Using XLReporter with FactoryTalk Historian SE - ODBC

Overview

XLReporter takes historical values from the FactoryTalk Historian SE to populate reports, periodically, on event or on demand. The award-winning reporting software turns raw data into industrial metrics which are used for compliance, regulatory, improvements and operations.

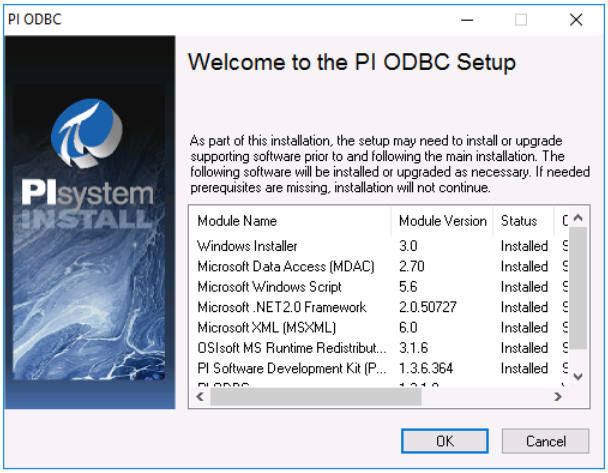
Complete reports are distributed automatically by email, FTP, file server and printers. With the Web Portal, reports are viewed or produced on-demand from any device supporting a web browser such as a mobile phone, tablet, desktop or FactoryTalk ViewPoint.

XLReporter connects to the historian through the **PI ODBC Driver**.

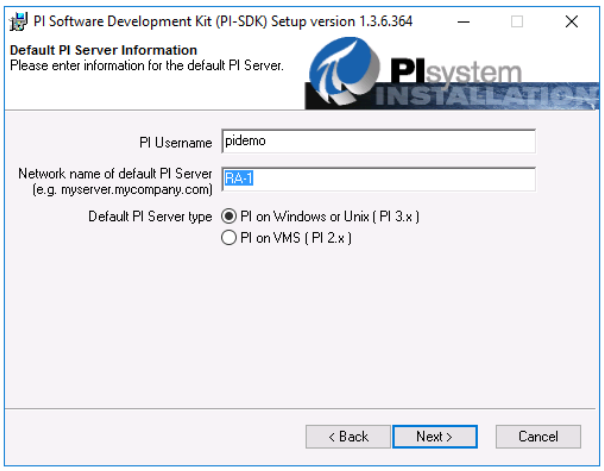
Set up PI ODBC Driver

The PI ODBC driver has to be installed on the same machine as **XLReporter**. **XLReporter** supports version 1.3.1.0 of the PI ODBC driver.

Installation



Click **OK** to proceed.



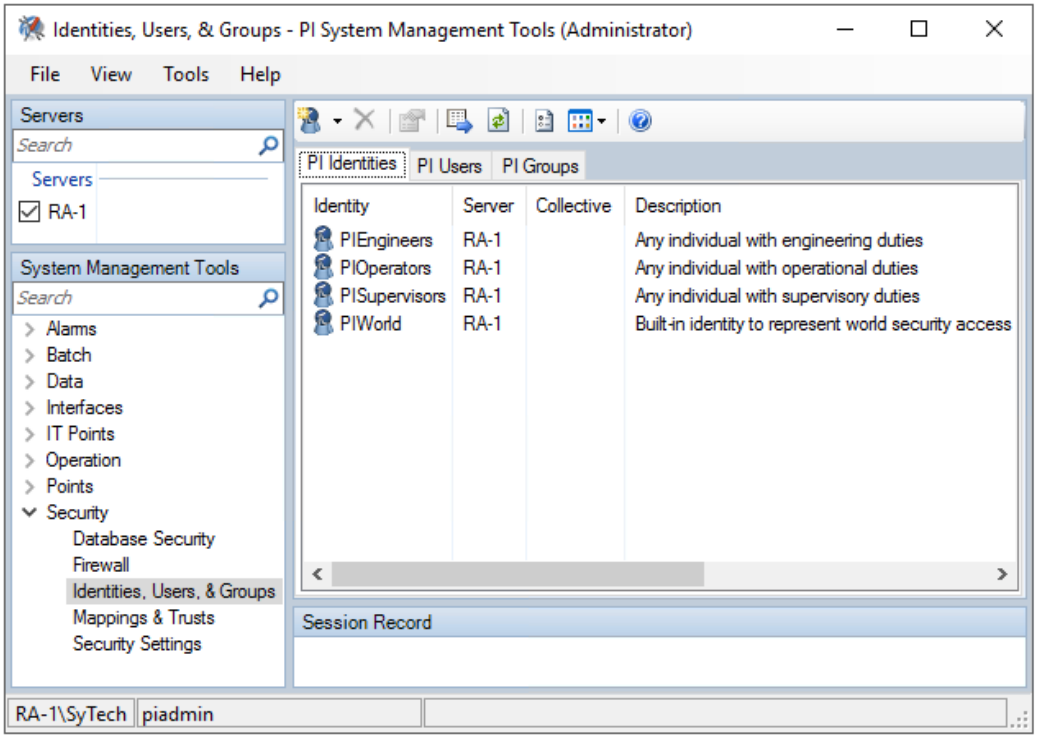
If the Historian is running on a remote machine, specify the **Network name of the default PI Server** to the name of this machine.

Remote Communication

When connecting remotely to the historian via ODBC, credentials must be provided to the server. If the XLReporter and the Historian are on the same domain or if the user accounts where they are both installed match, Windows authentication can be used.

If the above conditions cannot be met, a PI user account must be used to authenticate. If a user account is not already set up, use the following steps to create one:

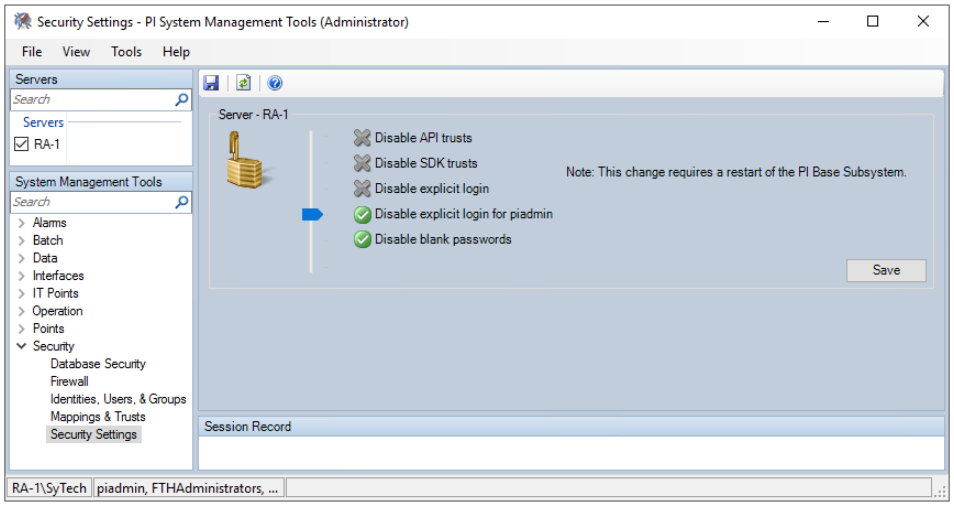
- Open the **PI System Management Tools** and select **Security, Identities**, **Users**, **& Groups**.



- Select the **PI Users** tab and click **New** (person icon in top header).
- Add a **Username** and password if required.

Security Settings

In order to connect using a PI user account, explicit login must be enabled.



- In the **PI System Management Tools** expand **Security** and select **Security Settings**.
- On the right, move the slider bar down so that **Disable explicit login** is not checked.
- Click **Save**.

In order for this change to take effect, the PI Base Subsystem must be restarted. To do so,

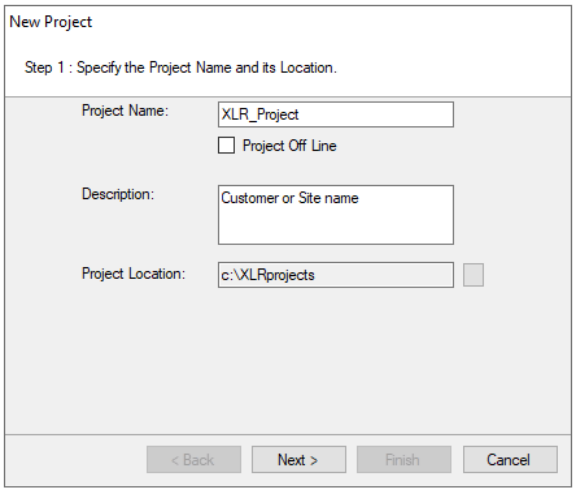
- In the **System Management Tools**, expand **Operation** and select **PI Services**.
- On the right, select the **PI Base Subsystem**, right click and select **Stop Service**.
- Right click again and select **Start Service**.

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

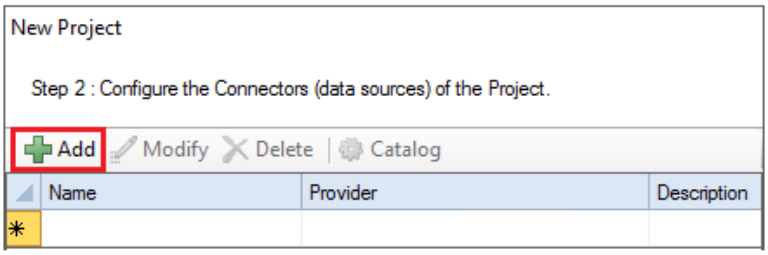
Step 1

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

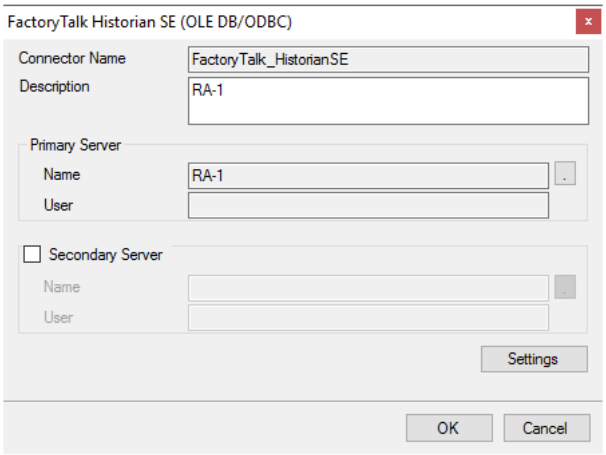


Step 2

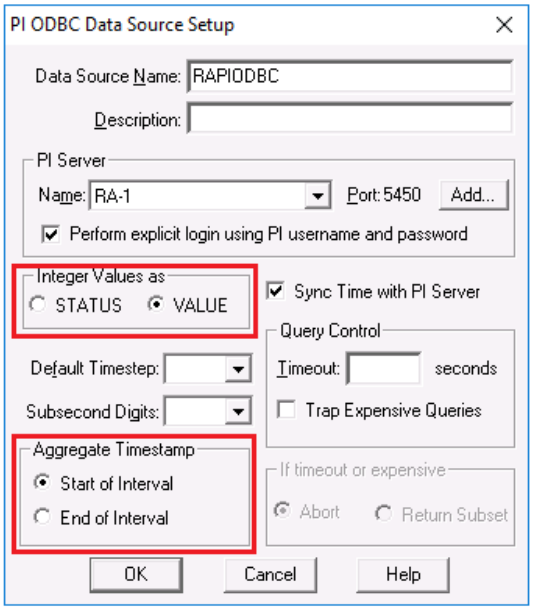
- Configure the data connector, click **Add**



- Select **Rockwell Automation**, **FactoryTalk Historian SE (OLE DB/ODBC)**



- Under Primary Server, click the browse button ([…]) for **Name**.
- On the left, select **PI ODBC**.
- Under **PI Data Source Name** click **New** to create a Data Source Name (DSN).

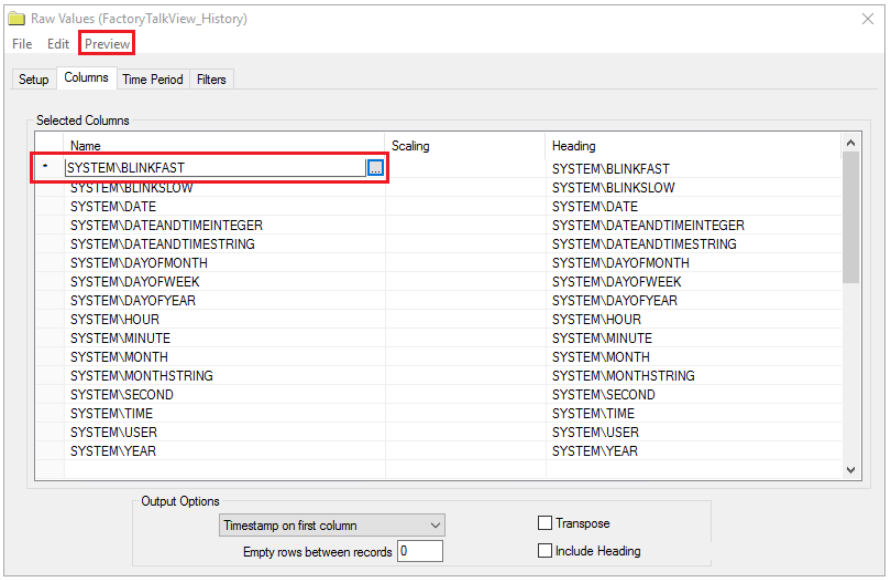


- Set **Data Source Name** to a logical name for the DSN.
- Under **PI Server** set **Name** to the name of the FactoryTalk Historian machine.
- Under **Integer Values as** select *VALUE*.
- Under **Aggregate Timestamp** select **Start of Interval**.
- Click **OK** to save the DSN.
- Under **Log on to the server** select the authentication needed to connect to the historian.
- Click **Test Connection** to verify.

Verify the Data Connector

XLReporter retrieves data for a report using a **History Group**. A quick way to create a History Group is from the **XLReporter Project Explorer.**

- Select, **Tools, Connector Groups**
- Select the connector
- Select **Add**.
- Set the Type *Raw Values* and click OK.



On the **Columns** tab of the group, select the tag **Name**(s).

From the menu bar

- Click **Preview**
- Enter a *Start* date
- Click **Refresh**.