

## Dream Report<sup>®</sup> Tech Note – February 5, 2017 Using Dream Report with Rockwell Software HMI and Historian Products

There are several ways for Dream Report<sup>®</sup> to communicate with the Rockwell Software *FactoryTalk*<sup>®</sup> series and legacy HMI products. These methods either use product specific communication drivers in Dream Report, or open communication protocols, such as OPC or ODBC.

## RSView32 Historical Log Files (.dbf format)

The Dream Report Rockwell **RSView Historical values** driver allows Dream Report to access data in RSView32 proprietary history archives (.DBF files), and generate reports directly from the archive, without the necessity of first exporting data into an open database or other format. This driver allows connecting to either local or remote .*DBF* historical archives, and is configured in the Dream Report *Communication Configuration Wizard* from **Rockwell** > **RSView Historical values**. Note that RSView .DAT file historical archives are <u>not</u> supported.

Once the driver is selected, the "**Configure**" button will become enabled. Enter a **Driver Logical Name**. Click the "**Configure**" button, and the following **RSView Driver Settings** configuration window will be opened:

RSView driver settings	×
Select folder	
Wide table     Narrow table	Test
<ul> <li>Long file names</li> <li>Short file names</li> </ul>	
	OK Cancel

Click the [...] button in to browse for a path containing RSView .DBF log files. RSView allows data to be archived in several "table", filename, and timestamp formats - select the appropriate options in the Dream Report driver to match the RSView configuration. Click the "**Test**" button to verify that valid files exist in the selected directory, and then click "**OK**" to close the driver configuration. Make sure to click "Add" to add the configured driver to the Defined Drivers List.

RSView historical log file data can be accessed from any reporting object when creating a report, by selecting *External History Server* and then clicking "Edit List" button to select the configured data source - all tagnames contained in the log files will be available to select for reporting. When opening the history tag browser for the first time, the driver will get the list of all tags and be cached for subsequent tag browsing.

## FactoryTalk View and PanelView HMI's

There are several FactoryTalk View and PanelView HMI products, with varying levels of functionality, and as such, have different capabilities with regards to data logging - from simple CSV files, to SQL database tables, and complete integration with FactoryTalk Historian.





*CSV Files* - the FT View and PanelView/Plus products can be configured to periodically store their historical data in CSV files using the DataStore Plus control. Those files could be stored in a Windows directory, or exposed through the internal FTP Server in the PanelView Plus. If exposed through the FTP Server, use Dream Report's *FTP Transfer Engine* (found in DR Studio under *Tools > FTP Transfer Engine*) to periodically

check for and transfer the CSV file(s) to the Dream Report machine, and then use the Dream Report open communication **CSV File Driver** to extract and log the data into the internal Dream Report database for reporting. If the CSV files are already located on a local or network directory, simply configure the Dream Report

Select Data Item Oream Report History	O External History Server
Data Source	
TMP_CSV1	
Item Name	
PSI_Input	

CSV File Driver to point to those files, and process them as described above. Once the CSV data has been logged in the Dream Report Database, you can browse for the data items in all Dream Report objects referencing "Dream Report History".

*Real-Time Data* - Using Dream Report's open communication **OPC-DA (real-time)** driver, you can configure Dream Report to browse for and access real-time values from RSLinx Classic, RSView32, FT View SE (using the FT Gateway), or directly from the PLC. If directly from the PLC, the Dream Report *OPC-DA (real-time)* driver will communicate with the PLC through any appropriate OPC server - e.g., using RSLinx, or other appropriate 3<sup>rd</sup>-party OPC server. The real-time values needed for reporting in Dream Report should then be added to *Logging Groups*, for logging to the database platform of choice (SQL Server/SQL Express, MySQL, Oracle or MS Access). Please reference the *Logger Configuration Studio* section in the DR Help file for more details. Once the real-time data has been logged to the Dream Report Database, browse for the data items by referencing "*Dream Report History*", as shown with the CSV files above.

*SQL Tables* - if the data is already logged to tables in a SQL database, simply use the Dream Report open communication protocol **ODBC Historical Values** driver to map into the appropriate table(s), and then report directly on that data referencing *"External History Server"* data items in all reporting objects. Reference the Help file under *Communication Drivers > ODBC* driver for details on configuring the driver.

## **FactoryTalk Historian**

The recommended method for Dream Report to communicate with FT Historian is through either the ODBC Historical Values driver, or the OPC-HDA driver - both found under the *Open Communications Protocols* section of the Dream Report Communication Configuration Wizard. Both of these methods rely on the FT Historian client components (available from Rockwell Software) being installed on the Dream Report machine. Those client components provide both ODBC and OPC-HDA drivers for the FT Historian that Dream Report can then utilize for reporting. Alternatively, you can install the Dream Report **Remote Communicate** locally with the historian, and then communicate with the Remote Driver Historical Value on the Dream Report machine via secured web services. Please reference *Help > Remote Connector* for more details on the Remote Connector.