

Using XLReporter with PanelView Plus

Overview

XLReporter imports historical log files created on a PanelView Plus terminal to a local PC to automatically populate workbooks, periodically or on event, without needing Excel. XLReporter's award-winning reporting engine returns either raw or calculated metrics from the data.

FactoryTalk ME's DataStore Plus control creates files that can be accessed using a flash drive, local network or FTP.

XLReporter copies and archives the history files to bypass the storage limitations on the terminal. When reports are generated, the data appears as a single entity which means collection can be done across multiple files. Tag names are catalogued from the files and browse-able from XLReporter tools. Database features like filtering and sorting are supported together with summaries like min, max, average, and machine uptime/downtime.

Finished reports are distributed 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, tablet or from the PanelView Plus Terminal itself.

Configure DataStore Plus

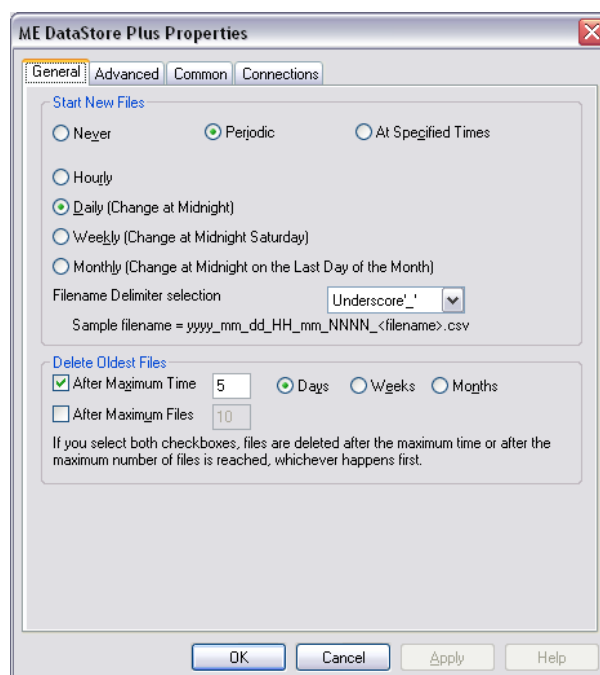
The DataStore Plus ActiveX control is used to collect data in comma separated values files (CSV).

In FactoryTalk View Studio – Machine Edition, place the **ME DataStore Plus** ActiveX control on a display that cannot be closed by a user.

**If this control is not available, it may need to be registered.*

Double-click the control to view its properties.

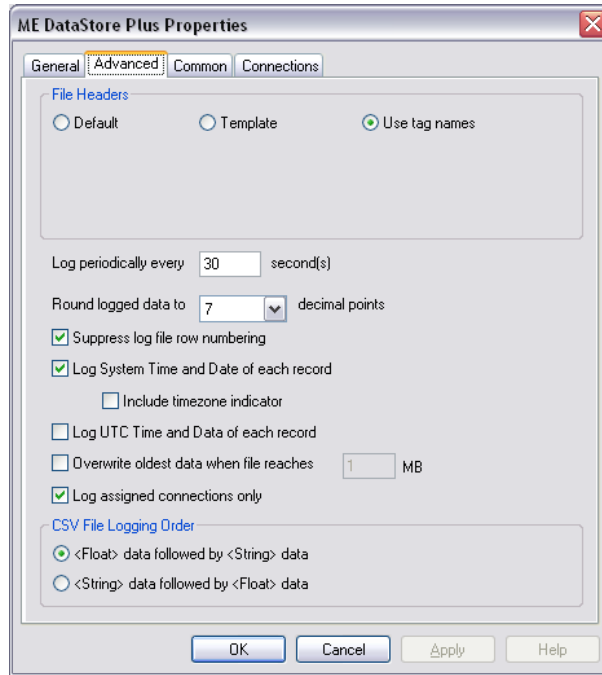
The **General** tab settings determine when csv files are created.



To optimize reporting runtime, enable the following:

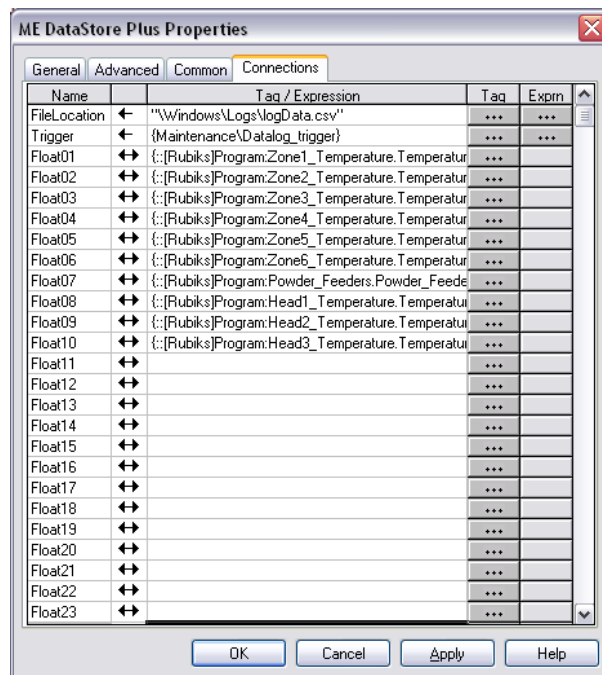
- **Start New Files** either *Periodic* (Hourly or Daily) or *At Specific Times*.
- **Delete Oldest Files** value longer than the transfer rate scheduled for the Connector (see below).

The **Advanced** tab settings determine when the data is logged.



- For **File Headers** select *Use tag names*.
- Enable **Suppress log file row numbering**.
- Enable **Log System Time and Date for each record**.
- Enable **Log assigned connections only**.

The **Connections** tab settings determine what data is logged and where the csv files are saved.



FileLocation determines the csv output path. Select a path accessible from the local network or via the Windows FTP Server on the machine.

The **Trigger tag** enables logging only when its value is non-zero.

Configure FTP Server

For FTP access, enable a Windows FTP Server.

- Open the **Windows Control Panel**
- Open **Services**
- Click the **FTP Server** button so it is green. If the button is green, the FTP Server is running.

To configure the FTP Server settings:

- Open the **Windows Control Panel**
- Open **Server Config**
- Select the **FTP Server** tab

Default Directory and **Base Directory** determine the root folder of the FTP server. To set this to the root folder of the system, configure both settings to \.

Allow Anonymous allows connection to bypass Windows authentication.

Prerequisites

Files

On the PanelView Plus, verify that csv files have been created by the DataStore Plus control. A connector cannot be defined in XLReporter until at least one csv file is generated.

If csv files are not being generated, contact Rockwell Automation technical support to troubleshoot and correct this issue.

Connectivity

FTP

If files are transferred via FTP Server to XLReporter, ensure a connection to the FTP Server can be established.

Open **Windows File Explorer** and navigate to:

ftp://<Panel View IP Address>

If successful, a list of files and folders on the PanelView Plus is displayed.

If this cannot be done, please contact the local network administrator for further assistance.

Local Network

Open Windows File Explorer and browse the network to the PanelView Plus machine and drill into the folder where the csv files are located.

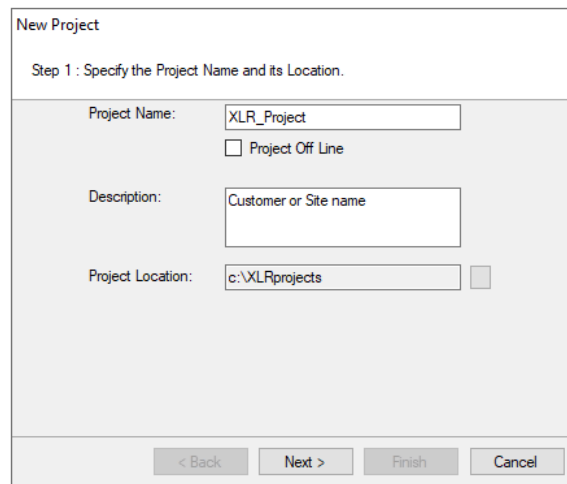
If this cannot be done, please contact the local network administrator for further assistance.

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).



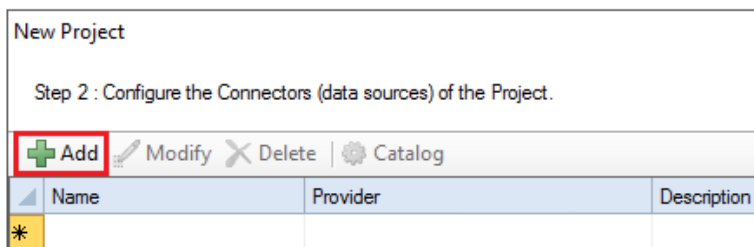
The screenshot shows the 'New Project' dialog box with the following fields and options:

- Project Name:** XLR_Project
- Project Off Line
- Description:** Customer or Site name
- Project Location:** c:\XLRprojects

At the bottom, there are four buttons: '< Back', 'Next >', 'Finish', and 'Cancel'.

Step 2

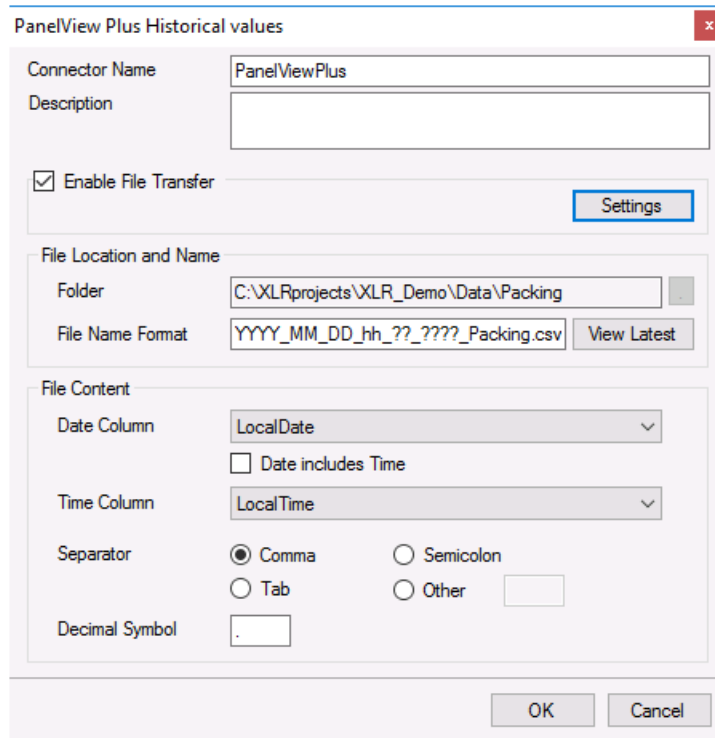
- Configure the data connector, click **Add**



The screenshot shows the 'New Project' dialog box with the following elements:

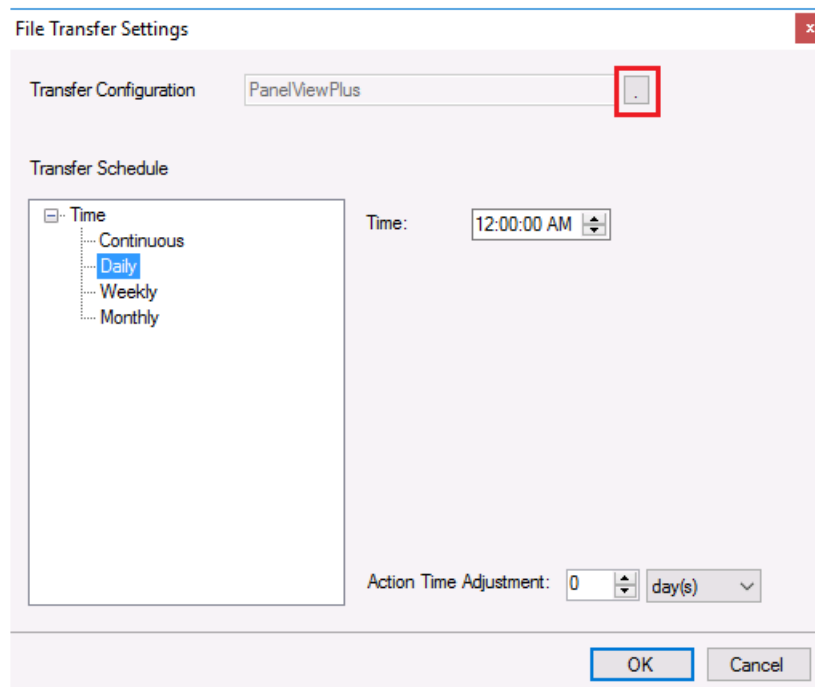
- Step 2 : Configure the Connectors (data sources) of the Project.**
- A toolbar with buttons: **Add** (highlighted with a red box), **Modify**, **Delete**, and **Catalog**.
- A table with columns: **Name**, **Provider**, and **Description**.
- The first row of the table is empty and has a yellow asterisk (*) in the first column.

Select **Rockwell Automation, PanelView Plus Historical Values**.



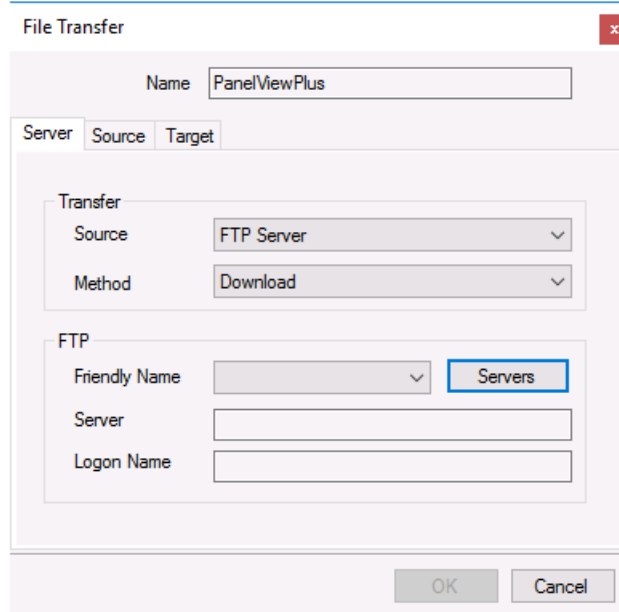
Please note a separate **Data Connector** is required for each PanelView Plus terminal used.

To transfer the log files automatically from the PanelView Plus, check **Enable File Transfer**. Click **Settings** to configure.



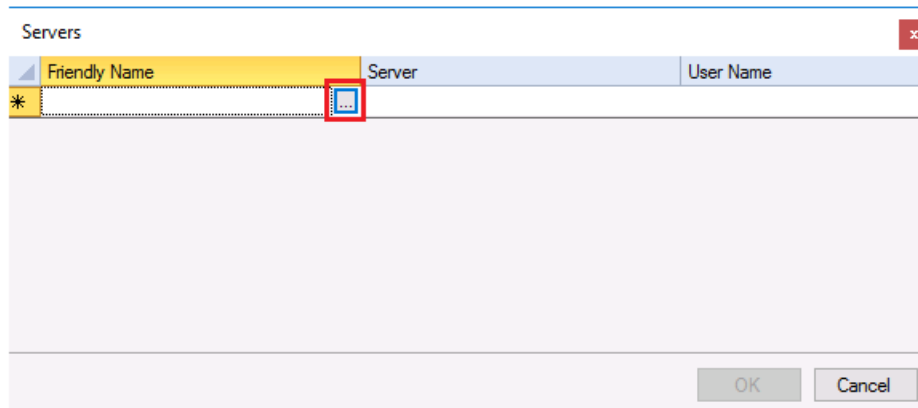
For **Transfer Configuration**, click the browse pushbutton (...).

Under the **Server** tab,



- In **Transfer**, set **Source** based on the previous network configuration.
- Set **Method** to *Download*.

If **Transfer Source** is *FTP Server*, in the **FTP** section set **Friendly Name** to an available FTP Server configuration. If there is not one available, click **Servers** to define one.



To define a new FTP Server, select the **Friendly Name** column of the next available row in the list and click the browse pushbutton (...).

For the FTP Server

Server

Friendly Name: PanelViewPlus

Server

Server(FTP): 192.168.1.100

Port Number: Use Default

Encryption: None

Logon Information

Name: Anonymous

Password: *****

Use Anonymous

Test FTP Server

OK Cancel

- Set **Friendly Name** to a name that reflects the PanelView Plus.
- For **Server**, set **Server(FTP)** to the IP Address of the PanelView Plus.
- For **Logon Information** check **Use Anonymous**.
- Click **Test FTP Server** to verify the configured settings for the server.
- Click **OK** to return to the list of FTP Servers.
- With the server row selected, click **OK** again to return to File Transfer.

File Transfer

Name: PanelViewPlus

Server Source Target

Transfer

Source: FTP Server

Method: Download

FTP

Friendly Name: PanelViewPlus Servers

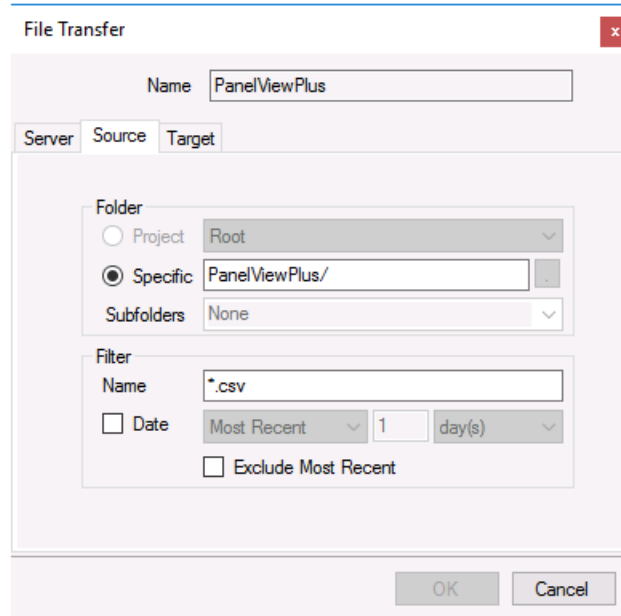
Server: 192.168.1.100

Logon Name: Anonymous

OK Cancel

The FTP settings should now be filled out.

Select the **Source** tab to specify the **Folder** containing the log files.



The **Folder** section defines the source file path.

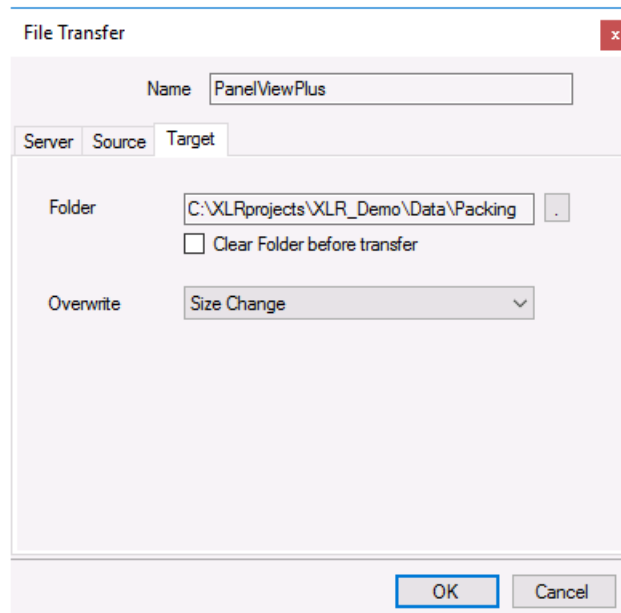
For FTP Servers, if the files are on the root of the server, **Specific** should be set to the **Friendly Name** of the FTP Server. If files are located in a subfolder on the FTP Server, subfolders can be specified separated by “/”. For example, if the **FTP Friendly Name** is *PanelViewPlus* and the subfolder is *PackingLine*, **Specific** will be set to:

PanelViewPlus/PackingLine

For **Local Network**, **Specific** should be set to the path on the PanelView Plus terminal where the csv files are located. It is not recommended to use a mapped drive for this path.

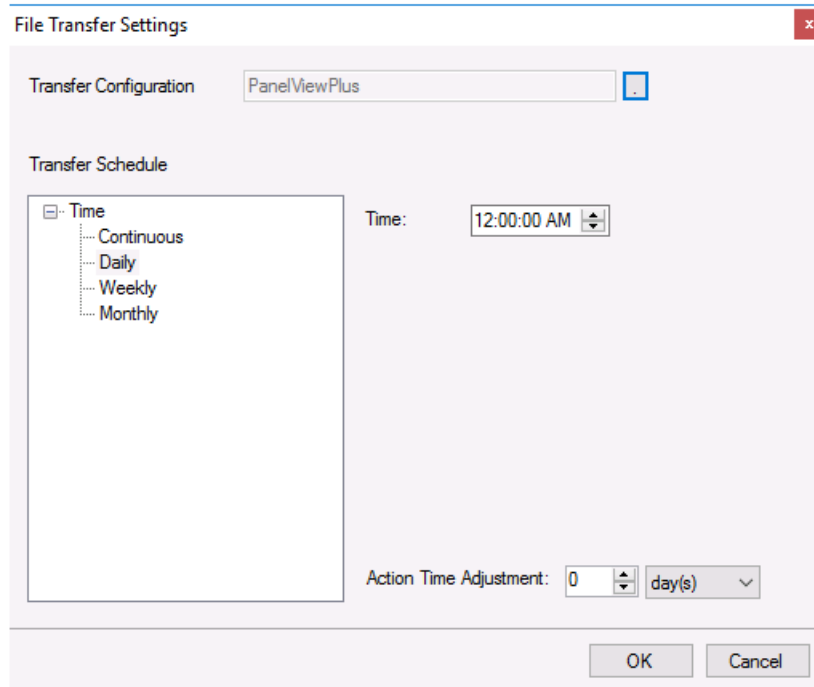
The **Filter** section determines which files are transferred. At a minimum the **Name** should be set to *.csv to ensure that files with the .csv extension are transferred.

The **Target** tab defines the local archive path and overwrite behavior.

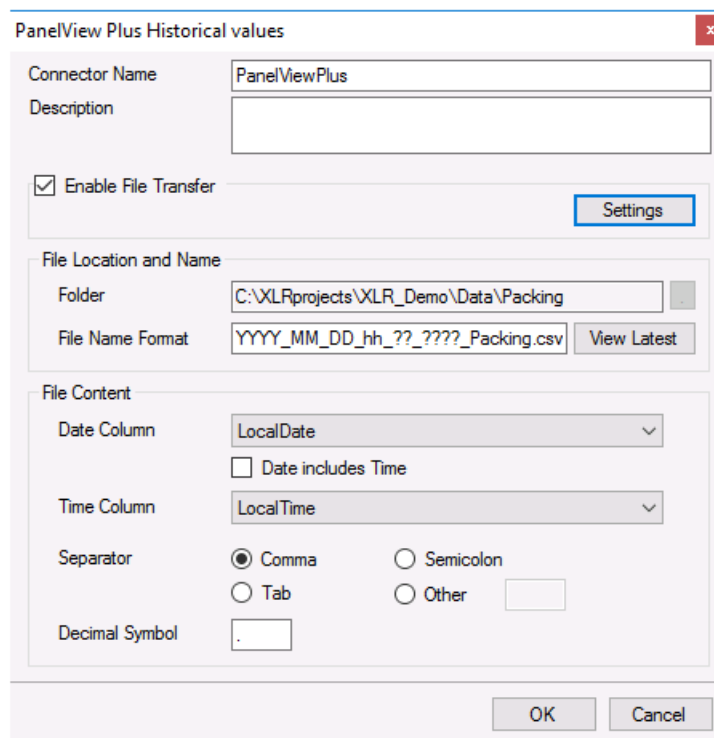


- **Overwrite** defines behavior when a source file already exists in the target path. Set this to *Size Change* to overwrite only when the source file contains different content than the target.

Click **OK** to save this configuration. An initial download runs automatically.



Set the **Transfer Schedule** based on the **Start New Files** parameter of the DataStore Plus control. Click **OK** to return to the connector settings.



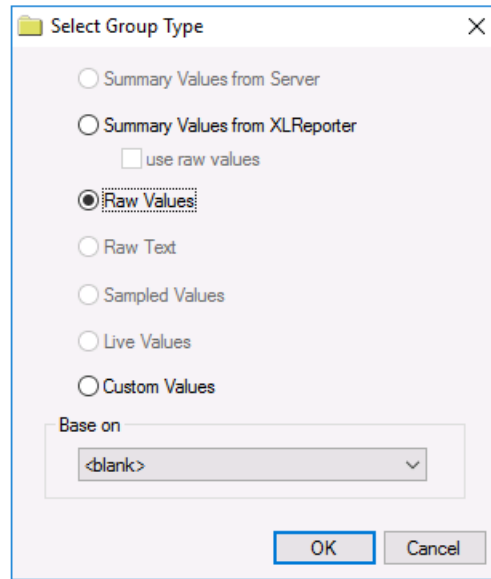
The **File Location and Name** settings are defaulted based on the latest file transferred from the PanelView Plus. In **File Name Format**, characters like *YYYY*, *MM* and *DD*, etc. indicate date and time expressions in the file names.

Click **View Latest** to test the connection to the historical files.

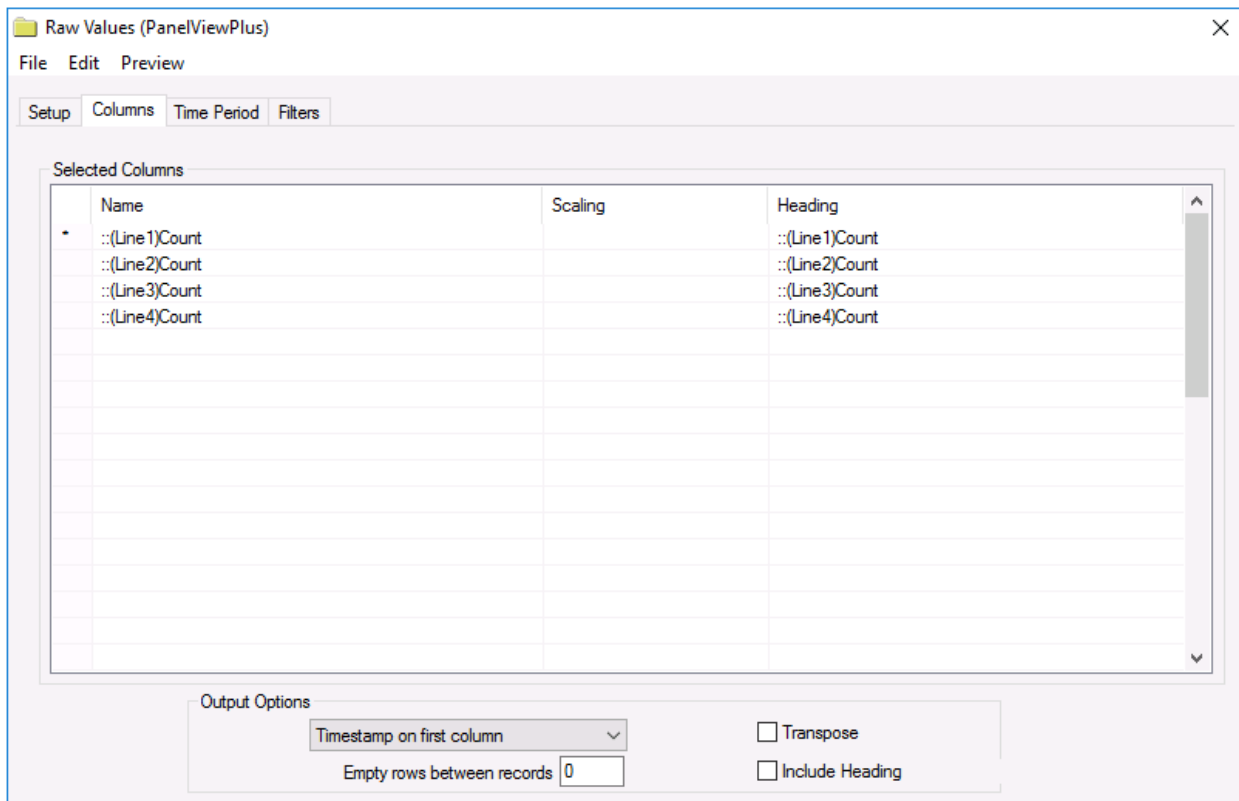
File Content defines date/time indexing in the files as well as the value separator which are determined from the files themselves.

Verify Data Communication

Open the **Project Explorer** and select the **Tools** tab. Open **Connector Groups**. Select your PanelView Plus connector and then select **Add**.



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 **Catalog, General** 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 you have data in a csv file on the local system. Click **Refresh** to view data. The first 60 records starting at the date and time specified should be displayed.