



FactoryTalk View version 12

What's new

October 2020



expanding human possibility™



PUBLIC

FactoryTalk View version 12.00 release summary

- FactoryTalk® View Site Edition (SE) design improvements
 - FactoryTalk® View Studio modernization
 - FactoryTalk View Studio usability enhancements
 - Organize graphic displays in folders
 - Support remark for numeric entry
 - New redundant server license
- FactoryTalk View SE runtime improvements
 - On-screen data grid control for displaying SQL data
 - Server-side script execution
 - Upgrade to Symbol Factory 3.0
 - Support Scalable Vector Graphics (SVG) images
 - Confirmation and E-sign enhancement
 - TrendPro enhancement
 - FactoryTalk® user badge authentication
 - Improved Global Objects performance
- FactoryTalk® View Machine Edition (ME) Improvements
 - XY Plot enhancement
 - RecipePlus Audit enhancement
 - Application management updates
- Mobility with FactoryTalk® ViewPoint SE
 - Mobile OSI PI data trending
 - Mobile Data Grid control
 - Usability enhancements
- FactoryTalk® Alarms and Events
 - Support AD (Automatic Diagnostics) from Logix-enabled devices
 - Enable alarms in the second Instance of FactoryTalk® Linx Data Server
 - Support meta data in device-based alarm message
 - Support Windows authentication for Alarm History
 - Support multiple log languages in Alarm and Event History
 - FactoryTalk® Alarms and Events TeamONE connector



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FactoryTalk View SE

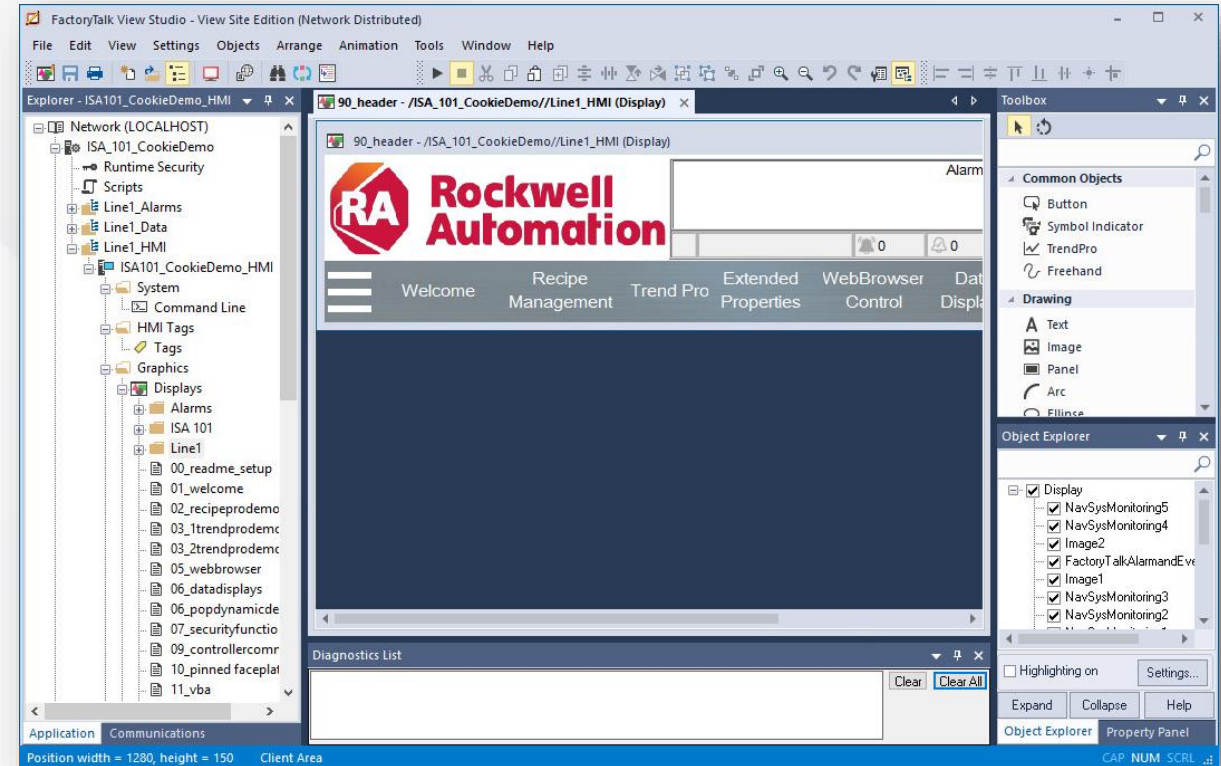
Design improvements

FactoryTalk View Studio refresh and modernization

FactoryTalk View SE and ME version 12.00

Modernized FactoryTalk View Studio development environment

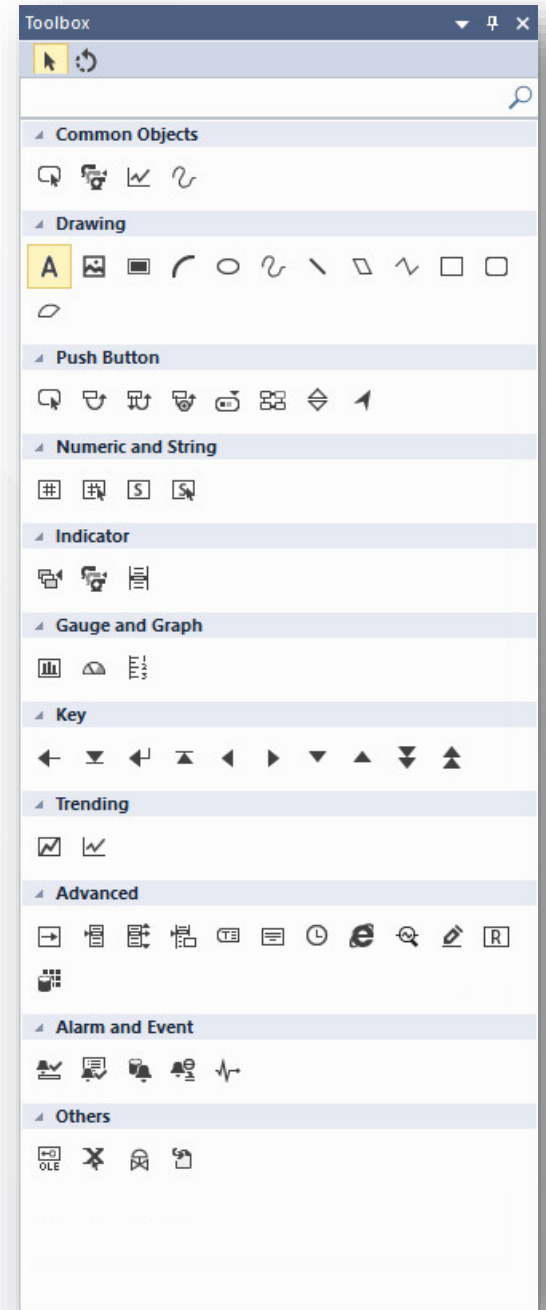
- Refreshed look and feel for FactoryTalk View Studio
- Improved design efficiency
- Simplified user experience with new user interface consistent with the Studio 5000 Logix Designer® application
- Customized window layouts in FactoryTalk View Studio that work best for various development workflows
- Default object colors updated to align with ISA-101 standards



Productivity and usability enhancements

New tools and features to enhance a productive design experience

- New searchable toolbox for all display elements
 - Right-click in toolbox to add frequently used objects to *Common Objects*
- Quickly zoom in/out using the common keyboard shortcuts (Ctrl Scroll or Ctrl +/-)
- Quick search in Object Explorer for filtering graphic elements on the display
- Support for clearer graphics on larger resolution displays (4K High-Resolution Display)
- ScreenPrint command to support printing of screen contents in multiple monitor configurations
 - Specify one of multiple monitors (1-6) to print

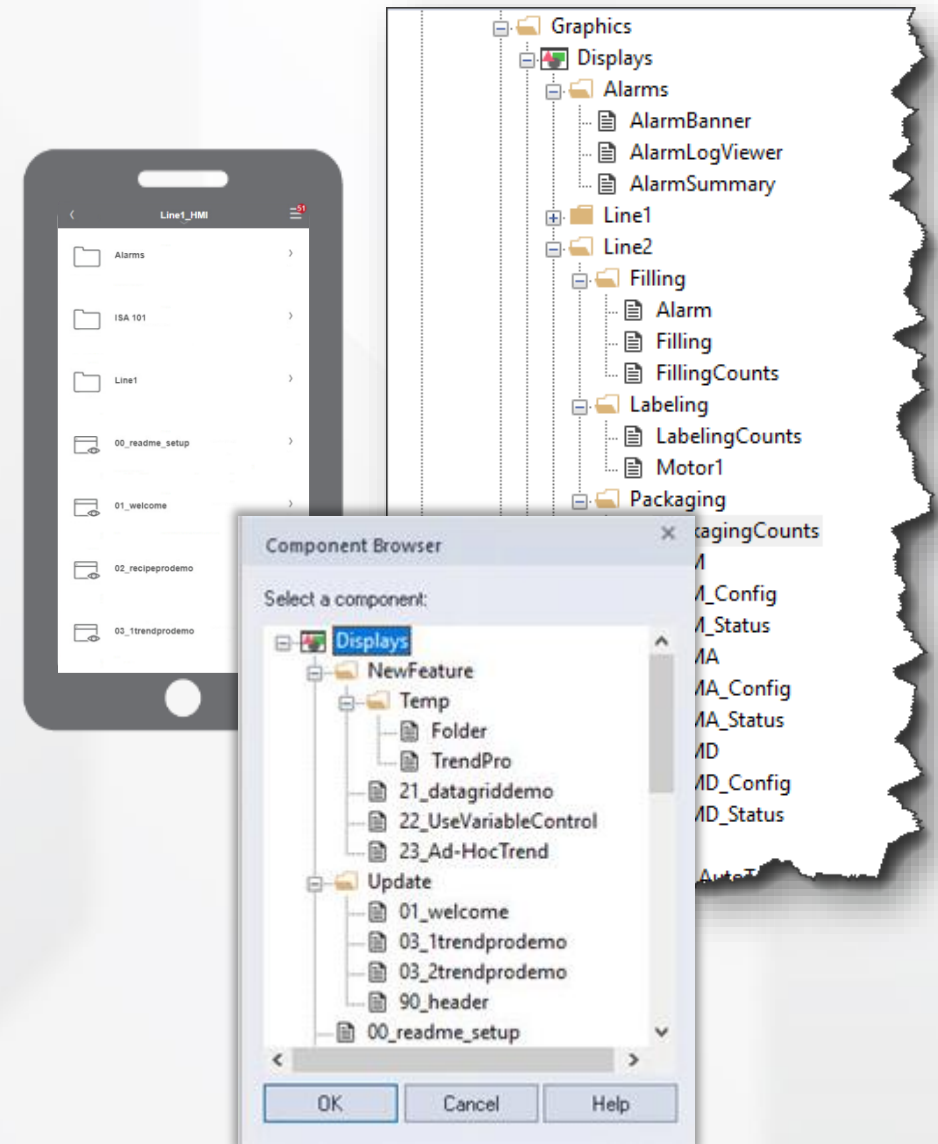


Design-time organization of displays in folders

FactoryTalk View SE, ME, and ViewPoint version 12.00

Organize displays into logical folders at design time in FactoryTalk View Studio

- Organize displays into logical folders
 - Folders can contain other folders
 - Displays can be in a hierarchy up to three levels deep
 - Physical organization of the FactoryTalk® View application remains the same – no change to physical location of display files on disk
- Runtime navigation commands are retained when adjusting location of displays in different folders
- New support for selection of multiple displays with Ctrl or Shift keys
 - Use for move / delete operations
- Support for drag / drop of displays across instances of FactoryTalk View Studio or between Windows Explorer and FactoryTalk View Studio

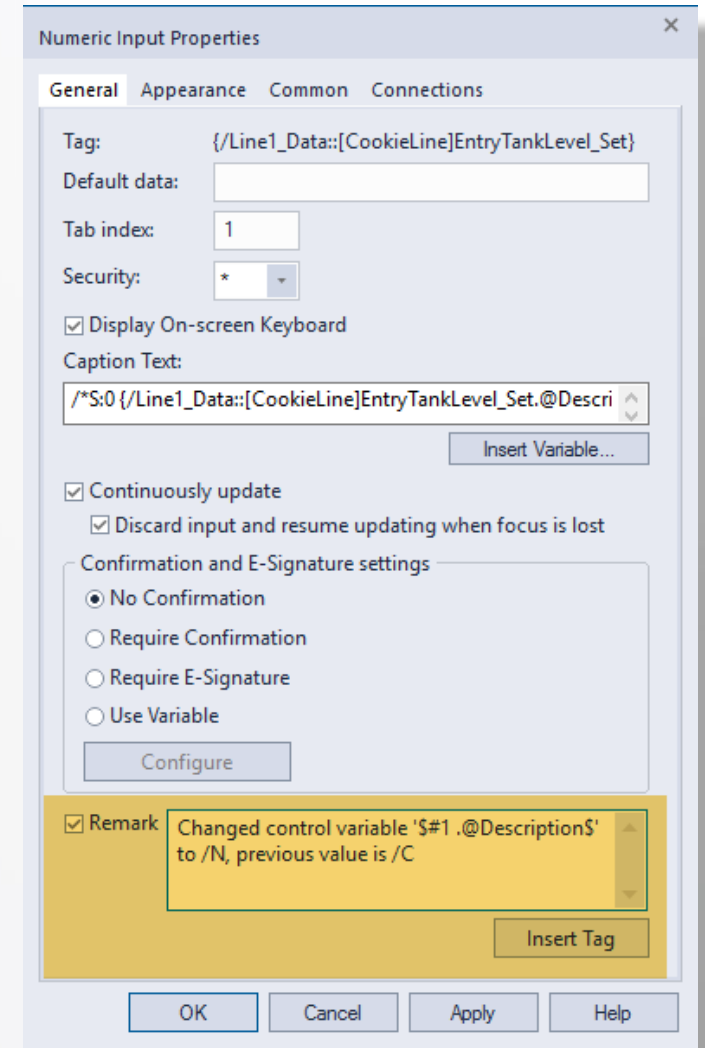
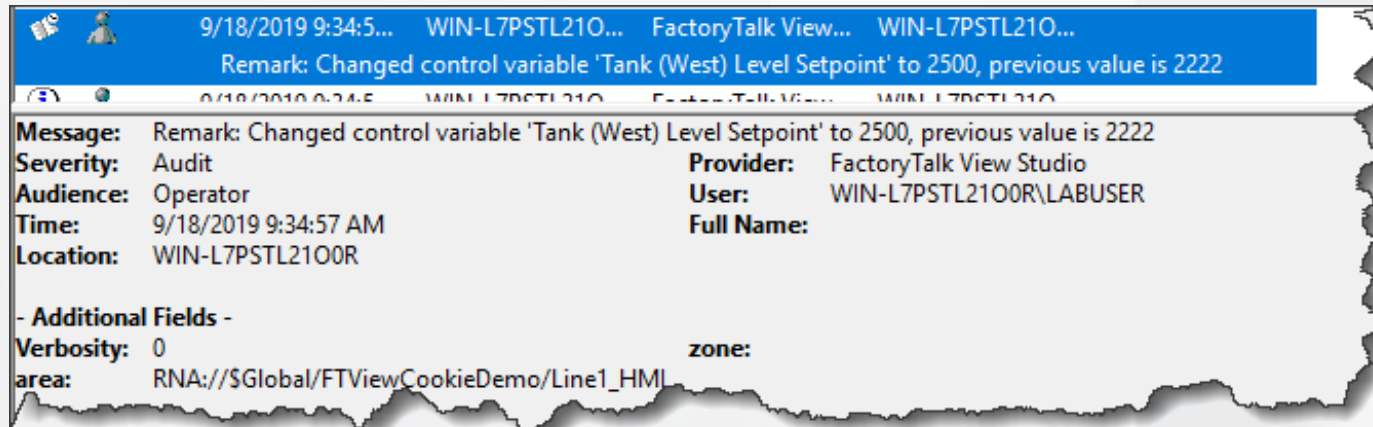


Remark for Numeric Input

FactoryTalk View SE version 12.00

Log customized audit message when setting a tag value using Numeric Input object

- Insert a tag value or parameter (#) into the remark
- New placeholders **/N** and **/C** to capture the new value and current value of the associated tag

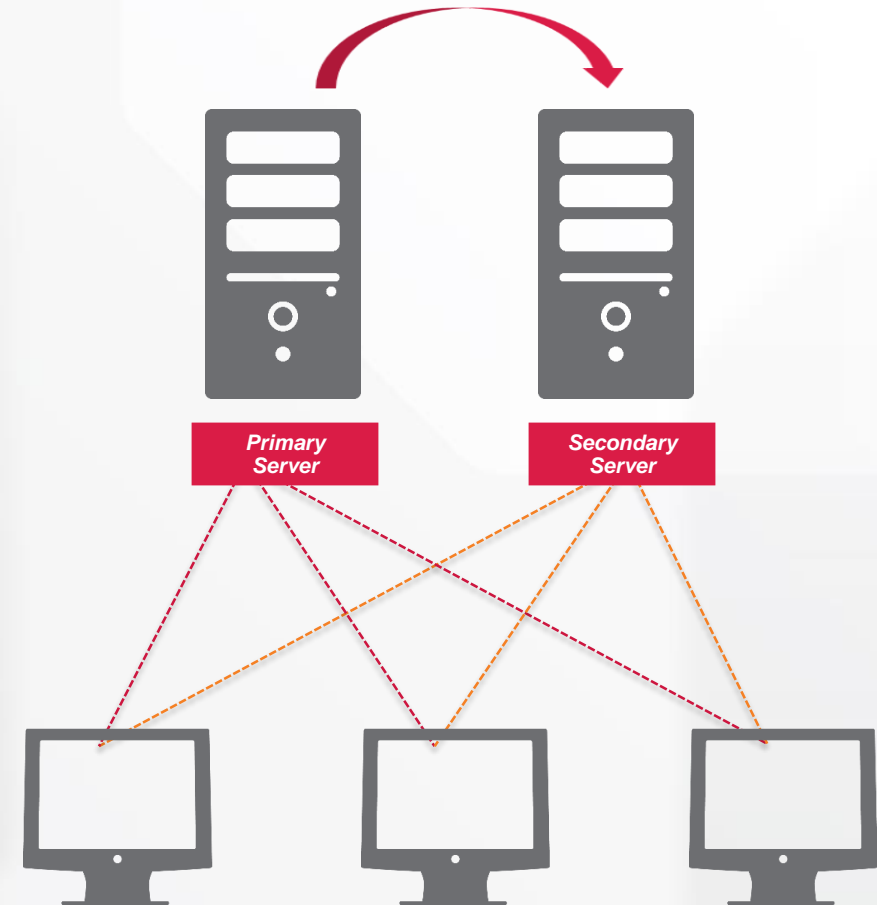


New FactoryTalk View SE redundant HMI server option

FactoryTalk View SE version 12.00

New redundant licenses available reduce the cost of implementing a redundant HMI system

- New redundant server license for a secondary HMI server
 - Will be introduced as new catalog numbers, with list price at 50% of “primary” catalogs of the same size
- Reduces cost and simplifies implementation of a redundant system
- Only a server configured as secondary/backup in a redundant pair can check out the redundant server license
- “Primary” HMI server license can still activate the secondary server if there is no redundant server license available



Duplicate to grid

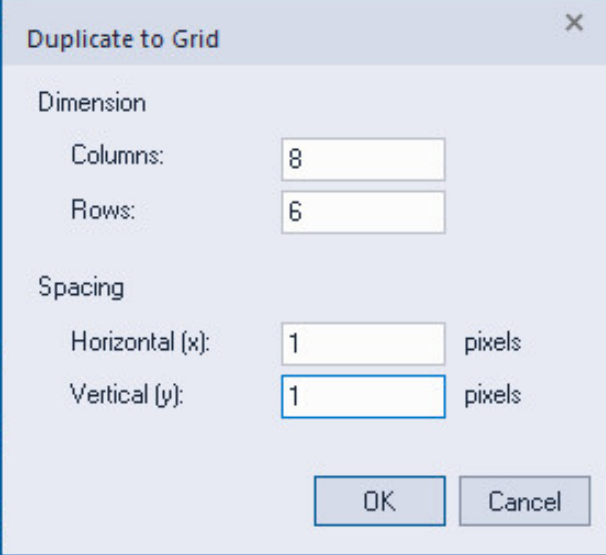
FactoryTalk View SE version 12.00

Quickly build a tabular control to display a set of tag values

- Specify the number of columns, rows, and spacing to easily duplicate a customized object to the desired quantity
- Size and formatting options are duplicated to new objects, using dimensions and spacing selected

Enabled for:

- Numeric Display
- Numeric Input
- String Display
- String Input



Duplicate to Grid

Dimension

Columns: 8

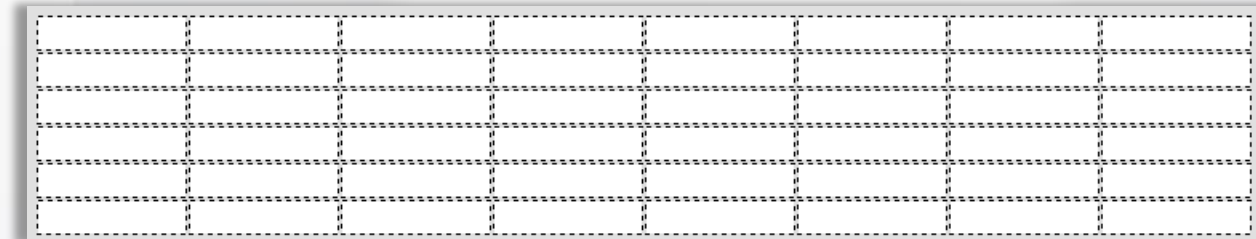
Rows: 6

Spacing

Horizontal (x): 1 pixels

Vertical (y): 1 pixels

OK Cancel





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FactoryTalk View SE

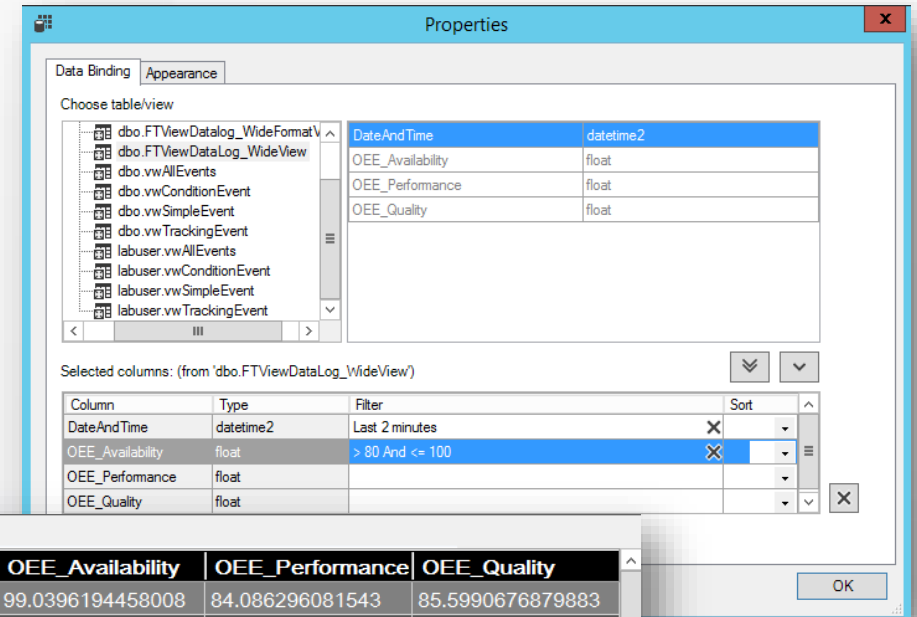
Runtime improvements

On-screen data grid

FactoryTalk View SE and ViewPoint version 12.00

Native data grid control allows you to retrieve and display historical data from a SQL Server Database in your HMI application

- Register a generic SQL Server DB Connection into FactoryTalk as a native data source of data grid
- Automatically connect to the database and display historical data in the data grid with no scripting
- Configure filters to query data from the database
- Supports both SQL and Windows Authentication



DateAndTime	OEE_Availability	OEE_Performance	OEE_Quality
8/12/2019 22:53:5...	99.0396194458008	84.086296081543	85.5990676879883
8/12/2019 22:53:5...	99.0433883666992	84.1487197875977	85.6247863769531
8/12/2019 22:53:5...	99.048957824707	84.2409973144531	85.6631927490234
8/12/2019 22:54:0...	99.0544891357422	84.3325881958008	85.6125793457031
8/12/2019 22:54:0...	99.0599822998047	84.4236755371094	85.6508102416992
8/12/2019 22:54:0...	99.0635757446289	84.4832077026367	85.6761779785156
8/12/2019 22:54:0...	99.0707244873047	84.6017227172852	85.7266616821289
8/12/2019 22:54:1...	99.0742568969727	84.6601791381836	85.764289855957
8/12/2019 22:54:1...	99.0795135498047	84.7472991943359	85.7453994750977
8/12/2019 22:54:1...	99.0846862792969	84.8330230712891	85.7390670776367
8/12/2019 22:54:2...	99.0898056030273	84.9178466796875	85.7888031005859
8/12/2019 22:54:2...	99.0932083129883	84.9743041992188	85.8011779785156

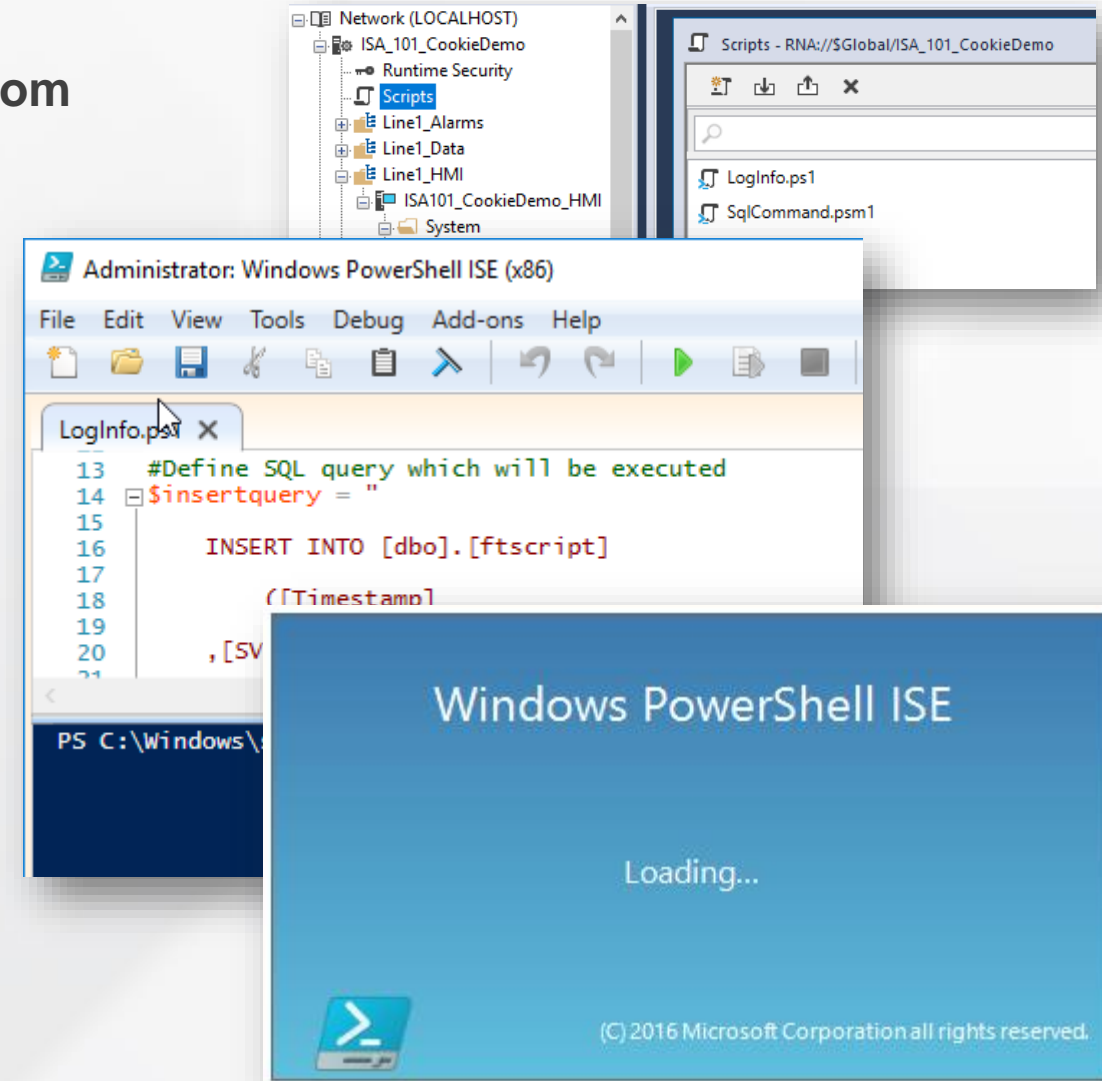
Total: 40

Server-side script execution with Windows PowerShell

FactoryTalk View SE version 12.00

Centralized scripting engine to execute external scripts from the FactoryTalk View SE System

- Configuration similar to centralized VBA execution in RSVIEW®32
- Execute PowerShell scripts from events within the HMI server, FactoryTalk View SE Client, or FactoryTalk ViewPoint SE Clients
- Scripts run on the HMI server that the resource calling the script is connected to
- Pass information as parameters from the FactoryTalk View SE system into the external script
- Load the PowerShell editor directly from FactoryTalk View Studio
- Run external scripts to:
 - Log information to databases
 - Perform application customizations
 - And more!

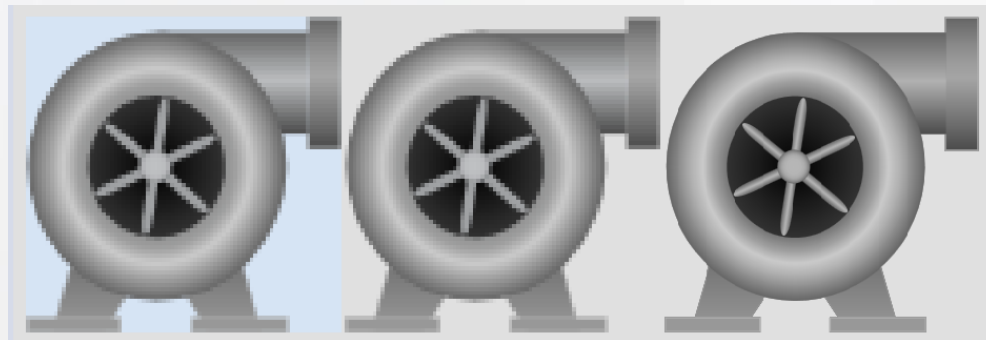


SVG image support

FactoryTalk View SE version 12.00

SVG support makes it easier to use graphics in HMI projects

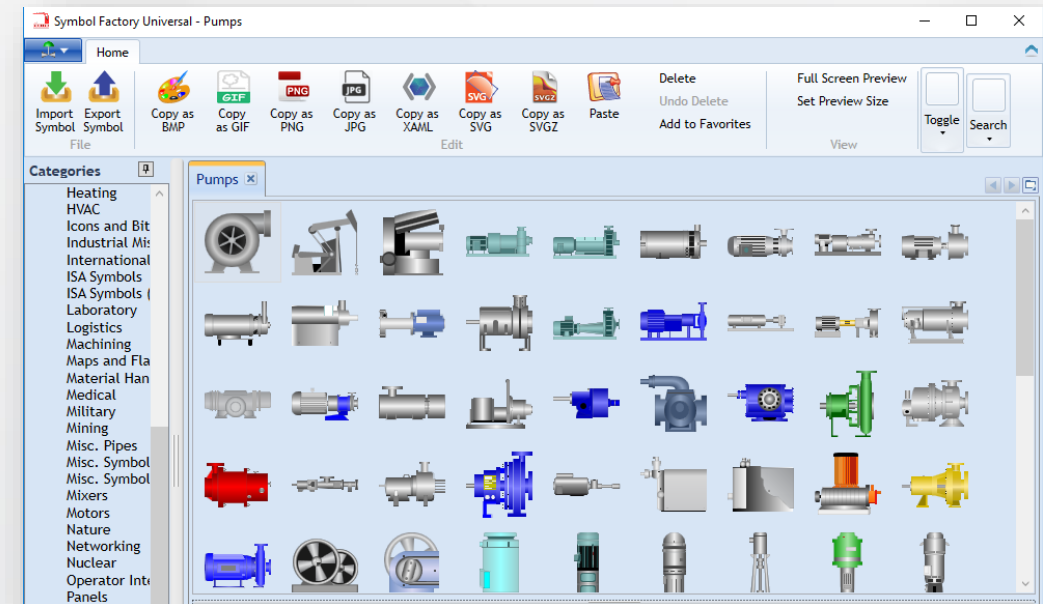
- Easily resize images to the desired width and height
- Leverage the new image library provided by Rockwell Automation
- Support for Symbol Factory 3.0 Enhanced Objects



*.bmp

*.png

*.svg

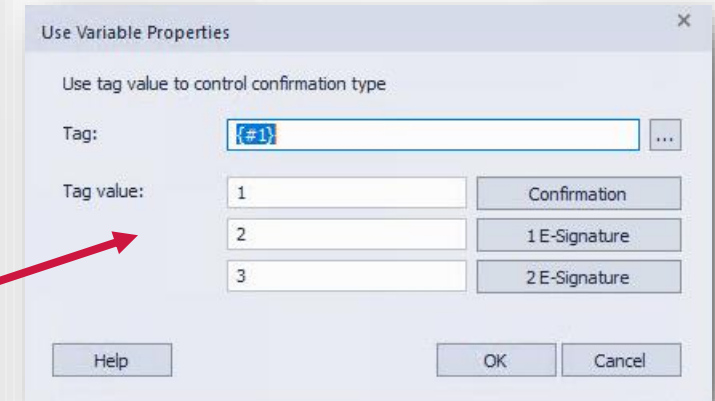
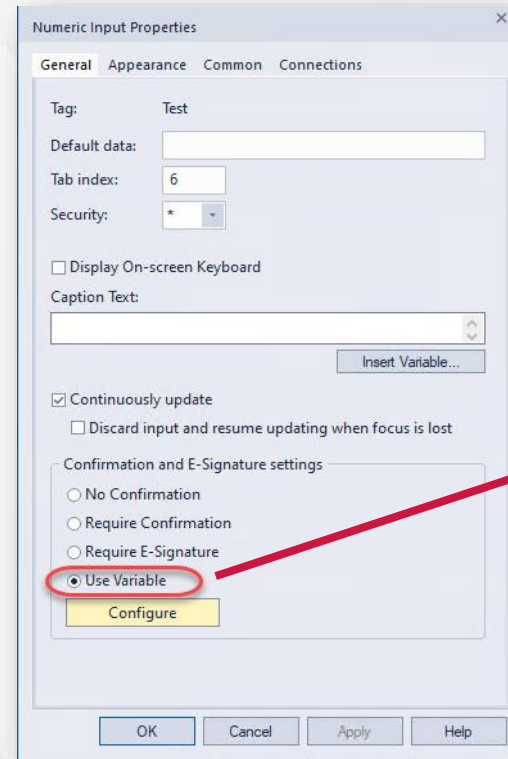


Electronic Signature Confirmation enhancements

FactoryTalk View SE version 12.00

Objects leveraging E-Signature and Confirmation have been enhanced to support dynamic behavior

- Use variables to control the confirmation type
- Support for parameter passing to a numeric input, string input, or button for different levels of confirmation:
 - No Confirmation
 - Confirm without Signature
 - With Performer Signature
 - With Performer & Approver Signature



TrendPro enhancements

FactoryTalk View SE version 12.00

New TrendPro VBA methods to set trace Min, Max, Caption, and Unit fields

- Enables customization of the minimum, maximum, caption, or engineering units for a trace using VBA at runtime

Sub **SetUnit**(unit As String, tagName As String, [modelName], [traceType As TrendTraceType])

Member of **AxTrendLib.AxTrend**

Set the unit of a specified trace and show the unit in the legend

Sub **SetCaption**(caption As String, tagName As String, [modelName], [traceType As TrendTraceType])

Member of **AxTrendLib.AxTrend**

Set the caption of a specified trace and show the caption in the legend

Sub **SetMinMax**(tagName As String, [modelName], [traceType As TrendTraceType], [option As MinMaxOption], [minValue], [maxValue])

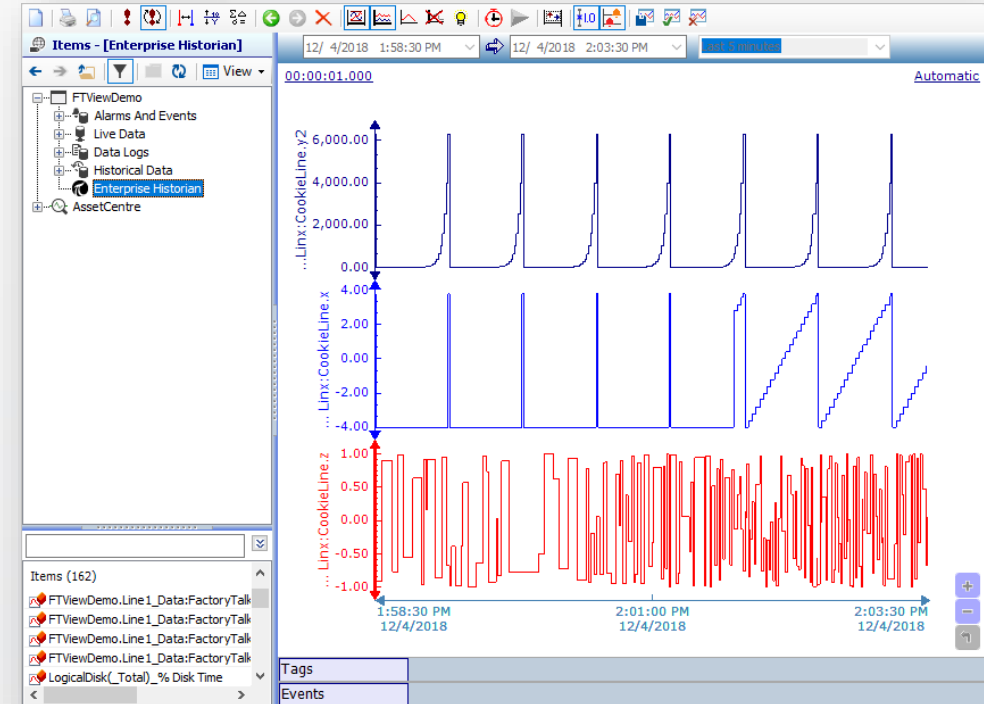
Member of **AxTrendLib.AxTrend**

Set the minimum and maximum values of a specified trace

Sub **SetMinMaxUseTag**(minTagName As String, maxTagName As String, tagName As String, [modelName], [traceType As TrendTraceType])

Member of **AxTrendLib.AxTrend**

Use tags to set the minimum and maximum values of a specified trace

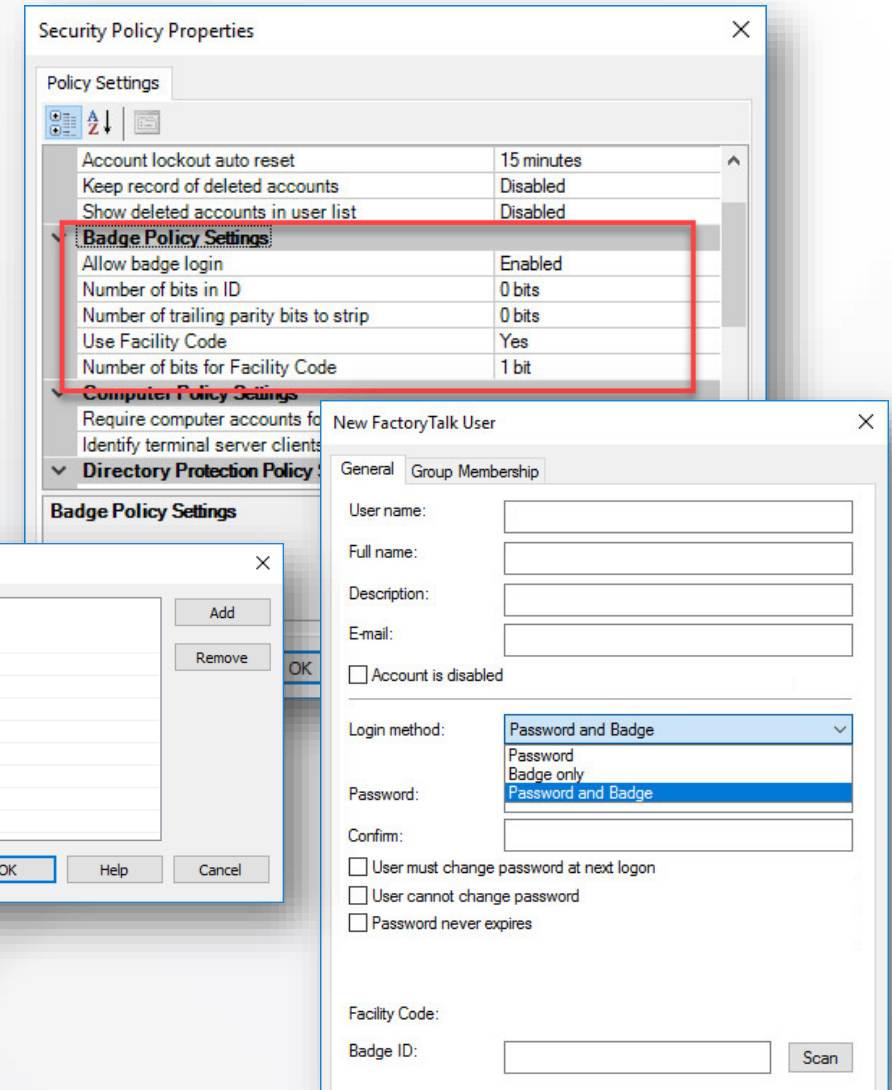
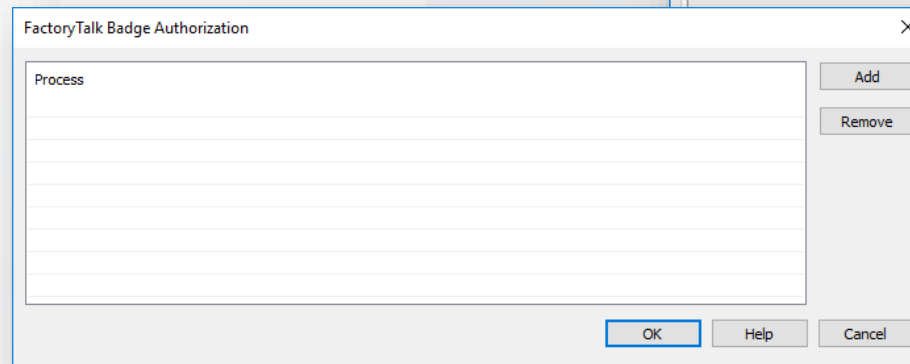


FactoryTalk badge authentication

FactoryTalk View SE version 12.00

Leverage log in via badge authentication to allow operators quick and easy access to the FactoryTalk View SE Client program

- Customize for specific badge readers, card specifications, and facility codes
- Multi-factor authentication requires badge and password to log in
- User Login options:
 - Password
 - Badge only
 - Password and badge

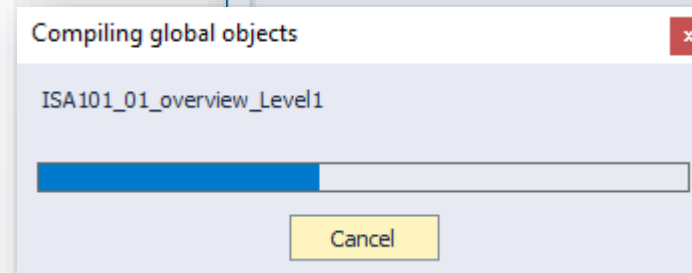
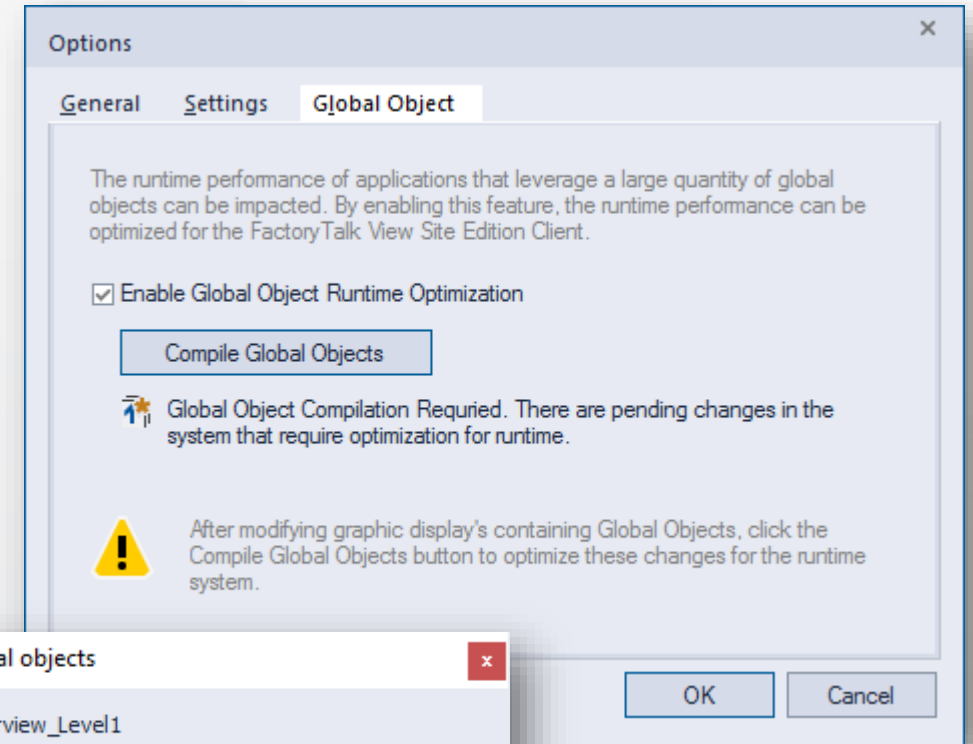


Improved global objects performance

FactoryTalk View SE version 12.00

Improved runtime performance for applications that leverage a large quantity of global objects

- Provides option to optimize runtime performance for FactoryTalk View SE Clients
- Manual 'Compile Global Objects' process when global objects or displays containing global objects have been modified
- Toolbar icon indicates when compilation is necessary and provides quick access to the configuration interface
- On average, 50% increase in screen call up time





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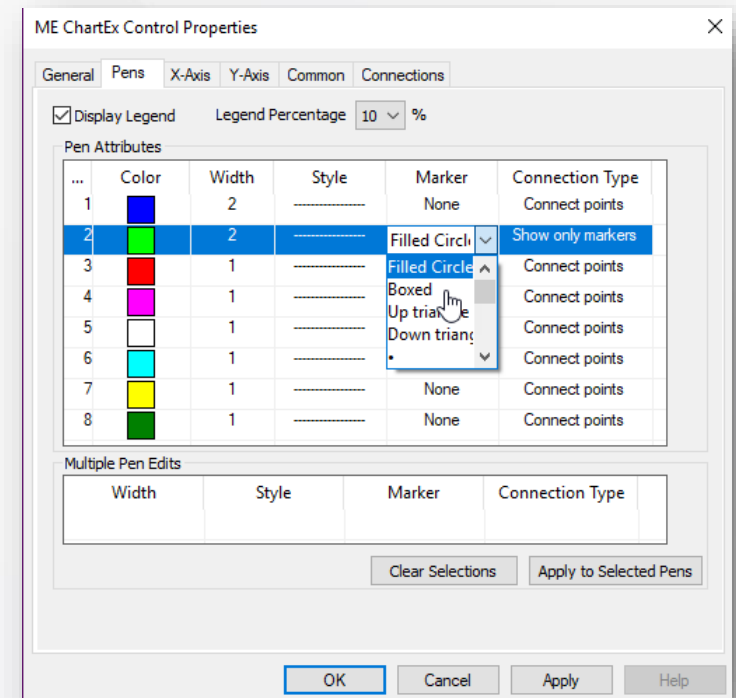
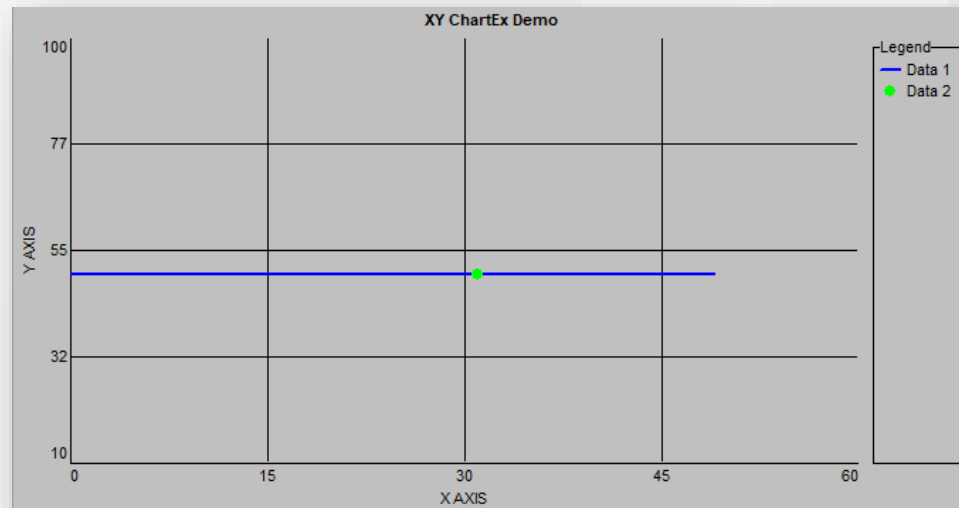
FactoryTalk View ME Enhancements

FactoryTalk View ME XY plot enhancement

FactoryTalk View ME version 12.00

Function provided to show the CAM profile AND actual axis position on the HMI

- Display actual vs. desired position of a machine as it is working
- Specify “data point connection” type by pen for desired range of axis location
- Overlay actual position with dot or other selectable type of marker



FactoryTalk View ME RecipePlus audit enhancement

FactoryTalk View ME version 12.00

New audit message to track recipe value changes in the recipe file

'Ingredient Name' ingredient for unit 'UnitName' in recipe 'RecipeName' has changed. Value is modified to 'NewValue' from previous configured value 'OldValue'.

- Track recipe value changes in recipe file to meet data integrity requirements
- Generates message to Audit Trail and the FactoryTalk® AssetCentre system
- Enables application validation for FDA regulation 21CFR Part 11

The screenshot displays the RecipePlus interface with three main sections:

- Recipe Selection:** A list showing 'Cookie' with 'Unit_Chocolate' and 'Unit_Peanut' options.
- Recipe Status:** A green progress bar and a 'Save successful' message.
- Recipe Buttons:** A vertical stack of buttons including Download, Upload, Upload and Create, Save, Restore, Delete, and Rename.
- Recipe Table:** A table with columns for Ingredient, Current, Recipe, Compare, and Tag Name. It lists ingredients like Butter, Flour, Sugar, Milk, Chocolate, and Peanut, along with their current and recipe values and comparison status.

Ingredient	Current	Recipe	Compare	Tag Name
Butter	8	10	X	Recipe\Butter
Flour	77	80	X	Recipe\Flour
Sugar	12	10	X	Recipe\Sugar
Milk	16	16		Recipe\Milk
Chocolate	5	5		Recipe\Chocolate
Peanut	0	0		Recipe\Peanut
CurrentRecipe	Unit_Chocolate	Unit_Chocolate		Recipe\RecipeName

Cookie : Unit_Chocolate : 7 : 7

Occurred Time 8/13/2019 9:19:54 AM
Source
Location WIN-L7PSTL2100R
Username ADMIN
Message 'Sugar' ingredient for unit 'Unit_Chocolate' in recipe 'Cookie' has changed. Value is modified to '10' from previously configured value '12'.

Discontinued support for creating CE4 runtime applications

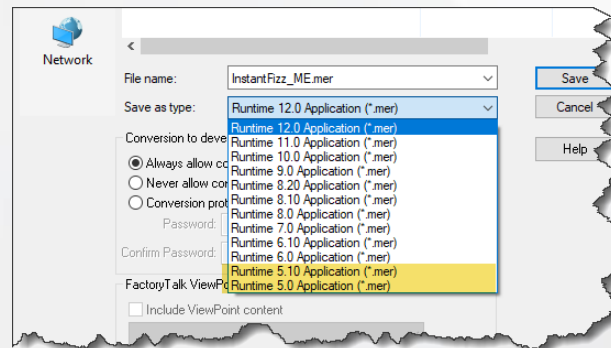
FactoryTalk View ME version 12.00

Beginning with FactoryTalk View ME version 12.00, it is no longer possible to create version 5.0 or version 5.10 runtime applications (*.mer) for CE4 PanelView™ Plus terminals

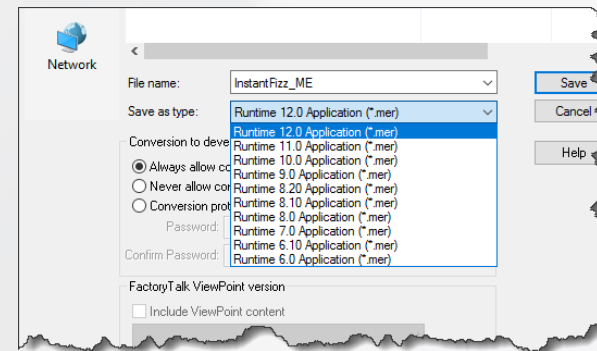
- 5.0 and 5.10 versions eliminated from the dropdown list when creating runtime applications (*.mer)
- Still able to upgrade 5.0 and 5.10 applications to the current version using View Studio version 12.00
- FTView ME version 11.00 is the last release with the ability to create and maintain pre-6.0 (CE4) runtime applications



FactoryTalk View ME pre-version 12.00



FactoryTalk View ME version 12.00





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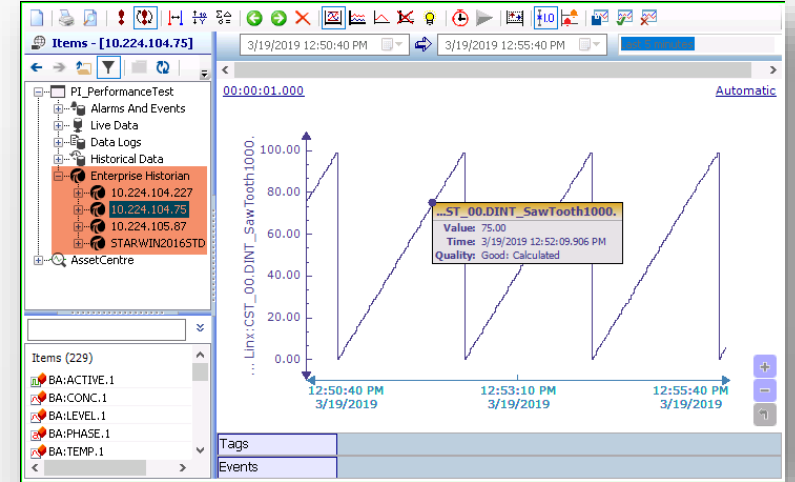
FactoryTalk ViewPoint SE Enhancements

OSI PI data source for mobile trend

FactoryTalk ViewPoint SE version 12.00

New data connector for OSI PI extended to mobile users

- Systems with an existing Enterprise OSI PI configuration can now display data from OSI PI on a FactoryTalk ViewPoint Trend
- Configure OSI PI Server as a native data source in FactoryTalk View SE TrendPro
- No additional license required




FactoryTalk ViewPoint SE data grid support

FactoryTalk ViewPoint SE version 12.00

Display Information from a SQL database to FactoryTalk ViewPoint SE Clients

- Leverage FactoryTalk View SE SQL server database connection to display enterprise system data to FactoryTalk ViewPoint SE users
- Sort and refresh data at runtime from the mobile client



Timestamp	Message	Sugar Value	Location
2/13/2020 13:54:31.0000000	Log Sugar value from FT View SE.	700	FTVSEDEMO19
2/13/2020 13:00:38.0000000	Log Sugar value from FT View SE.	800	FTVSEDEMO19
2/12/2020 22:06:16.0000000	Log Sugar value from FT View SE.	801	FTVSEDEMO19

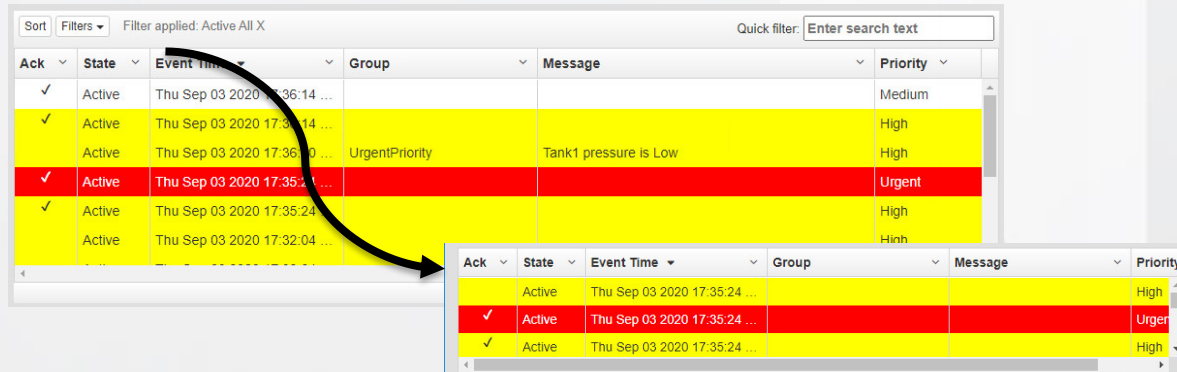
Total: 3

FactoryTalk ViewPoint SE usability enhancements

FactoryTalk ViewPoint SE version 12.00

New settings in FactoryTalk ViewPoint Administration Console let you choose whether to show or hide the FactoryTalk ViewPoint header and status bar

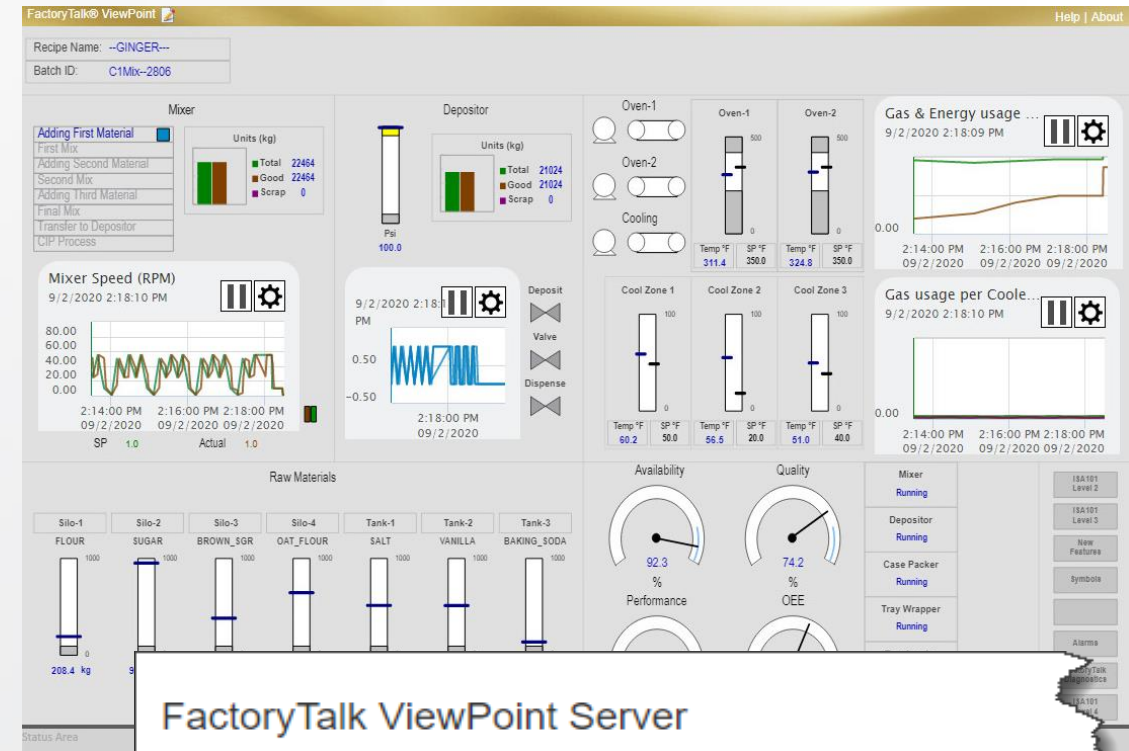
- Settings determine the default state of the FactoryTalk ViewPoint header and status bar in the classic web client
- State can be changed on web client from context menu
- Auto-hide the filter bar based on the height of the mobile alarm summary for improved user experience



Sort Filters Filter applied: Active All X Quick filter: Enter search text

Ack	State	Event Time	Group	Message	Priority
✓	Active	Thu Sep 03 2020 17:36:14 ...			Medium
✓	Active	Thu Sep 03 2020 17:36:14 ...			High
✓	Active	Thu Sep 03 2020 17:36:10 ...	UrgentPriority	Tank1 pressure is Low	High
✓	Active	Thu Sep 03 2020 17:35:24 ...			Urgent
✓	Active	Thu Sep 03 2020 17:35:24 ...			High
✓	Active	Thu Sep 03 2020 17:32:04 ...			High

Ack	State	Event Time	Group	Message	Priority
✓	Active	Thu Sep 03 2020 17:35:24 ...			High
✓	Active	Thu Sep 03 2020 17:35:24 ...			Urgent
✓	Active	Thu Sep 03 2020 17:35:24 ...			High



FactoryTalk ViewPoint Server

- Show the status bar on the classic web client
- Show the header bar on the classic web client



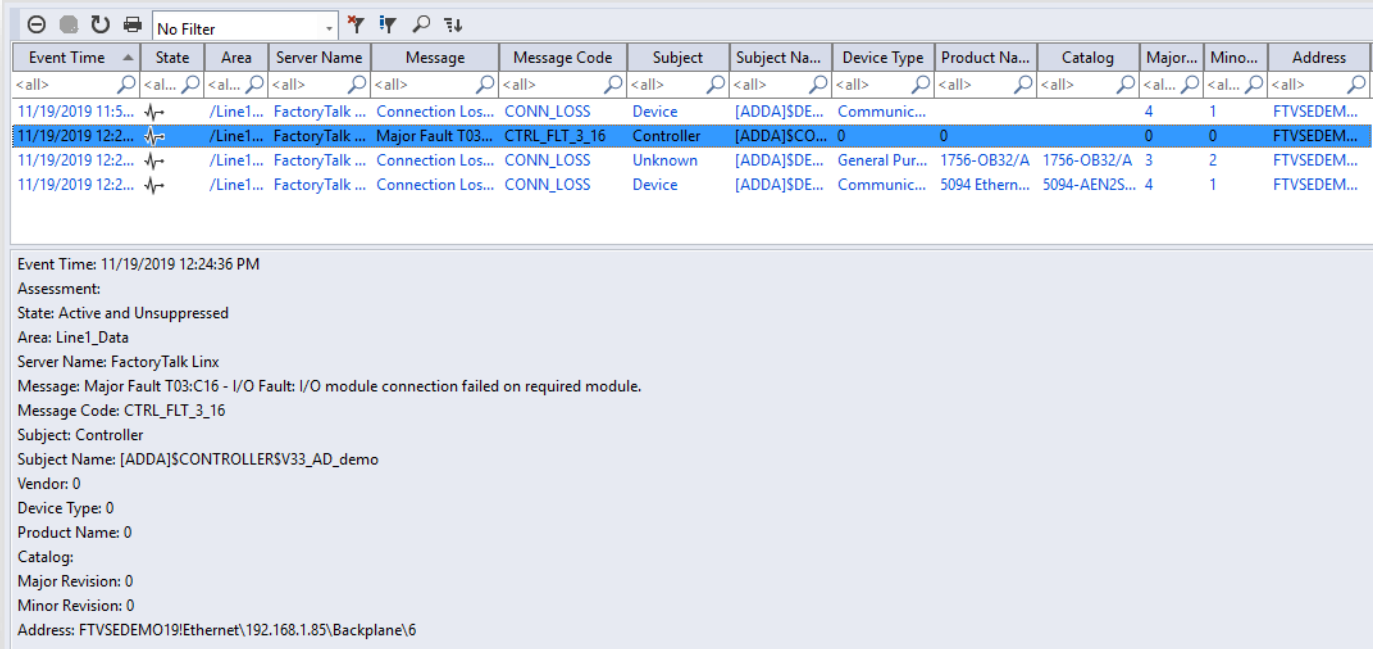
FactoryTalk Alarms and Events

Automatic Diagnostics

FactoryTalk Alarms and Events version 6.20

Subscribe to diagnostics messages created in the Logix controller

- Automatic device diagnostics and analytics are generated by the controller in a system
- Information about I/O communications and faults in the controller code can now be sent to the HMI to provide information to operators
- Easily access information about the devices in the control system
 - Fault messages
 - Disconnected I/O
- Pre-built AD object can be added to FactoryTalk View SE displays
- **AD** supported by the Studio 5000 Logix Designer application version 33 for ControlLogix® 5580, CompactLogix™ 5480, and CompactLogix 5380 controllers



The screenshot displays the FactoryTalk Alarms and Events interface. At the top, there is a search bar with the text "No Filter". Below this is a table with columns: Event Time, State, Area, Server Name, Message, Message Code, Subject, Subject Na..., Device Type, Product Na..., Catalog, Major..., Mino..., and Address. The table contains several rows of event data. The second row is highlighted in blue, showing an event from 11/19/2019 12:24:36 PM with the message "Major Fault T03: C16 - I/O Fault: I/O module connection failed on required module." Below the table, a detailed view of the selected event is shown, including the event time, assessment, state, area, server name, message, message code, subject, subject name, vendor, device type, product name, catalog, major revision, minor revision, and address.

Event Time	State	Area	Server Name	Message	Message Code	Subject	Subject Na...	Device Type	Product Na...	Catalog	Major...	Mino...	Address
11/19/2019 11:5...	Active	/Line1...	FactoryTalk ...	Connection Los...	CONN_LOSS	Device	[ADDA]\$DE...	Communic...			4	1	FTVSEDEM...
11/19/2019 12:2...	Active	/Line1...	FactoryTalk ...	Major Fault T03...	CTRL_FLT_3_16	Controller	[ADDA]\$CO...	0	0		0	0	FTVSEDEM...
11/19/2019 12:2...	Active	/Line1...	FactoryTalk ...	Connection Los...	CONN_LOSS	Unknown	[ADDA]\$DE...	General Pur...	1756-OB32/A	1756-OB32/A	3	2	FTVSEDEM...
11/19/2019 12:2...	Active	/Line1...	FactoryTalk ...	Connection Los...	CONN_LOSS	Device	[ADDA]\$DE...	Communic...	5094 Ethern...	5094-AEN2S...	4	1	FTVSEDEM...

Event Time: 11/19/2019 12:24:36 PM
Assessment:
State: Active and Unsuppressed
Area: Line1_Data
Server Name: FactoryTalk Linx
Message: Major Fault T03:C16 - I/O Fault: I/O module connection failed on required module.
Message Code: CTRL_FLT_3_16
Subject: Controller
Subject Name: [ADDA]\$CONTROLLERSV33_AD_demo
Vendor: 0
Device Type: 0
Product Name: 0
Catalog:
Major Revision: 0
Minor Revision: 0
Address: FTVSEDEMO19\Ethernet\192.168.1.85\Backplane\6

System sizing enhancements

FactoryTalk Alarms and Events version 6.20

Extend the capabilities of your FactoryTalk system without increasing the number of assets to manage

- FactoryTalk® Linx Instance02 now provides support for device-based FactoryTalk Alarms and Events
- Twice the tags, twice the alarms, all from one machine – physical or virtual



2 x 100,000 tags



2 x 10,000 Logix device-based alarms

FactoryTalk Linx Server Properties

General Redundancy **Alarms and Events**

Name
FactoryTalk Linx Instance 02

Description

Computer hosting the FactoryTalk Linx server:
 FTVSEDEMO19

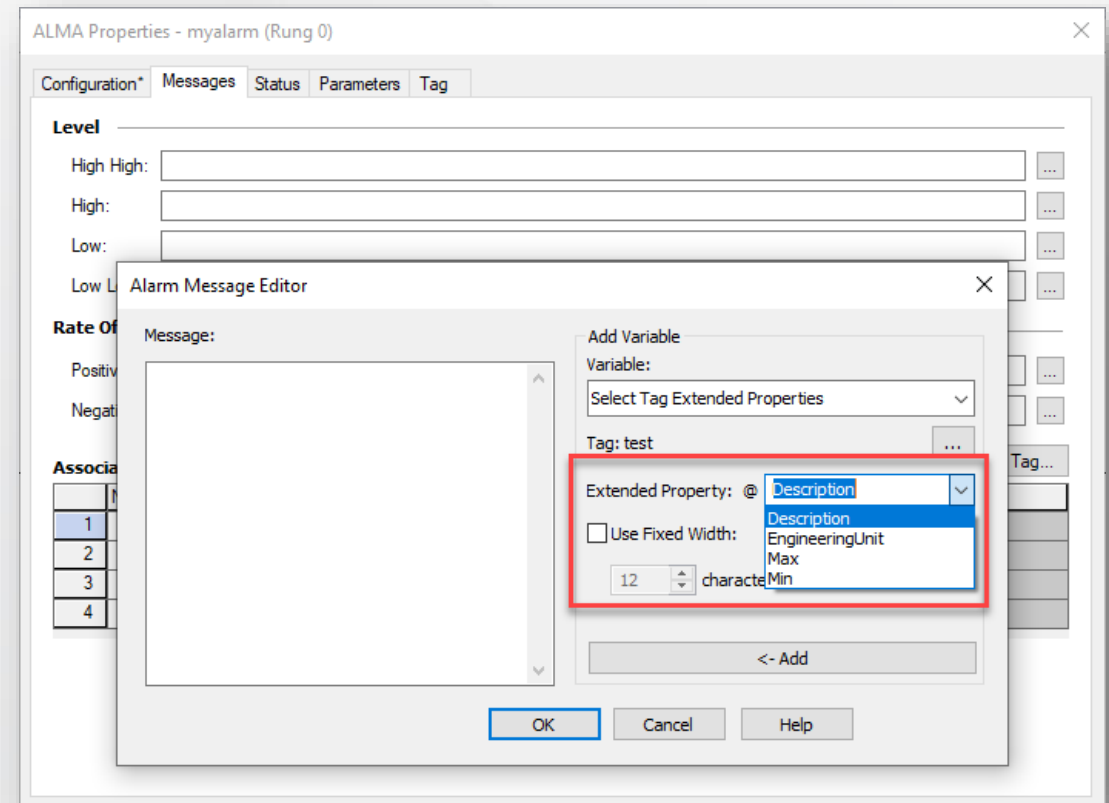
Server Type:
FactoryTalk Linx Instance02 Server

Device-based alarm message improvements

FactoryTalk Alarms and Events version 6.20

Provide meaningful alarm messages to your operators leveraging the extended tag properties available from controller tag attributes

- The Studio 5000 Logix Designer application version 33 provides direct access to Extended Tag Properties that can be used in alarm messages
- Streamline the development of alarms and messages by having quick and easy access to tags and their attributes where needed
- Extended Tag Properties
 - [.@Description](#)
 - [.@EngineeringUnit](#)
 - [.@Max](#)
 - [.@Min](#)
 - [.@State0](#)
 - [.@State1](#)

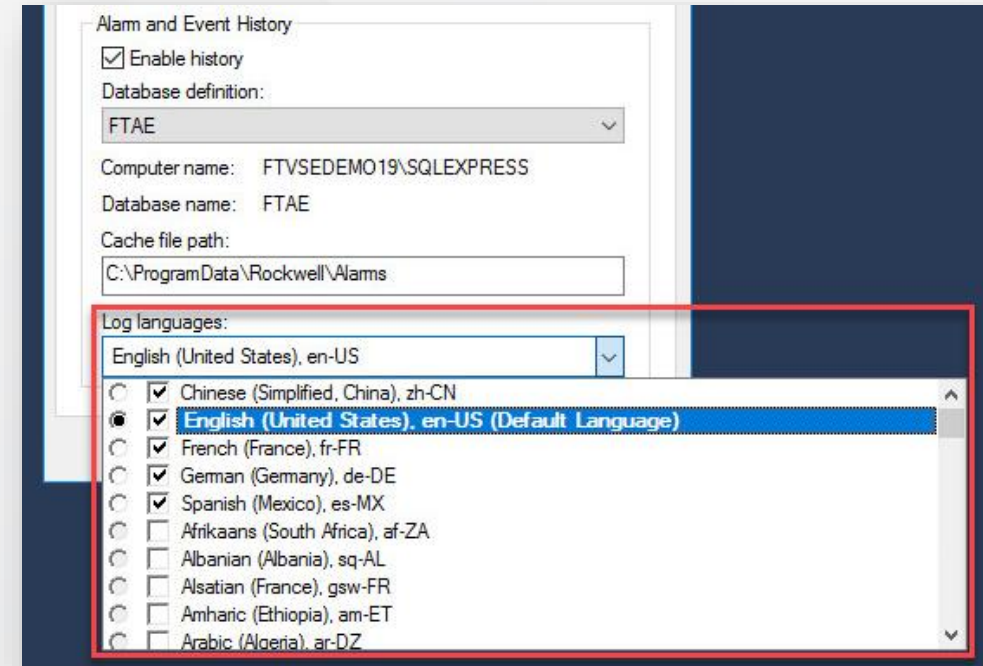


FactoryTalk Alarms and Events log languages

FactoryTalk Alarms and Events version 6.20

Alert! Alerta! Alerte! Aufmerksam! 警報!

- Support for applications deployed in multiple languages
- FactoryTalk Alarms and Events summary and banner objects provide visualization of alarm information in different languages (where configured)
- Now it is possible to provide the context of historical alarm information in those languages as well





FactoryTalk

by ROCKWELL AUTOMATION



OS support

- Windows Server 2019 (64 bit)
- Windows Server 2016 (64 bit)
- Windows Server 2012 R2 (64 bit)
- Windows 10
- *** Windows 7 ***

SQL server support

(for datalog & FactoryTalk A&E)

- MSSQL 2017 (64 bit)
- MSSQL 2016 SP2 (64 bit)
- MSSQL 2014 SP3 (64 bit)
- MSSQL 2012 SP4 (64 bit)

No longer supported

- Windows XP (8.10)
- Windows Vista (8.00)
- Windows Server 2003 (8.00)
- Windows Server 2012 (10.00)
- Windows 8 (10.00)
- Windows 8.10 (10.00)

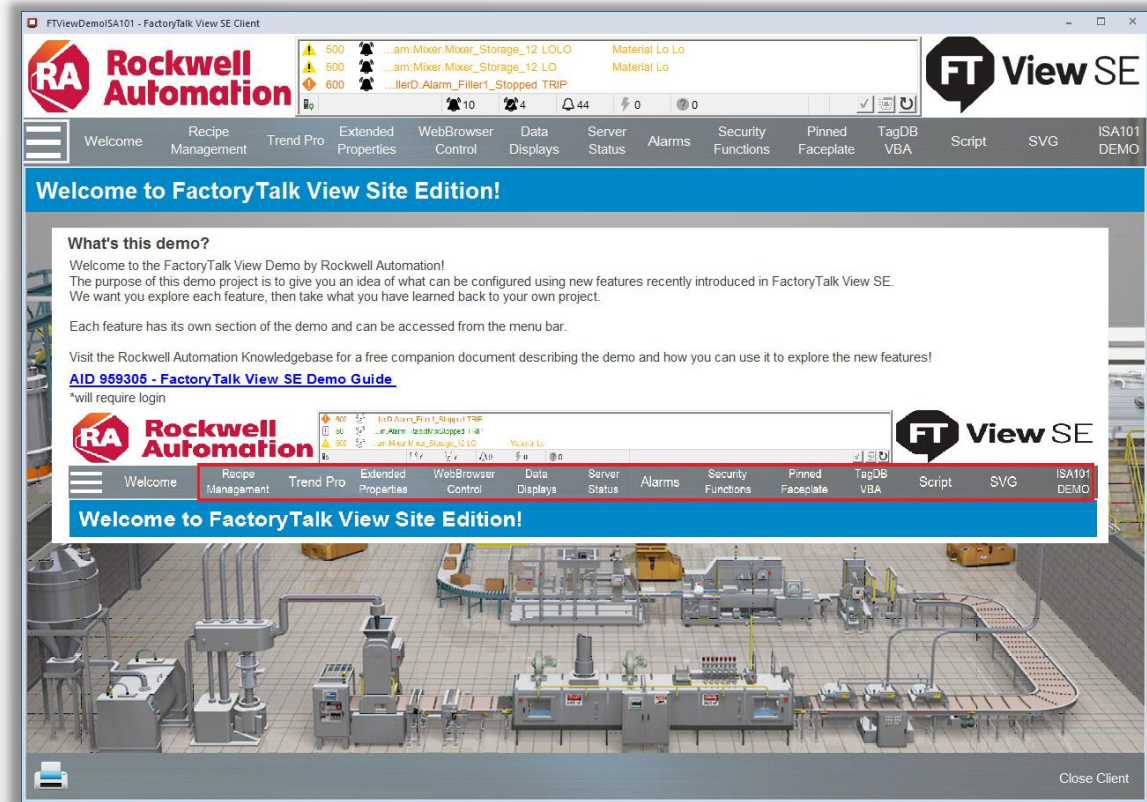
Latest operating system info can be found at the [Rockwell Automation Compatibility and Download Center](#)

Demo application: FactoryTalk View SE distributed

FactoryTalk View SE version 12.00

FactoryTalk demo application included with FactoryTalk View Studio Enterprise is updated to include new version 12.00 features

- Walks a user through features delivered in version 9.0 through version 12.0
- Setup instructions included via .PDF in *HMI Project* folder
 - How to link the demo to a controller
 - How to find the .CLI file
 - How to set up FactoryTalk ViewPoint
 - Etc.
- .ACD file also included in *HMI Project* folder
- Installed with FactoryTalk View SE version 12.0
- Demo set up guide also found in Knowledgebase AID [IN34910](#)



YouTube video playlists

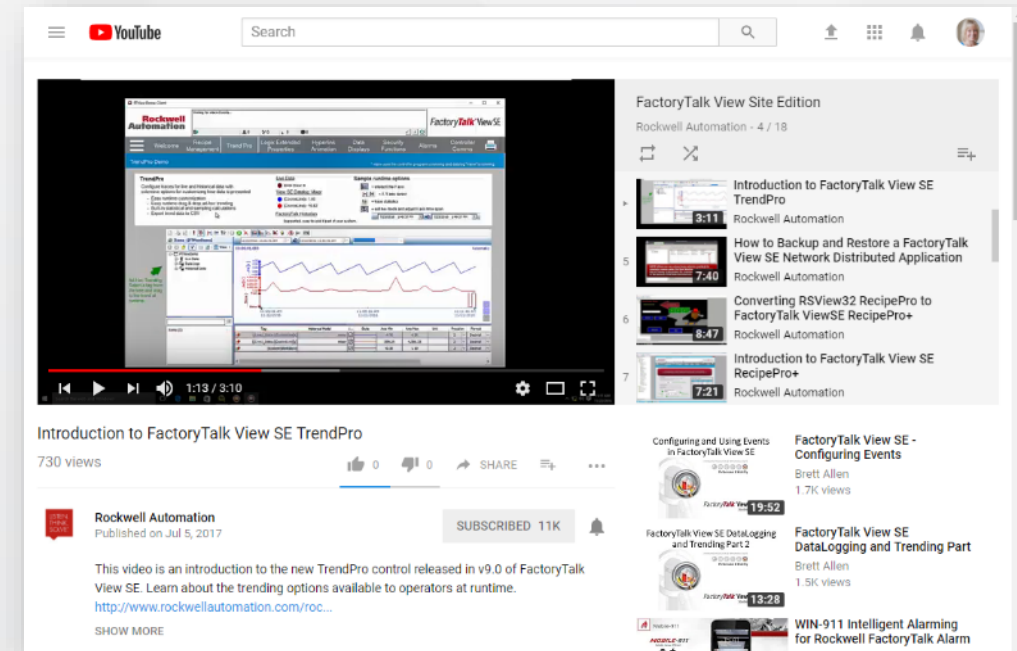
FactoryTalk View SE / ME, FactoryTalk AssetCentre, and Studio 5000 View Designer® application

Rockwell Automation provides “how to” videos for various features in FactoryTalk View SE, FactoryTalk View ME with PanelView Plus 7, View Designer with PanelView™ 5000, and other Rockwell Automation products

- Created by Commercial Engineering to demonstrate product features and how they are configured
- New content added monthly
- **Look for new video content covering FactoryTalk View version 12.00 features!**

YouTube playlists:

- [FactoryTalk View Site Edition](#)
- [PanelView Plus and FactoryTalk View Machine Edition](#)
- [FactoryTalk AssetCentre](#)
- [PanelView 5000 & Studio 5000 View Designer](#)





Thank you



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