

## Reporting from PanelView Plus

**XLReporter** generates Excel based reports from the log files created by Rockwell Automation® PanelView Plus terminals using DataStore Plus.

The DataStore Plus ActiveX control is used for logging data to log files. The log files on the terminal can be accessed using a flash drive, directly across the local network or by FTP. Using FTP, a layer of security may be added to prevent unauthorized access.

**XLReporter** uses these methods to copy the log files to a secondary location on the local system. By using network access, this can be done automatically, on time or event. The advantage of copying the files automatically to the connector is that they are archived before the data is overwritten by the device.

**XLReporter's** PanelView Plus Data Connector makes the log files appear as a single data entity like a database, so reports are not limited to the content of a single file. In addition, the connector maintains a list of tag names so that any tag selection can be done using a tag browser. Database features such as filtering and sorting are supported together with analytic calculations such as the average for each hour of a day.

## FTP Server Setup

If you wish to retrieve data using FTP, the FTP server must be enabled on the PanelView Plus. This is done from the **Windows Control Panel** by opening **Services**. If the FTP Server button is not green, it is not running. Click the button to turn it green and start the FTP server.

The FTP Server settings are configured from the **Windows Control Panel** by opening **Server Config**. Under the **FTP Server** tab are all the available FTP Server settings.

The **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 \.

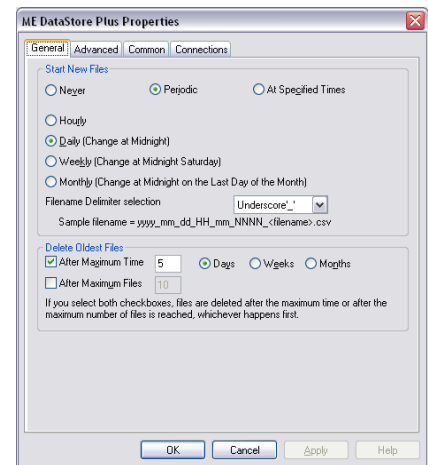
To allow anonymous access, check all the **Allow Anonymous** options for the FTP Server.

## DataStore Plus

The DataStore Plus ActiveX control is used to collect data in comma separated values files (CSV files). It is configured in the FactoryTalk View Studio-Machine Edition by placing the control on a screen that cannot be closed by a user. The following is available when opening the properties.

### General Tab

This tab determines when the files are created.

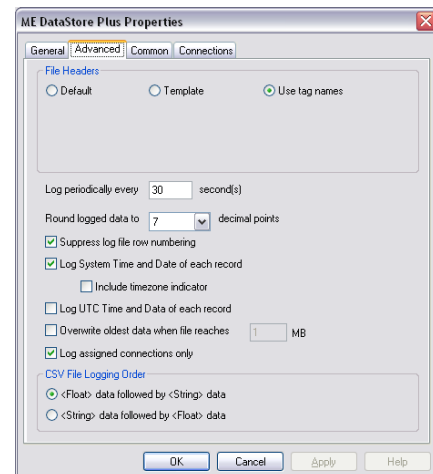


**XLReporter** recommends,

- 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.

### Advanced Tab

This tab determines when the data is logged.

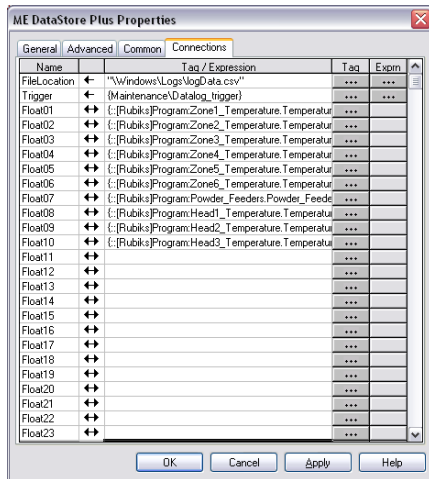


**XLReporter** recommends,

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

### Connections Tab

This tab determines what data is logged and where the files are saved.



The **FileLocation** setting determines both where the csv files are located as well as the fixed text portion of the naming convention. It is important that this location is configured to a folder that is accessible either from the local network or via FTP in order for **XLReporter** to have access to these files.

The **Trigger** setting is typically set to a tag that determines if data should be logged. Only when the value of the tag is non-zero will data be logged to the CSV file.

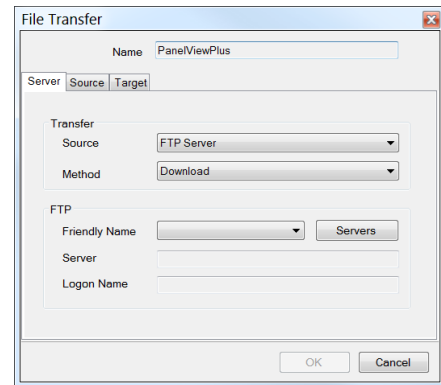
### Creating a Data Connector

To connect **XLReporter** to the log files from PanelView Plus, you will first need to create a **Connector**. To do this, open **XLReporter's Project Explorer**, and open **Connectors** from the **Data** tab. In **Connectors**, select **Add**, and select **Rockwell Automation, PanelView Plus Historical Values**.

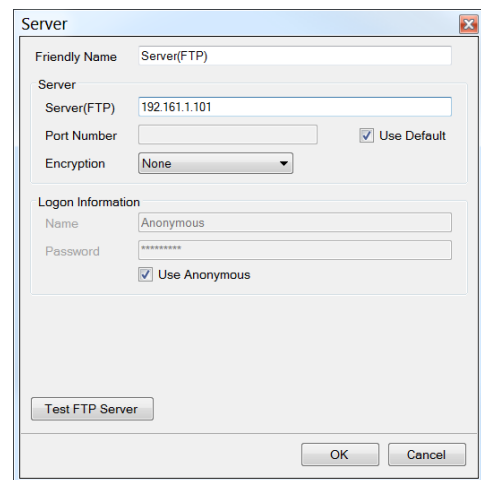
A separate **Data Connector** is required for each PanelView Plus terminal used.

If the log files are accessible from the **XLReporter** machine only via FTP or a network drive, check **Enable File Transfer** and click **Settings** to configure.

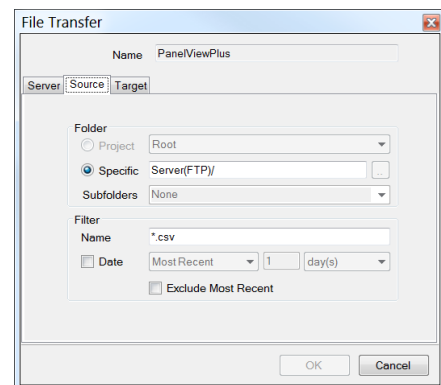
For **Transfer Configuration**, click the browse pushbutton (...).



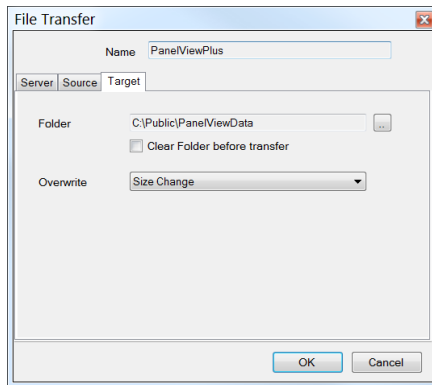
Under the **Server** tab, set the **Transfer** settings to either **FTP Server** or **Local Network**. For **FTP Server**, in the **FTP** section click the **Servers** button to configure a connection to the FTP Server.



The **Test FTP Server** button can be used to verify the configured settings for the server.



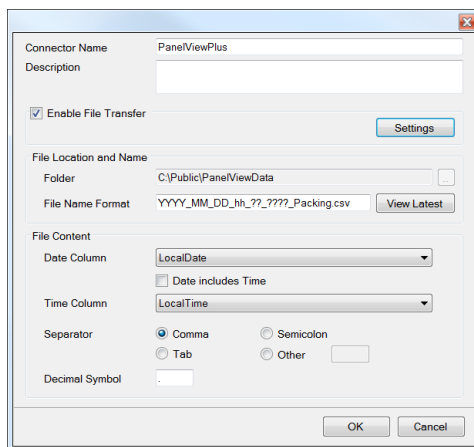
Under the **Source** tab, specify the **Folder** containing the log files.



Under the **Target** tab, specify the **Folder** on the local machine where the log files will be stored.

After clicking **OK**, an initial download occurs automatically to bring files to the local machine.

Configure a **Transfer Schedule** that determines how often files are downloaded from the PanelView to the local machine.



The **File Location and Name** settings as well as the **File Content** settings are populated based on the most recent log file in the **Folder**. Click **View Latest** to see the content.

## Verifying the Data Connector

Create a **Connector Group** to verify that data can be retrieved from the connector. **Connector Groups** are designed in **Project Explorer, Tools, Connector Groups**. Select your PanelView Plus connector, and then select **Add**. Select the **Type**, and click **OK**.

On the **Columns** tab of the group, select the tag **Name** and **Calculation** for each tag in the group.

On the **Time Period** tab, select the **Start Time, End Time** and **Interval** for the group. By default this is set to one hour intervals over the current day.

The **Preview** pushbutton at the top of the history group display can be pressed to preview the result of the current configuration.

Date	MIXER_ZONE1_TEMP	MIXER_ZONE2_TEMP	MIXER_SPEED	MIXER_RAMPRESSURE
3/30/2012	71.393817136719	77.178934250895	33.1370187441508	64.6267203648885
3/30/2012 1:00:00 AM	76.162520907389	49.0242124239654	36.6801054444946	73.1387713114421
3/30/2012 2:00:00 AM	63.6886295264242	53.4956168584188	38.8911795934417	82.3010019938151
3/30/2012 3:00:00 AM	74.5661202748617	76.0964986836444	50.6953378041585	88.912783406331
3/30/2012 4:00:00 AM	78.5054932407227	65.9928971377055	54.0780682517456	90.664429855467
3/30/2012 5:00:00 AM	72.0215874989828	63.6706168492635	53.4231768929585	86.9440397896356
3/30/2012 6:00:00 AM	65.389525524902	53.538532274882	59.6284706751506	79.0512536366781
3/30/2012 7:00:00 AM	71.9103756605676	74.3889140625	59.4726551055908	69.7432478586833
3/30/2012 8:00:00 AM	78.2382620493571	60.0908380508423	60.3853614171346	62.2715770095653
3/30/2012 9:00:00 AM	61.3350624084473	61.3104316383534	71.1325941721588	59.248310443335
3/30/2012 10:00:00 AM	70.8315608978271	56.1890864372253	77.1162390391032	61.7242600123088
3/30/2012 11:00:00 AM	77.7188284556071	56.4964746157328	77.6274737040202	68.8388073821394
3/30/2012 12:00:00 PM	72.8585931142171	62.9040375709534	73.2186347961426	78.1672879378563
3/30/2012 1:00:00 PM	60.1481925964356	60.267854800415	69.4468827565511	86.2893030802409
3/30/2012 2:00:00 PM	71.179417292277	76.4206968943278	70.5296145121256	90.5276397705078
3/30/2012 3:00:00 PM	77.8320638020833	76.4182764889128	68.1329851786296	89.3417254130046
3/30/2012 4:00:00 PM	67.2665041605631	68.3305636723836	65.6417427638771	83.145834477425

Preview

Preview displays the data exactly the same way it will be written into the report.

## Publish Reports

With **XLReporter** reports can be generated automatically as a background task. Once reports are produced they can be published as web pages by scheduling the *Save Workbook to HTML* or *Save Worksheet to HTML* command.

Using **XLReporter's Web Site Portal**, a home page is created which maintains links to all the reports published. As soon as a new report is published, **Web Site Portal** can automatically update the home page to make that report available. To enable this, in the **Project Explorer**, open **Project, Web Site Portal**, and check **Enable Web Portal**. This feature requires Internet Information Services (IIS) to be enabled.

IIS is enabled in the **Windows Control Panel**. The procedure differs depending on the operating system, but basically involves opening **Programs and Features** (or **Add or Remove Programs**) and enabling IIS under the Windows features. More detailed instructions on configuring IIS can be found in the **User Guide**.

With the **Web Site Portal** enabled, anyone on the network can access the reports with their web browser, including the web browser that may be installed on the PanelView (Internet Explorer).

## View Published Reports from PanelView

If Internet Explorer is installed on the PanelView it can be launched from a pushbutton press on a PanelView display. This is done by first inserting a ME Program Launcher ActiveX control on the display.

In the properties of the control, under the **Common** tab uncheck the **Visible** setting so the control won't be seen on the display.

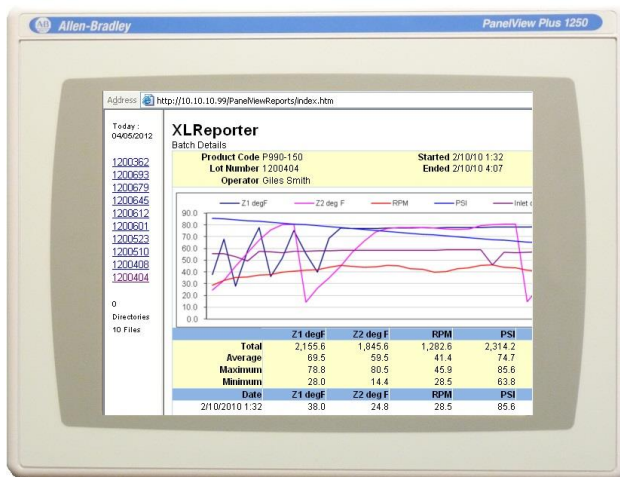
Under the **Connection** tab, set

- **Program Location** to “\windows\iesample.exe” (the Internet Explorer executable).
- **Program Parameter** to “http://IP Address/XLRWebPublish” where IP Address is the IP address where **XLReporter** is installed.
- **Launch Enable** to a digital tag that will be toggled true by a pushbutton press.

To run the ActiveX control, insert a Momentary Pushbutton on the display. In the properties of the button, under the **States** tab, select **State0** and set the **Caption** to *View Reports*.

Under the **Connection** tab, set **Value** to the same digital tag you specified as the **Launch Enable** setting of the Launcher ActiveX control.

Now, when you view the display with the PanelView, if you click/touch the **View Reports** button, Internet Explorer launches displaying the home page with all the web published reports. Select any report to view.



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