

## Using XLReporter with FactoryTalk® SE Data File Sets

### Overview

**XLReporter** takes historical values from the FactoryTalk Data File Sets 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, desktop or FactoryTalk ViewPoint.

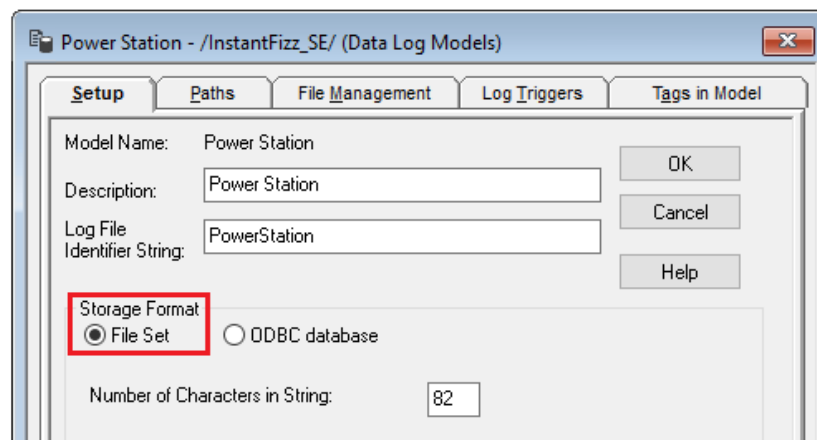
### Setup FactoryTalk View SE Data Log Models

#### Define Data Log Models

Open the **FactoryTalk View SE Studio** from the **Rockwell Software** or **FactoryTalk View** program group then open the current application.

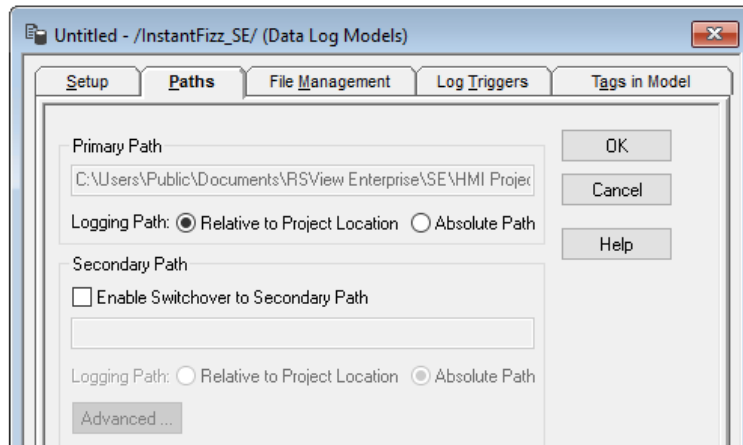
Under the **Data Log** folder in the **Explorer**, select the **Data Log Models** icon.

Under the **Setup** tab,



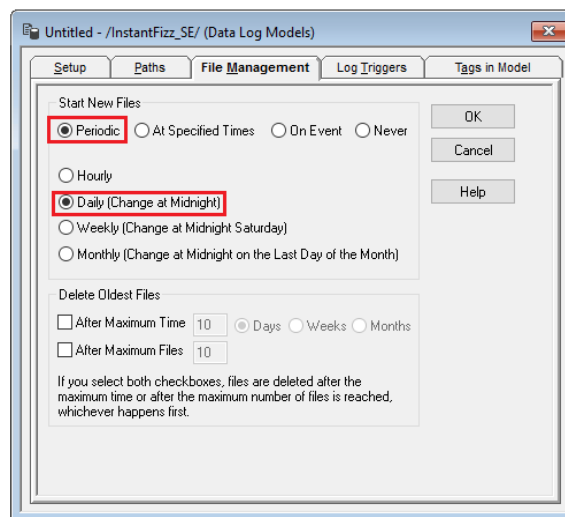
- Add a **Description** and **Log File Identifier String**.
- Set the **Storage Format** to *File Set*.

Under the **Paths** tab,



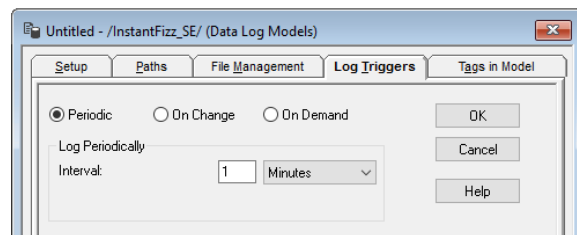
- Set the **Primary Path** to where the files are stored.

Under the **File Management** tab,



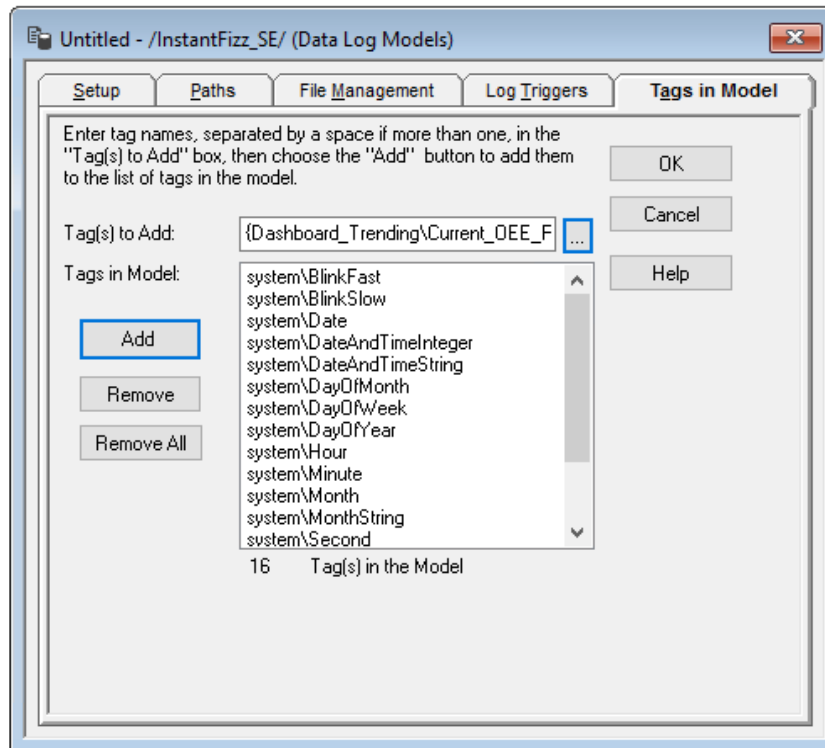
- Specify how often you want new files created. It is suggested to create *Periodic* files that start *Daily (Change at Midnight)*.
- Indicate if old files should be deleted under the **Delete Oldest Files** section.

Under the **Log Triggers** tab,



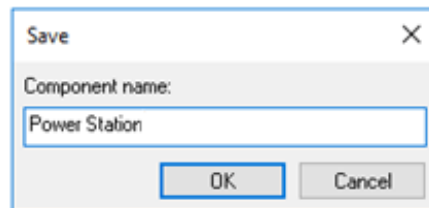
- Specify how the logging of tag values will be triggered i.e. periodically, on change or on demand. The **On Demand** option will log data when the **DataLogSnapshot** command is issued. This command can be issued from anywhere that commands and macros are supported. For example, it could be typed in the command line or specified as the action for an event. If **Periodic** or **On Change** is selected, on demand logging can still be used whenever it is appropriate.

Under the **Tags in Model** tab,



- Specify the tags to be logged.  
The maximum number of tags that can be logged by one data log model is 10,000.
- Close the dialog.

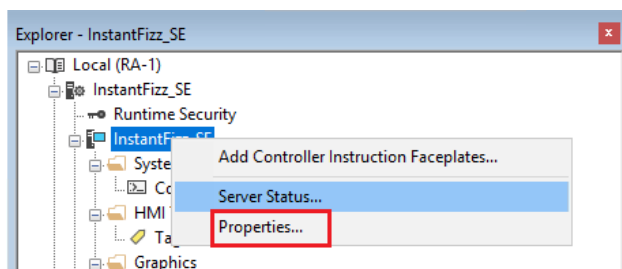
On close the **Save** dialog is opened.



Add a *Component* name. This is the name of the Data Log Model.

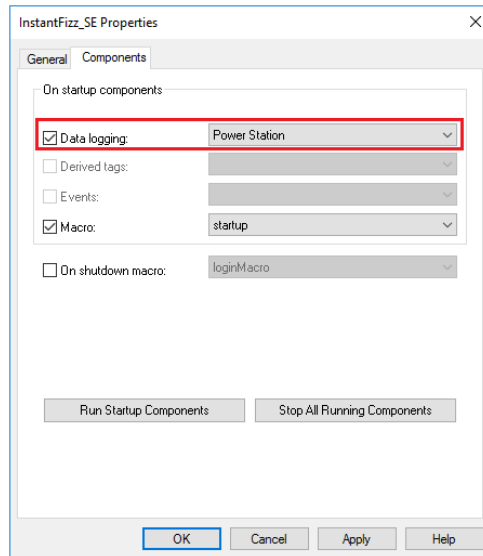
## Start Data Log

To start the data log when FactoryTalk View SE starts, access the **HMI Properties** dialog.



- Right click on the application and select *Properties*.

Under the **Components** tab,



- Check **Data Logging** and select the data log model.

If more than one data log model needs to be started, they can be started using the command:

**DataLogOn "Component name"**

Where *"Component name"* is the data log model name. If the model name has a space in it, enclose the name in quotes. The command can be issued from the command line or from a startup or login macro. For example:

**DataLogOn "Power Station"**

Note that in FactoryTalk View SE, a HMI server can have up to 20 data log models running at one time.

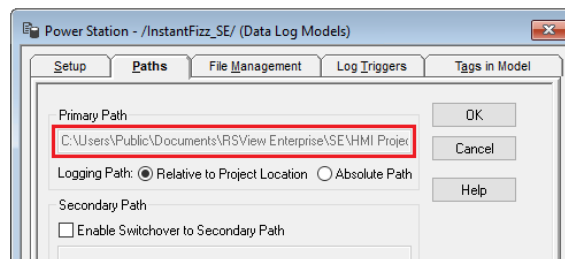
## Prerequisites

### Verify Data Files

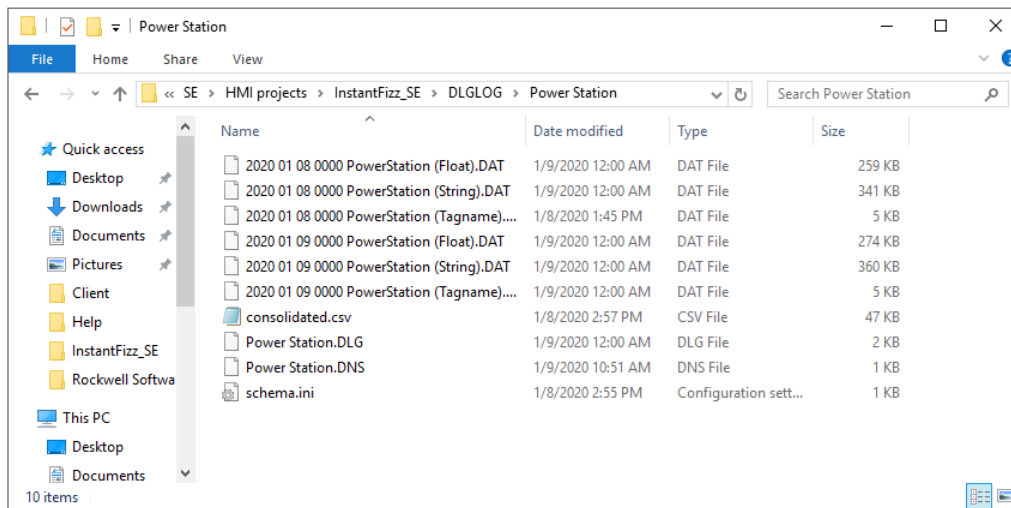
Open the **FactoryTalk View SE Studio** from the **Rockwell Software** or **FactoryTalk View** program group. Then open the application to configure.

Select the **Data Log Models** icon under the **Data Log** folder, open the data log model.

- Open the **Paths** tab and note the **Primary Path**



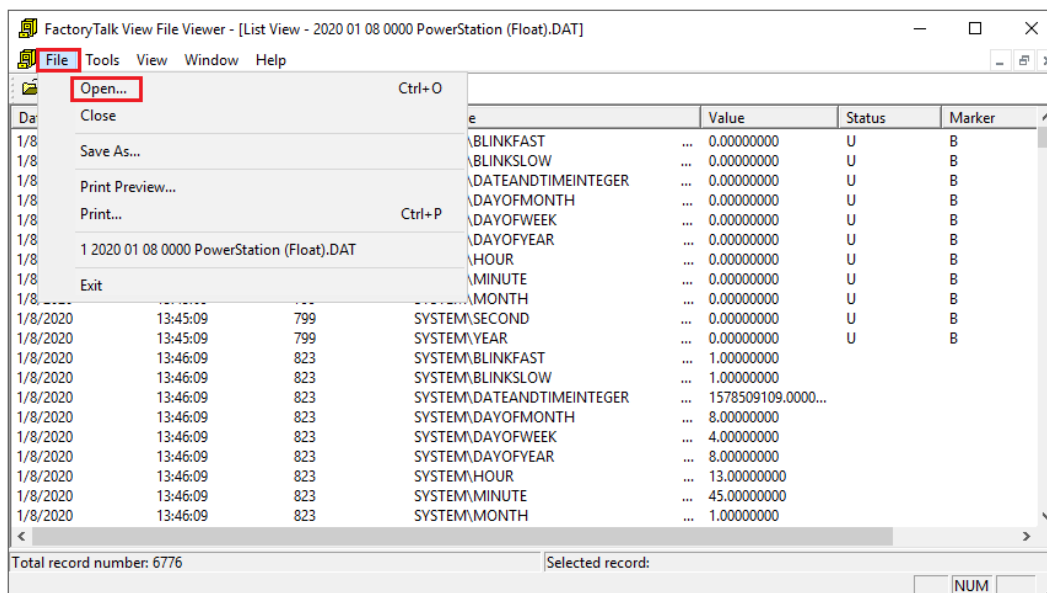
In Windows File Explorer navigate to the path.



Verify the data files (.DAT) are created in sets of three with (*Float*), (*String*) and (*Tagname*) in their names. Also verify the files size is greater than 0 KB.

## Verify Tags and Data

Open the **FactoryTalk View File Viewer** from the **Rockwell Software** program group.



Select **File, Open** and navigate to the path. Open the most recent (*Tagname*), (*Float*) and (*String*) files in the path.

- Verify the tag file is correct and that the float and string files contain data

# 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, Modify, X Delete, Catalog
- Table with columns: Name, Provider, Description
- Table content: \* (in Name column)

## Select Rockwell Automation, FactoryTalk View Data File(s)

The screenshot shows the 'FactoryTalk View Data File(s)' dialog box with the following fields and options:

- Connector Name:** FactoryTalkView\_History
- Description:** C:\Users\Public\Documents\RSView Enterprise\SE\HMI projects\hns
- File Information:**
  - File Type:** SE Datalog files
  - Log Files:** C:\Users\Public\Documents\RSView Enterprise\SE\HMI
- File Formats:**
  - Tag:** YYYY MM DD ??? PowerStation (Tagname).DAT
  - Float:** YYYY MM DD ??? PowerStation (Float).DAT
  - String:** YYYY MM DD ??? PowerStation (String).DAT
  - Time Adjustment:** 1 day(s)

Buttons at the bottom: OK, Cancel

Set **Log Files** to the folder where the data log model is storing the file set.

# Verify the Data Connector

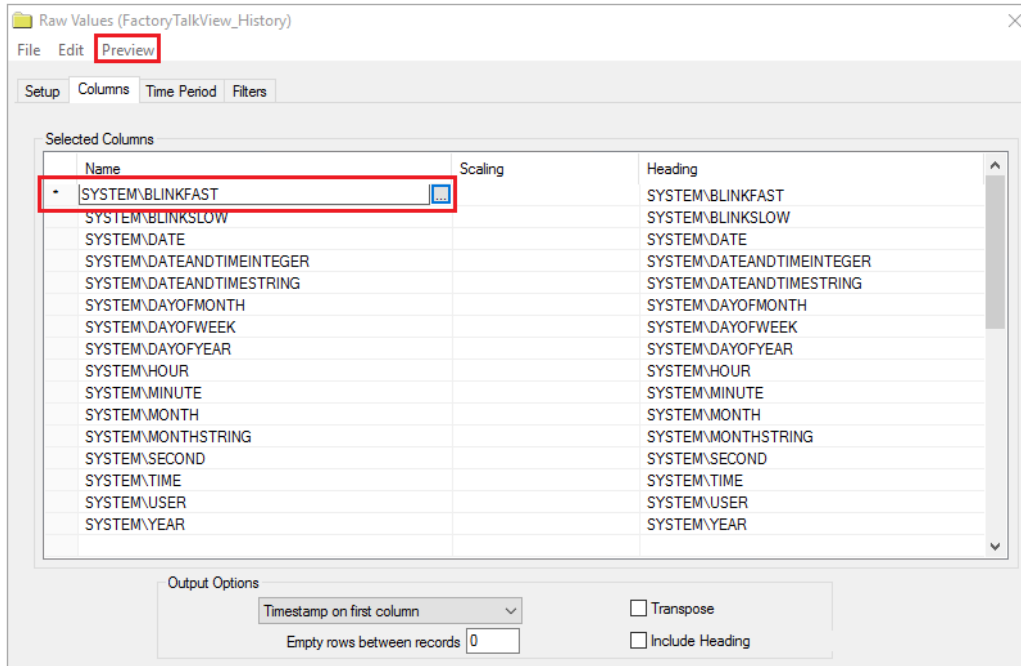
**XLReporter** retrieves data from the **Data Connector** using a **History Group**.

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

Select the *FactoryTalk historical 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**.

