Version 14.4 Release Notes

Version 14.4

Connectors

OPC DA and OPC HDA

When connecting to an OPC DA or OPC HDA server on a remote machine, Microsoft's DCOM technology is used.

Microsoft is due to release an update to harden DCOM connectivity which requires OPC DA and OPC HDA clients like XLReporter to use higher level authentication to connect.

To account for this, in the **Settings** of the OPC DA and OPC HDA connectors, the **Use Packet Integrity Authentication Level** option is provided. If the DCOM hardening has been applied to the machine where the OPC DA or OPC HDA server is running, this option should be checked.

For more information on DCOM hardening, see Microsoft's Knowledge Base article KB5004442.

Database (time series) Historical values (wide multi-table)

The Historical values (wide multi-table) connector now provides an interface to specify which tables and views to browse and request data from in the database connected to. Each table and view can be set with a **Friendly Name** to help users identify where to get their data from.

Database (time series) Historical values (narrow multi-column)

The Historical values (narrow multi-column) connector now provides an interface to specify the tag table and data table settings for all the tables and views to consider in the database for the connector. Each data table/view can be set with a **Friendly Name** to help users identify where to get their data from.

Email and SMS

Microsoft Office 365

In an effort to bolster email security, Microsoft is phasing out basic authentication to the Office 365 SMTP server in favor of more advanced, modern authentication methods.

To account for this, the Email and SMS application has been updated so that the Office 365 SMTP server can still be used as your mail server by using the OAuth2 authentication method.

For more information, see Deprecation of Basic authentication in Exchange Online on Microsoft's website.

Improvements/Issues Fixed

Database Consolidator

Timeout

If requests to the source database took longer than *20* seconds a timeout error would be returned regardless of the **Client Wait Time** set in the connector.

Missing Data

If the **Source Date Storage** is set to *utc*, after the initial consolidation of data, records from the beginning of the next request were not being logged to the **Target Table**.

Data Entry Forms

When used from a Windows Client, if the table for the data entry form contained a reserved word in the database, an error would appear when the form was selected. For example, if the table contained a column named *Level*, the error would read "The LEVEL clause includes a reserved word or argument".

Design Studio

For older manual data entry form templates, a **Save As** action would cause the studio to crash.

FTP Transfer

When uploading to an FTP Server, if the **Clear Folder before transfer** setting was checked on the **Target** tab and no files in the **Target Folder** matched the **Source Filter** specified, a "Failed to clear target folder" error message could be returned.

On-Demand Reports

When selecting a tag with no description in an On-Demand Report, changing **Display** to *Description* and back to *Name* or *Nickname* would remove the tag from the panel.

Template Library

The **Chart Recorder** library templates have been completely revamped.

Version 14.3 Release Notes

Version 14.3

Database (time series) Connectors

Historical Values (wide multi-table)

A new connector that manages multiple tables in a database to make them appear as a single table. This approach avoids complex database "joins" and makes the retrieval of data efficient. From a user's perspective, data access is selected from a single tag browser displaying columns across all the tables. When a filter is applied to a column, this influences the entire result set. In other words, a filter on one table that can affect data returned from others.

Historical Values (narrow multi-column)

The current Historical Values (narrow) connector is used for "narrow" data tables that only contain a single data column. This new connector expands the functionality to handle narrow tables that have multiple columns of data.

Data Management

Data Export To Database

This is an enhancement to the existing export capability where data in a report is exported to a database. When exporting is performed to a Microsoft SQL Server database, a *Bulk Copy* is available to export a range of values to the database quickly and efficiently.

Function

The *Function* **Category** provides a collection of functions to perform tasks not easily available in spreadsheets. For instance, this category offers *TimeStamp Convert* which converts Universal Time (UTC) to local time and vice versa, accounting for daylight savings adjustments.

Custom

The *Custom* **Category** is for users who wish to integrate their own business logic by providing them in .NET classes. XLReporter orchestrates the transfer of raw data from the report to the external .NET class for processing and places the output of the class onto the report.

Improvements/Issues Fixed

Alarm Module

Increased Performance

A performance increase is provided by the alarm module when used against the Rockwell Alarms and Events database.

Siemens WinCC/PCS7 Alarms

In some cases, when requesting alarm data from the WinCC/PCS7 alarms database an error would occur about the syntax of the query.

Client Wait Time

If requests to a database took longer than *20* seconds a timeout error would be returned regardless of the **Client Wait Time** set in the connector.

No Alarms Message

When scheduled, if no alarms were logged over the time period requested a popup message could appear which would halt schedule execution.

Data Connectors

FactoryTalk View SE Data Agent Data Files and Historian SE

Raw Values

In a **Raw Values** group, it was observed that if no values were recorded at the start of the time period, an interpolated value from the past is reported with a timestamp matching the start. This has been removed so that a raw values data group returns only the raw data recorded during the time period.

Arithmetic Overflow Error

In a **Summary Values from Server** data group, if a request to the Server returns only 1 value then an arithmetic overflow error occurs.

Read/write memory error

In a **Summary Values from Server** data group, when requesting data spanning over the end of daylight savings time a read/write memory error could occur when updating the report.

FactoryTalk View SE Historical Values

In a **Summary Values from XLReporter** data group with use raw values unchecked, values marked as bad quality were still being factored into the calculations requested.

GE Historian

In a *Summary Values from Server* data group with a 1 hour interval that spans the transition out of daylight savings time, an extra *1:00:00* timestamp was being reported with no data.

OPC DA

If the value for a tag was returned as no value, the retry logic would not kick in like it does if the value returned as bad quality. Now no value is treated just like bad quality.

OPC HDA

When browsing for tags, if the enter key was pressed the browser would close but the client license used to get the tags from the server would not be released.

OPC UA

In certain OPC UA servers (like Emerson's DeltaV OPCUA server) only a subset of tags available from the server would be shown in the tag browser.

Text File Historian

If the text files contained an encrypted column and the data request spanned multiple text files, only data from the first file would be reported.

VTScada History

If the data group contained a tag in VTScada that was not configured for a device, an error would occur when the group was executed.

Data Management

Analysis Histogram

If the **Bin Range** was set to a specific cell range on the same row as the **Placement Cell** and **Pareto** was set to *Yes*, unless the **Bin Range** and **Placement Cell** were directly adjacent, the **Bin Range** would not be sorted to reflect the **Pareto** setting (sorted most frequent to least frequent).

Data Import Sheet From Workbook and Sheet From Workbook List

An **Overwrite** setting has been added for these functions to overwrite the worksheet if it exists in the report workbook.

Design Studio

Template New

The import template option now supports importing existing Excel files with *.xls* and *.xlsm* file extensions.

Express Chart

When a pie chart is created from the Express Chart option, the series would sometimes not be applied correctly.

Historical Data Group

The **Difference** calculation has a *Calculate by* setting to define how the difference is calculated, either by the value from the *previous* interval or from the *next* interval.

Report Generation

If a report workbook only had 1 visible sheet in the book and the Overwrite setting was enabled for that worksheet, an error would occur when the report was updated.

Template Library

Any template configured for historical data connectors now lists analytic and manual data entry connectors to select. In addition, when either of these is selected a second option is available to specify which analytic or specific data entry form to use.

Windows Client

Manual Data Entry

When running the Manual Data Entry application on a Windows client, if connection to the network where the server is running is lost, the application does not close down, preserving any data that has been entered. Once network connectivity is restored and the client is logged back in, data in the form can be stored to the database.

Web Portal

If the web portal was configured to an https protocol, when attempting to view reports published in HTML format, an error would appear indicating the file does not exist.

Web Publishing

If a report was published using the *SaveBookHTML* action and that report contained hidden sheets, the hidden sheets were shown in the HTML rendition of the report.

Version 14.2 Release Notes

Version 14.2

Data Entry Forms

An advancement on the time-based forms, user can now create custom forms that are non-time based. A wide range of forms are now supported such as maintenance, operator logbooks, laboratory, operator rounds and diagnostics.

Custom forms are created by the user and from events in the process such as the exceedance of a runtime or the occurrence of a critical alarm.

Workbook to XML

Save all or part of a report to XML and provide report data in a consistent format to third party products. This feature is especially relevant in Water and Wastewater treatment since the electronic submission of the eDMR (electronic Discharge Monitoring Report) in XML format is acceptable in most States.

To ensure the structure of the XML complies with the requirement, an XML designer is provided for the development of the XML structure. In the context of Water treatment, this designer is applied to submission form so that the XML conforms to the requirement of the State.

Management

A new category of Management called **Functions** provide powerful industrial functions.

- **Result from Workbook**
  Avoid needing to overload a report with "background" sheets that contain calculations, lookup tables and so on, by providing them in separate "background" workbook. This function passes parameters from the report to the background workbook and receives the result for the report. For example, store the Giardia lookup tables in the background workbook and use it to populate the report.

- **Number to Bits**
  Expand a number in a cell to a set of cells containing the binary equivalent (1/0). For example, a number may represent an alarm mask where each bit represents an alarm.

- **Timestamp Convert**
  Timestamp conversion methods such as converting a timestamp from UTC to local time, considering daylight savings.

- **Zero Pad**
  Zero pad the cell content to a specified number of characters.

ISA 18.2 Alarm

The alarm KPIs can be filtered by Operator Position, Module, Attribute and Alarm Duration. The alarm duration is used to show the condition of the alarm system without the chattering/fleeting alarms included so that users can understand the outcome of the improvement if these alarms were removed.

The alarm application provides the export of the KPIs to a database so that improvements to the alarm system can be tracked over time.

Text File Drivers

Advanced features to support text files that do not conform to the common file structure of the first row containing the row headings and the remaining rows representing the data. Provision to support user friendly column names.

Database Consolidator

A Database Consolidator to take data from various sources and log that data to a relational database for reporting purposes. This feature could be used to periodically filter records from one database and save the result in another.

Web Portal Features

Web client download on-demand reports in both Excel and PDF format providing a mechanism for users to share their reports. In addition, the layout of the template list is user selectable.

Improvements/Issues Fixed

Alarm Module

Positions have no effect from a Web Client

The sub filters did not work from the web client. No issues with Windows clients.

Alarm Report Template

The Summary worksheet was the default active worksheet and was scrolled down the page. Dashboard is now the default active worksheet.

Ignition Alarms

Corrected issue where alarms strings did not conform to what was expected.

Documentation

The Product Registration, Setup IIS for Distributed Installation and Name Types documents were missing from the Document Library listing.

Data Group

Columns

If a selected column in the data group started with ":", the "::" was stripped off the tag name when the group was saved so data could not be retrieved for that tag.

If the first selected column from the tag browser is a static variable the "*" was removed from the column when returned to the group builder causing it to not be treated as static.

Time Period

If the Type is set to Database every available column in the selected Source is listed for Date and Time. In some cases, the column may contain a timestamp but the column type prevented it from being listed.

If the Start Date and/or End Date were configured as Variable, the variable was set to a date in the "yyyy-MM-dd" format and the date format of the Windows Operating System contained text and spaces (e.g., "dd MMM yyyy") an exception error could occur when the report was updated.

Database Data Group Stored Procedure

If the Database Data Group is configured with a stored procedure and that stored procedure took more than 30 seconds to execute the group would generate the error "Failed to execute stored procedure". The timeout for the stored procedure now uses the Client Wait Time configured for the connector to prevent this error from occurring.

Tag Browser

For any history connector set up to a database if the tag name or description returned was greater than 256 characters the tag browser would close with an unhandled exception.

Data Connectors

Data Historical Values (wide)

If the Date or Time column in the connector is not a datetime column in the database, when creating a database group an error about the column not being selected pops up when attempting to select off the Setup tab or when saving the data group.

FactoryTalk View SE History values

Added support for millisecond in the timestamp for raw values and corrected an issue where if multiple values were recorded on the same second not all those values factored into the calculations produced from a Summary Values from XLReporter data group.

OPC HDA Historical Values

If a request for server calculated values results in no data returned an attempt to read or write protected memory issue may occur.

ProSoft PLX51 History values

Added support for millisecond in the timestamp for raw values and corrected an issue where if multiple values were recorded on the same second not all those values factored into the calculations produced from a Summary Values from XLReporter data group.

VTScada History

If the tags requested have multiple tiers, the request may fail.

WinCC Alarms

Corrected an issue where in some cases the Test Connection would fail with the error "Format of the initialization string does not conform to the specification …".

Corrected an issue where in some instances the data group that was created from this connector was set with the wrong file extension.

Data Management

Worksheet – Condense Range

The Interval setting has been added to create a set of equally spaced intervals to condense the data to.

Added Count as a Condense To option to produce a count of non-blank rows.

Presentation – Weave Into Range

Corrected an issue where the last row of the Collection range was not being processed.

On Demand Reports

Database Panel

The panel is now populated immediately when the template is selected.

Report Generation

Reports with many rows of data are now generated 40% faster than previous releases.

Project Explorer

Workbook Reports

When toggling from Use XLReporter Design Studio to Use XLReporter Addin in Excel an error about converting from string "x86" to type integer may appear.

Upgrader

When upgrading from version 12.x if the project had Multi Snapshot analytics scheduled to update and/or store they were not changed to Event Frame and therefore would not execute.

Version 14.1 Release Notes

Version 14.1

System Requirements
Microsoft .NET 3.5 Framework is no longer required.

Connectors

Advanced Modules Alarm Management (ISA-18.2)
The Alarm Management connector now supports alarm history logged in the Ignition Alarm Journal.
If KPIs are configured to be exported, the database tables are automatically created.

Rockwell Automation FactoryTalk View SE Data Agent Real-time values
This connector requires FactoryTalk View SE V10, 11 and 12. Real-time data can be retrieved from
PLCs as well as any tag configured in FactoryTalk View SE from anywhere on the network using the
FactoryTalk View SE Data Agent.

Rockwell Automation FactoryTalk View SE Data Agent Data File(s)
This connector requires FactoryTalk View SE V10, 11 and 12. Historical data can be retrieved from
any Data File Set (DAT) in FactoryTalk View SE from anywhere on the network using the
FactoryTalk View SE Data Agent.

Rockwell Automation FactoryTalk View Data Agent Historian SE
This connector requires FactoryTalk View SE V10, 11 and 12. Historical data can be retrieved from
FactoryTalk Historian SE from anywhere on the network using the FactoryTalk View SE Data Agent.

HMS Ewon M2Web Real-time values
The most current value from remote devices can be obtained from Ewon Flexy devices using Talk2M.

ProSoft PLX51 History values
Historical data from one or more PLX51 DLplus 232 data loggers can be stored to a local database
from which the data can be used for reporting.

OPC-DA
The OPC-DA connector can be configured to retrieve data by either performing a *CACHE* read or a
DEVICE read from the server.

Project

Help System
The documentation has been improved so that relevant content can be found easier.

Template Categories
The templates in a project can be organized by categories to make it more intuitive for users to find the
templates they need when using the Project Explorer, On-Demand Reports application or Web Portal.

Design Studio

Express Chart

In the **XLReporter** Design Studio or the add-in to Excel, a new option Express Chart is provided to quickly produce a chart so that it is ready with minimal setup.

Advanced Modules Alarm Management (ISA-18.2)

The Alarm Management module has been improved with the following:

- Support for Inductive Automation Ignition
- Most sub-reports have been enhanced for custom filters
- Enhanced filtering on Position, Module and Attribute
- The calculation of the alarm cycle time i.e., the time from active to inactive so that it can be used as a filter.
- Enabling of alarm KPIs to be exported to an external database for "long term" trending of improvements
- Additional "out-of-box" templates.

Data Management

Group Range

The new management function Group Range function applies grouping to rows of data when values in the Group column match based on the Group Criteria specified. Grouping adds "outline" controls to the left of the row headers to allow expand or collapse one or more rows of data.

Database Group Builder

Manual SQL Entry

A SQL query can be manually entered into the Database Group Builder, overriding the settings of the builder itself.

Support for stored procedures that returns a data table can be specified in place of the SQL query.

Static Text

Static text including empty columns, fixed text and variable values can all be added as selected columns in a *Standard* database data group.

Email and SMS

Text messages can be sent out through MMS (Multimedia Messaging Service) so that reports may be sent as part of a text message.

Improvements/Issues Fixed

Connectors

AVEVA Historian

    Summary Values from Server
    If the **Interval** was set to **Number of Samples**, no data was returned.

    Summary Values from XLReporter
    Sampled Values **Retrieval Mode** now supported.

Rockwell Automation RSLinx Classic

Multiple PLCs through the RSLinx Classic OPC-DA server has been enhanced. Previously it was recommended to set up each PLC as its own connector which is no longer required.

Siemens SIMATIC WinCC/PCS7 Alarms

The connector has been enhanced for easier setup.

Trihedral VTScada Historical values

Connector

The connector now supports the new VTScada ODBC driver that is delivered with VTScada version 12.x.

Tag Browser

The Tag Browser now retrieves tags live from the database and presents them in the same tiered structure as they are presented within VTScada.

Quality

When processing historical data in *Summary Values* from XLReporter connections, quality is now considered.

Citect Historical Values

Corrected issue where no tags were shown in the browser in the latest version of Citect.

Microsoft SQL Server

The **SSL Security error** if fixed when connecting to Microsoft SQL Server by an updated SQL Server OLEDB driver. If that driver is detected, it is used for the connector.

Alarm Management

Improved detection of disabled and suppressed alarms. Alarms which remain disabled or suppressed at the end of the report period are now considered in the summary information for each attribute.

Data Retrieval

Date Format

Corrected issue where if the Local Date format of the Windows Operating System was set to something that was completely numeric (e.g.,23-Jan-2021), **XLReporter** would fail to get historical data.

Data Management

Workbook Chart Range

Corrected issue where if there is a blank series in the chart it returned an error. Now that series is skipped.

Workbook Collapse Range

Corrected issue where function only clearing #REF on top row rather than entire range

Workbook Condense Range

Corrected issue where error would occur if the group was set up for a date or time but the cell was blank.

Presentation Chart Enhancement

Corrected issue where Alternate labels weren't considering blank rows.

Data Export To Database

Corrected issue where zero padded values not exporting with padding.

On-Demand Report Designer

Improved determining the default action for On-Demand reports based on what is configured in the template.

On-Demand Reports

Parameter Panel

Corrected issue where if value in Custom List contained a comma the list value was invalidated.

Scheduler

Daylight Savings Time

Corrected issue where if the Action Time Adjustment is 1 day, on the day daylight savings time 24 hours are subtracted to calculate the Report Time which can push this time back 2 days rather than 1.

Action Time Adjustment for Event Triggers

Corrected issue where if Action Time Adjustment was configured for an event trigger it was having no effect.

Error Logging

Improved error logging for event triggers.

Report Generation

Active Worksheet

Corrected issue where if the template contained hidden worksheets or the Hide Template Worksheet option was enabled, the Active Worksheet would always end up being the left most visible worksheet in the report workbook.

Version 14.01 Release Notes

Web Portal

Licensing

A Professional license now has one roaming client license available for the web portal.

Viewing Web Pages

The distributed web page viewer has been deprecated and is replaces by the web portal.

With the Suite edition, unlimited web clients for viewing web pages only.

With the Professional edition, the user can select between:

- Unlimited web clients for viewing web pages only.
- One full featured client to all the features of the web portal.

Automatic Log in

With User Security not enabled in the project, users visiting the web portal are automatically logged in as Guest without any prompts.

Automatic Hide

An auto hide option of the input panel, if enabled, will automatically hide to show the report full screen.

Data Management

Condense Range

A new Management function to group similar records based on a specific **Group** column and methods to perform a **Condense To** operation such as *First Sample, Last Sample, Average, Minimum, Maximum* and *Total*.

Copy Range

For **Paste**, *Formats* has been added as a choice.

Interfaces

Rockwell FactoryTalk Historian SE OLE DB/ODBC

For a Raw Values data group, the *Timestamp with milliseconds on leftmost column* option is available for **Output**.

Issues Fixed

Interfaces

GE iFIX

When selecting tags from iFIX Real Time local or iFIX Classic Historian connectors, sometimes the node and field were removed from the selected tag name.

GE Historian Plus

When a report was backfilled over a long period of time after many updates an error would occur failing to connect to the historian.

PDF Security

Certain combinations of security settings were not being applied correctly to the PDF files published.

Data Management

Weave Into Range

When **Weave Mode** was set to *Row Append* and there were empty columns in the **Apply To Range** an invalid row or column index error would return.

Write To Process

When writing a value back to a process tag using the **Scheduler**, **System Check** or Data Management Data Export To Tag List function the tag name and value were restricted to 64 characters. Both tag name and value have been expanded to 128 characters each.

Variables

Setting to Blank Value

Corrected issue where if multiple variables were set to blank values it would trigger an error. This was most seen when using the Cell Action By Row Iteration Data Management function.

Analytics

Multi-tag selection

Improved usability of the analytic designer, allowing for multiple analytic items to be configured from a single tag browsing selection.

Email and SMS

Attachments

When configuring attachments for a configuration, the list of Subfolders for Reports is now a list of every template in the project regardless of whether the folder for the template has been created yet.

Web Portal

Parameter Panel

Corrected issue where if a database list is configured to use variables from other rows in the panel nothing would be returned.

Database Panel

Corrected issue where if records were returned with NULL values the panel would not display correctly.

Long User Names

Corrected issue where if the user name was longer than 10 characters it would cause a wraparound which would prevent some items from being accessible.

Themes

The list of pre-configured themes has been expanded.

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