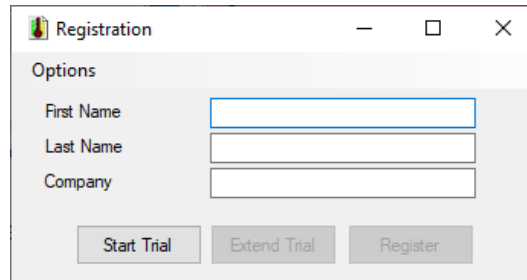


Advanced Module Connectors

Registration

Before you begin, enable the software to run either in evaluation or full mode. From the **XLReporter Project Explorer**, select the **Home** tab, **Register Product**.



The Registration dialog box contains the following fields and buttons:

- Options** section with three text input fields:
 - First Name
 - Last Name
 - Company
- Three buttons at the bottom: **Start Trial**, **Extend Trial**, and **Register**.

Evaluation License

Enter the information required and select **Start Trial** to start the evaluation. When the evaluation period expires, you can re-open this display and select **Extend Trial**.

The evaluation license runs continuously for two hours and limits the number of data connections to a report template. In evaluation mode, the data collection from the **Alarm Management** connector is also limited. When the product is registered, the time limit and data connections limit are removed. When the product is registered with an **Advanced Modules** license, the limitations of the Alarm Management connector are removed.

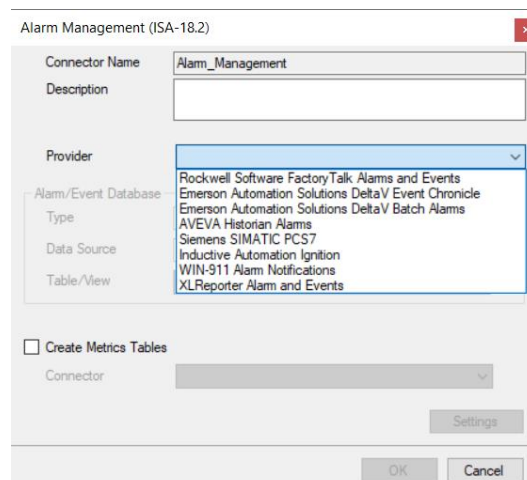
Alarm Management (ISA-18.2)

This connector is used to retrieve advanced metrics from alarm data recorded to a database. For detailed information, see the **Alarm Management** document.

Connector

To configure the **Alarm Management** connector, from the **Project Explorer** select **Data, Connectors**.

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



The Alarm Management (ISA-18.2) configuration dialog box contains the following fields and controls:

- Connector Name**: Text field with value "Alarm_Management".
- Description**: Empty text field.
- Provider**: Dropdown menu showing a list of providers.
- Alarm/Event Database**: Section containing:
 - Type**: Text field.
 - Data Source**: Text field.
 - Table/View**: Text field.
- Create Metrics Tables**: Check box.
- Connector**: Dropdown menu.
- Settings**: Button.
- OK** and **Cancel**: Buttons at the bottom.

As part of configuring the **Alarm Management** connector, a **Provider** is selected that defines what interface logged the alarms. Once selected, in the **Alarm/Event Database** section, a connection to the database with the alarms is defined.

Rockwell Software FactoryTalk Alarms and Events

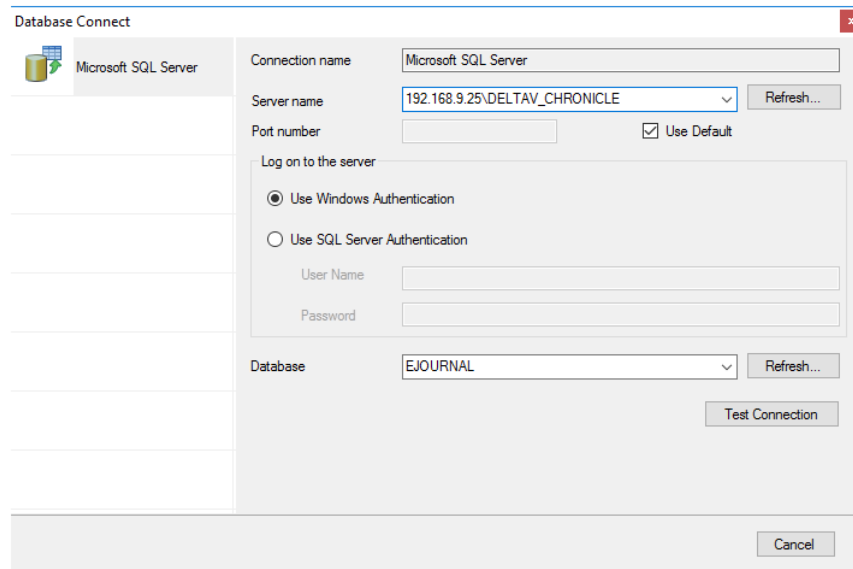
The 'Database Connect' dialog box is shown with the 'Microsoft SQL Server' provider selected. The 'Connection name' is 'Microsoft SQL Server'. The 'Server name' is 'RA-1\FACTORYTALK' with a 'Refresh...' button. The 'Port number' is empty, and the 'Use Default' checkbox is checked. Under 'Log on to the server', 'Use SQL Server Authentication' is selected. The 'User Name' is 'sa' and the 'Password' is masked with asterisks. The 'Database' is 'AlarmsAndEvents' with a 'Refresh...' button. A 'Test Connection' button is at the bottom right, and a 'Cancel' button is at the very bottom right.

The FactoryTalk Alarms and Events are always logged to Microsoft SQL Server or SQL Server Express database.

These settings should match what has been configured in the **Alarm and Event Historian Database Properties** within FactoryTalk View SE.

The 'Alarm and Event Historian Database Properties' dialog box is shown with the 'General' tab selected. The 'Definition name' is 'AlarmsAndEvents'. The 'Type' is 'Microsoft SQL Server' (selected). The 'Computer name' is 'RA-1\FACTORYTALK'. The 'Database user name' is 'sa'. The 'Database password' is masked with asterisks. The 'Database name' is 'AlarmsAndEvents'. A 'Show Usage...' button is at the bottom left. At the bottom right are 'OK', 'Cancel', 'Apply', and 'Help' buttons.

Emerson Automation Solutions DeltaV Event Chronicle



Database Connect

Microsoft SQL Server

Connection name: Microsoft SQL Server

Server name: 192.168.9.25\DELTAV_CHRONICLE Refresh...

Port number: Use Default

Log on to the server

☒ Use Windows Authentication

☐ Use SQL Server Authentication

User Name: Password:

Database: EJOURNAL Refresh...

Test Connection

Cancel

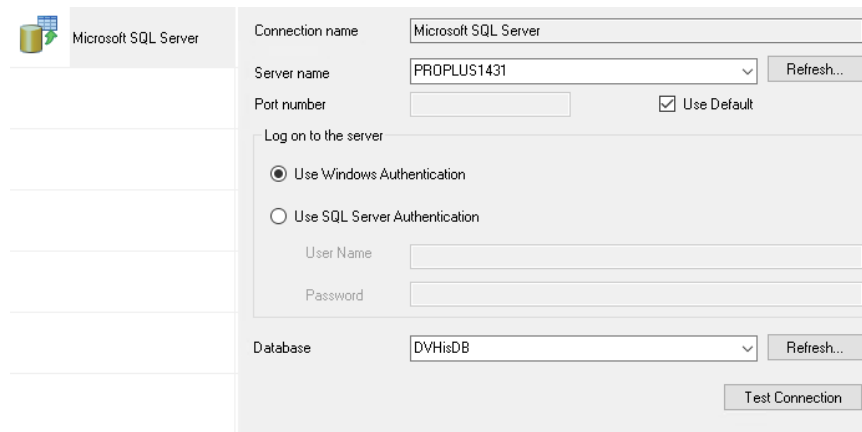
The DeltaV Event Chronicle is configured to log to a Microsoft SQL Server database.

By default, when browsing, the Server name is set to the local machine plus “\DELTAV_CHRONICLE”. If the Event Chronicle is on another machine, replace the local machine name with the other machine name but leave the rest. When browsing for the Server name, the instance name “\DELTAV_CHRONICLE” may not appear. If it does not, it will have to be manually added.

In newer versions of DeltaV the **Port Number** is not default and should be specified as *55114*. Also, only **Windows Authentication** is supported. If you are connecting remotely, you must be logged on as a user that is valid on the machine where the Event Journal is running.

The **Database** should always be set to *EJOURNAL*.

Emerson Automation Solutions DeltaV Batch Alarms



Microsoft SQL Server

Connection name: Microsoft SQL Server

Server name: PROPLUS1431 Refresh...

Port number: Use Default

Log on to the server

☒ Use Windows Authentication

☐ Use SQL Server Authentication

User Name: Password:

Database: DVHisDB Refresh...

Test Connection

The DeltaV Batch Alarms is configured to log alarms as part of the DeltaV Batch Historian to a Microsoft SQL Server database.

The Server name should be the SQL Server instance configured for the DeltaV Batch Historian.

The **Database** should always be set to *DVHisDB*.

AVEVA Historian Alarms

The screenshot shows the 'Database Connect' dialog box with the 'Microsoft SQL Server' provider selected. The 'Connection name' is 'Microsoft SQL Server'. The 'Server name' is 'WW2020' with a 'Refresh...' button. The 'Port number' is empty, and the 'Use Default' checkbox is checked. Under 'Log on to the server', 'Use Windows Authentication' is selected. There are empty fields for 'User Name' and 'Password'. The 'Database' is 'Runtime' with a 'Refresh...' button. A 'Test Connection' button is at the bottom right, and a 'Cancel' button is at the very bottom.

The AVEVA Historian Alarms are accessible through a Microsoft SQL Server connection to the AVEVA Historian Server.

The **Database** name depends on the version of AVEVA Historian installed. With older versions this may be *WWALMDB* while later versions this may be *Runtime*.

Siemens SIMATIC PCS7

The screenshot shows the 'Database Connect' dialog box with the 'Siemens WinCC' provider selected. The 'Connection name' is 'WinCC/PCS 7 Alarms'. The 'Data source' is 'Connectivity Pack'. The 'Computer Name' is empty, and the 'local' checkbox is checked. The 'Database' is 'CC_OS_08_03_17_08_54_11R'. A 'Test Connection' button is at the bottom right, and a 'Cancel' button is at the very bottom.

The Siemens SIMATIC PCS7 alarms are accessible through the WinCC OLEDB provider.

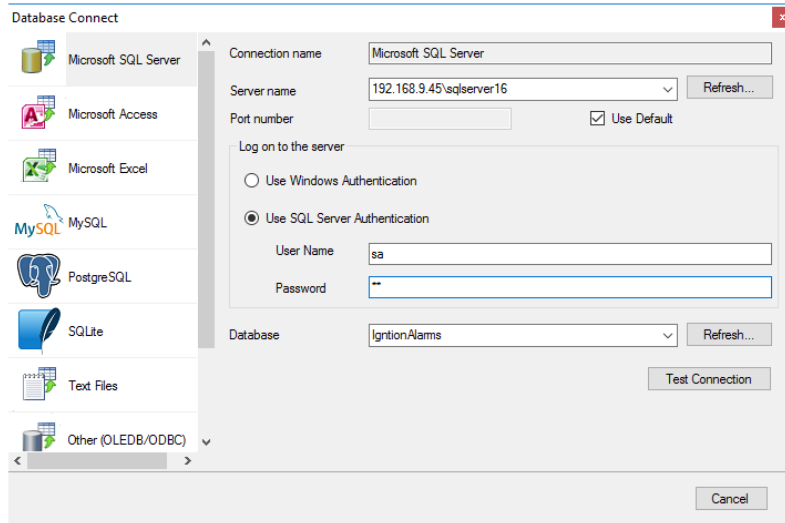
The **Data Source** defines how to connect to the alarms server. This depends on what is installed and licensed. It can either be *Connectivity Pack* or *Open PCS7*.

If **Connection** is *Connectivity Pack* and the alarm server is on the local machine, for **Computer name** check local. Otherwise uncheck local and specify the physical name of the machine.

If **Connection** is *Open PCS7*, set **Symbolic Computer Name** to where the alarm server is running.

Database is the name of the WinCC alarm database. This value can be read from the *@DataSourceNameRT* system tag in **WinCC**. Use **System Check** to read this value.

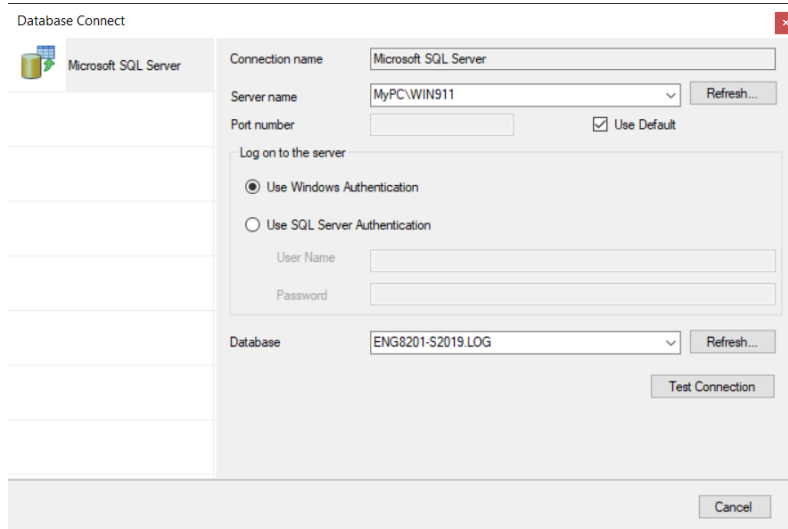
Inductive Automation Ignition



The Ignition Alarms can be configured to log to any available database on the network.

The settings should reflect the **Database Connection** used as the **Datasource** within the **Ignition Alarming Journal**.

WIN-911 Alarm Notifications



The WIN-911 alarm notification system logs every alarm it is configured to monitor. XLReporter's Advanced Alarm Metrics can be calculated on this set of alarms with this option.

The connection should be made to the SQL Server instance where the WIN-911 database is configured. Typically, this is on the same machine where WIN-911 is installed and the instance is named *WIN911*.

The **Database** selected should end with *.LOG*.

Note that alarms logged with the *IsBypassed* column set to *TRUE/1* will be displayed in the **AlarmDisabled** worksheet in the **Alarm Report** template.

XLReporter Alarm and Events

Microsoft SQL Server

Microsoft Access

Microsoft Excel

MySQL

PostgreSQL

SQLite

Text Files

Connection name: Microsoft Access DB_AlarmsEvents

Database name: C:\XLRprojects\XLR_Demo\Data\DB_AlarmsEvents.mdb Browse...

Log on to the database

User Name:

Password:

Test Connection

This option is provided as a way of trying out the Alarm Management module. A Microsoft Access database has been provided in the XLReporter Demo project for this option.

With **Microsoft Access** selected, set **Database name** to *C:\XLRprojects\XLR_Demo\Data\DB_AlarmsEvents.mdb*.

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