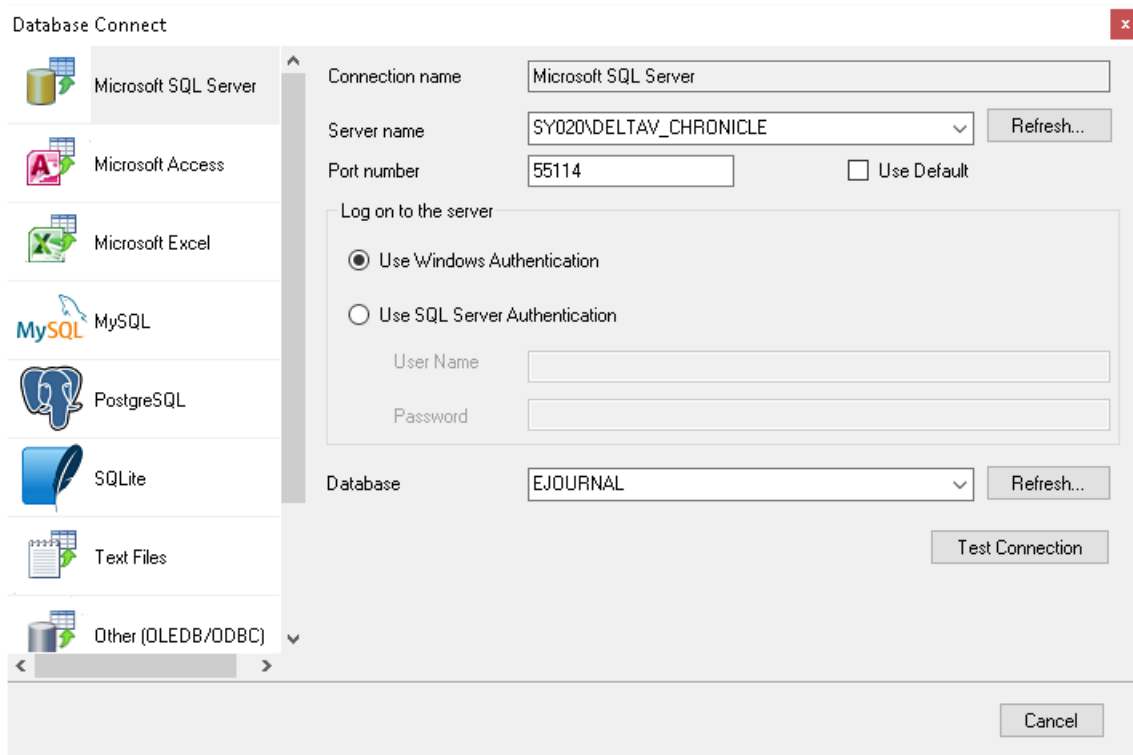


The screenshot shows a dialog box titled "New Project" with the subtitle "Step 2 : Configure the Connectors (data sources) of the Project." It features a toolbar with icons for "Add" (a green plus sign), "Modify" (a pencil), "Delete" (an X), and "Catalog" (a gear). Below the toolbar is a table with three columns: "Name", "Provider", and "Description". The table is currently empty, with a yellow asterisk icon in the first cell of the first row.

Select **Advanced Modules, Alarm Management (ISA-18.2)**

- Set the **Provider** to *Emerson Automation Solutions DeltaV Event Journal*.

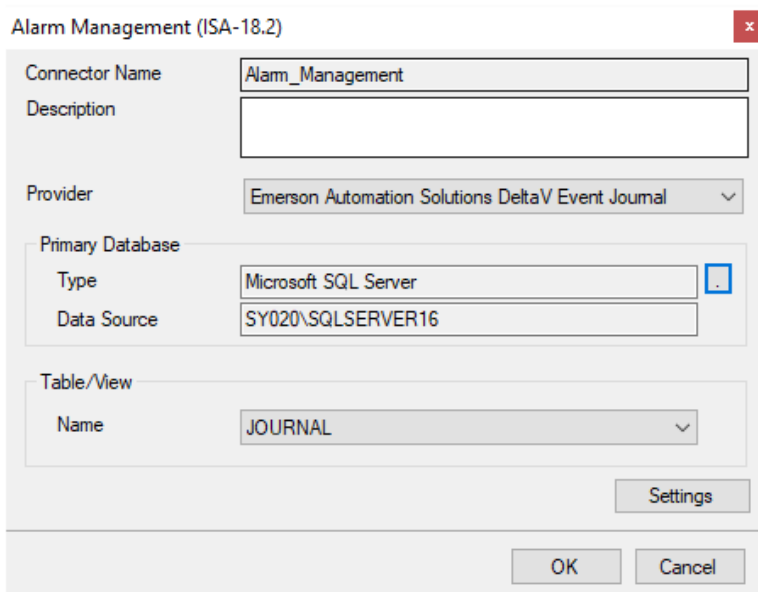
Under **Primary Server**, click the browse pushbutton (...) to connect to the database.



If XLReporter is installed on the same machine as the SQL Server containing the Event Journal database, accept all default settings. 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** to verify the settings.



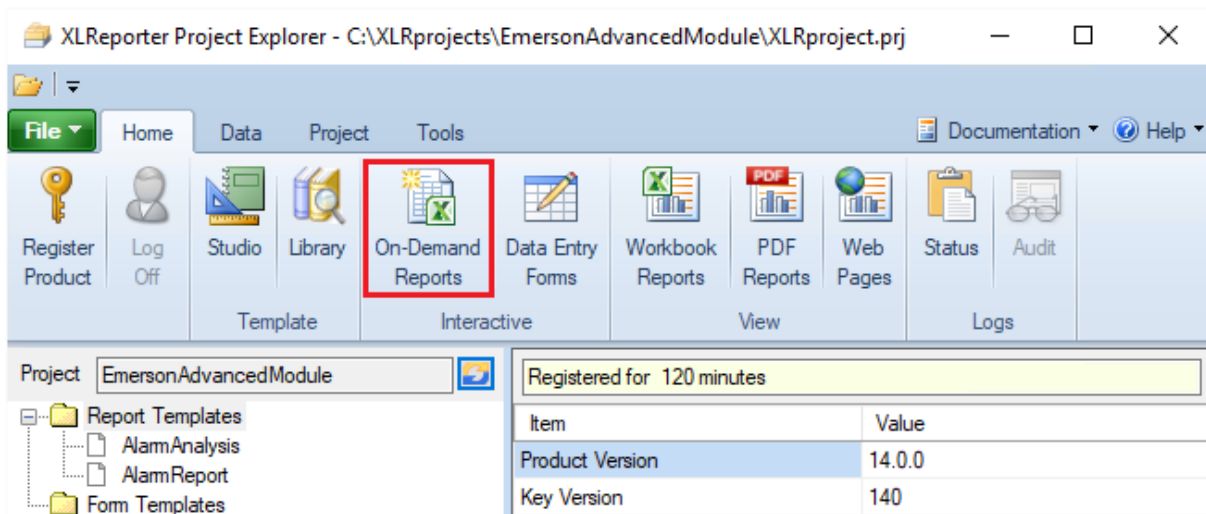
Under **Table/ View** set **Name** to *Journal*, click **OK**.

Two reports are automatically added to the project called *AlarmReport* and *AlarmAnalysis* for ISA18.2.

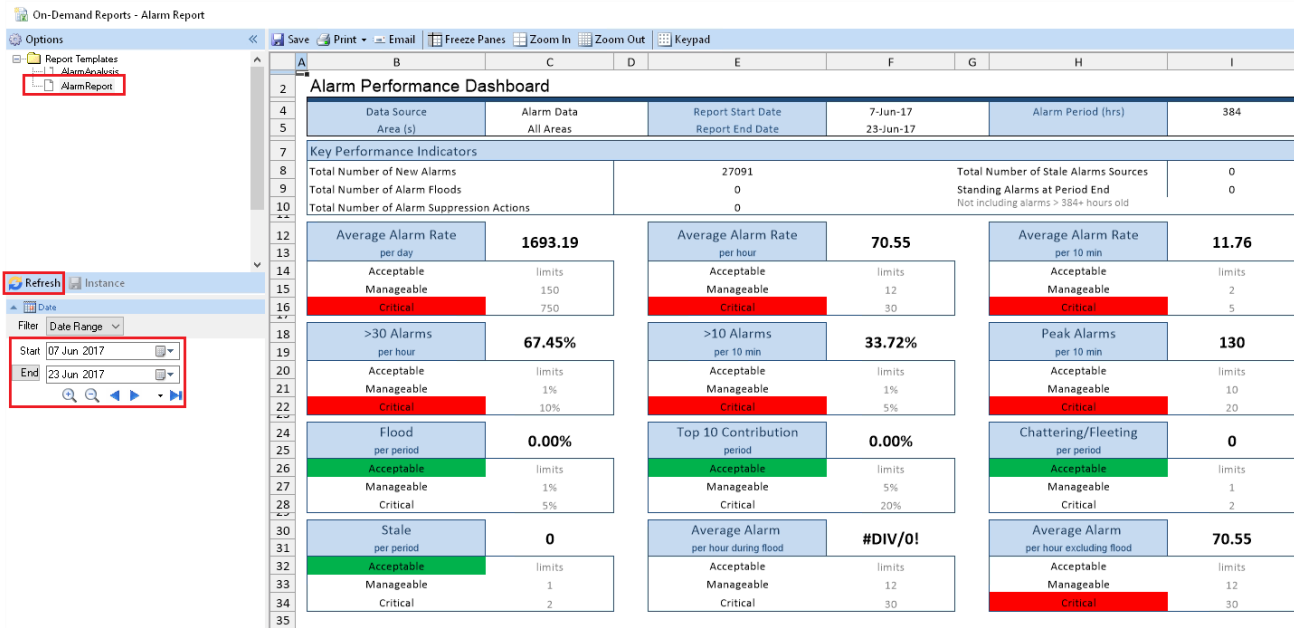
Verify Data Communication

On-Demand Report

From the **XLReporter Project Explorer**, select **On-Demand Reports** to open the On-Demand application.



The templates *AlarmReport* and *AlarmAnalysis* will be listed in the left pane.



- Select *Alarm Report*.
- Enter a valid *start* and *end* date.
- Click **Refresh**.