

FactoryTalk View SE / ME

VERSION 13.00



expanding human possibility®



PUBLIC

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FactoryTalk® View
version 13.00

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Modernization for
FactoryTalk® View
ME



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Automation**

FactoryTalk View version
13.00

FactoryTalk View v13.00 release summary

NEW FEATURES AND SUSTAINABILITY

Build upon features in v12.00, continue to enhance system components and increase scalability

Confirm platform sustainability and ease of maintenance with refresh of key technologies

Enhanced mobility features with a responsive, mobile-first design

Support requirements to enable the PlantPax® 5.10 solution

RSView®32 MIGRATION SUPPORT

Complete the feature set required to enable migration of existing RSView32 applications

RSView32 moving to discontinued lifecycle status in May 2022

DIAGNOSTICS AND REPORTING

Display basic HMI system status for operators and share status with analytics products

Mobile visibility to system diagnostics

LICENSE SIMPLIFICATION

New bundled pricing and licensing model for FactoryTalk View SE systems

Simplified product selection for FactoryTalk View SE with all-unlimited displays and clients included

FactoryTalk View v13.00 enhances a sustainable, feature-rich HMI platform with bundled licensing to make it easier than ever to choose FactoryTalk View

FactoryTalk View V13.00 feature summary

DATA CONNECTIVITY AND PRESENTATION

- New Data Grid data source: data log model
- XY Plot Control for FactoryTalk View SE Client and ViewPoint

EXTENSIBILITY AND SCRIPTING IMPROVEMENTS

- HMI Tag access for Server-Side scripts
- Client-specific tags for Network Applications
- Native .NET Control Object
- OPC AE Client adoption

IMPROVED APPLICATION DESIGN

- Add Component Tool Enhancement
- Use and Evaluate Tag Based Alarms as desired (v.6.21)

IMPROVED APPLICATION MAINTENANCE

- System Status Portal
- Mobile Access to Automatic Diagnostics

FEEDBACK-DRIVEN ENHANCEMENTS

- Support for language switching in TrendPro & Recipe Pro Plus
- Custom User Message for Electronic Signature and String Input
- Application export to XML from Application Documenter
- Synchronization of HMI Tag Values in a Redundant System
- HMI Tag access for Server-Side scripts
- Client-specific tags for Network Applications
- Native .NET Control Object
- Animation driven by Automatic Diagnostics

FACTORYTALK VIEW SE MODERNIZATION

- SQL Server LocalDB Compatibility Update
- Adoption of MS FactoryTalk® Analytics™ Edge Web Browser

FACTORYTALK VIEW ME MODERNIZATION

- PanelView™ Plus 7 Performance Series B Update



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License simplification

FactoryTalk View SE license simplification

Introducing new licensing tiers for the FactoryTalk View SE portfolio to simplify buying decisions by including everything needed for a visualization solution in one part number

Station Lite	Station	Small	Medium	Large
View SE Station <ul style="list-style-type: none"> • 25 display count • Unlimited web clients 	View SE Station <ul style="list-style-type: none"> • Unlimited display count • Unlimited web clients 	View SE Distributed <ul style="list-style-type: none"> • HMI server with unlimited display count • 5 HMI clients • Unlimited web clients 	View SE Distributed <ul style="list-style-type: none"> • HMI server with unlimited display count • 10 HMI clients • Unlimited web clients 	View SE Distributed <ul style="list-style-type: none"> • HMI server with unlimited display count • 25 HMI clients • Unlimited web clients

Two options for Station

- Station Lite – 25 displays with unlimited web clients
- Station – unlimited displays with unlimited web clients

With add-on option:

- FactoryTalk® View Studio Enterprise

Three options for Distributed

All options have unlimited displays and unlimited web clients, plus:

- Small – 5 full HMI clients
- Medium – 10 full HMI clients
- Large – 25 full HMI clients

With add-on options:

- Additional HMI client, full or read-only
- FactoryTalk View Studio Enterprise
- Redundant HMI server



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Data connectivity and presentation

New Data Grid data source: data log model

Your data - **where** and **how** you want to see it

New data source for the Data Grid control introduced in v12.00 allows users to visualize FactoryTalk View SE data log models and information from an MS SQL Database

Display information from data log models in a tabular format

Simplified configuration for developers at design time and operators at runtime

BENEFITS

- Quick and easy method to access the historical information at the operator station
- Eliminates many steps in the process for exporting data from data log model
- Visualize pens from data log models “on the fly” by modifying the Data Grid properties at runtime

The screenshot displays the Rockwell Automation FactoryTalk View SE interface. At the top, the Rockwell Automation logo and navigation tabs (Welcome, Recipe Management, Trend Pro, Extended Properties, WebBrowser Control, Data Displays, Server Status, Alarms, Security Functions) are visible. The main area shows a Data Grid with columns for DateAndTime, /Line1_Data:[CookieLin], and numerical values. A 'Properties' dialog box is open, showing 'Data Binding' set to 'Data Log'. The 'Choose tags' section lists various tags like /Line1_Alarms, /Line1_Data, and /Line1_HMI. The 'Selected tags' section shows a list of tags with columns for Tag Name, Data Type, Filter, and Sort. The 'Time period' is set to 'Last 30 minute(s)'. The 'Limit number of records returned to' is set to 5000. The dialog box has 'OK' and 'Help' buttons.

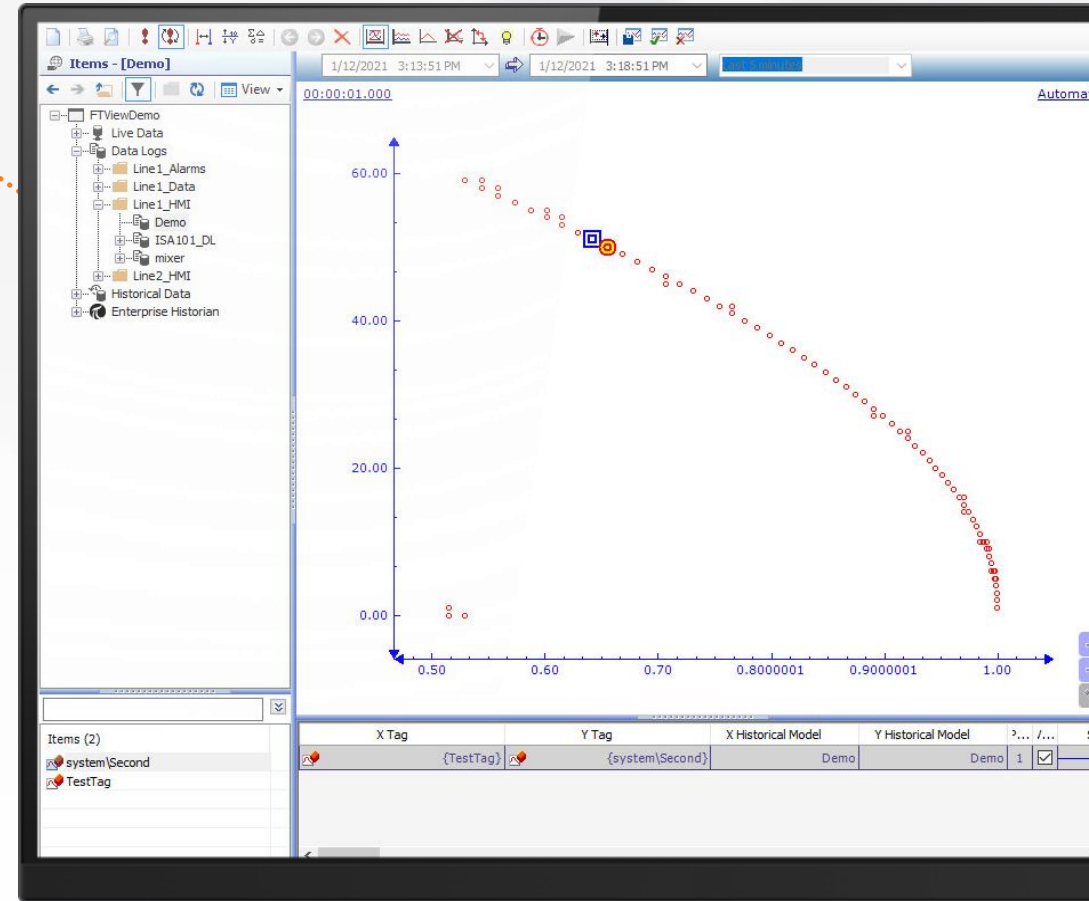
XY Plot control for FactoryTalk View SE client and web client

Extends trending capabilities by providing the ability to plot two sets of production data, one as a function of the other: $y=f(x)$

Plot two variables of interest against one another

BENEFITS

- No longer restricted to plotting data points as a function of time
- Access to existing FactoryTalk data sources:
 - FactoryTalk Live Data
 - FactoryTalk View SE Data log
 - FactoryTalk® Historian SE
- Analyze the relationship of two sets of data against one another





Extensibility and scripting improvements

HMI Tag access for server-side scripts

Transitioning scripting from the client to the server

Bidirectional interactions with data using PowerShell scripts

Further extends the PowerShell Scripting Engine capabilities introduced in FactoryTalk View SE v12.00

Trigger/call scripts from system events or application clients

V13.00 provides the capability to write information back to HMI Tags from the PowerShell script

BENEFITS

Use PowerShell scripts to:

- Change tag values in the HMI Tag database with script
- Push data from FactoryTalk View SE to Microsoft Excel (ex: send an Excel spreadsheet with parts that must be ordered right from an HMI display)
- Import data from Excel or a database to PowerShell, send this information to control system via HMI Tags
- Send email
- Update a text file

Select a Recipe ID:


Upload&NewRecipes DownloadRecipe Delete Recipe ResetID

RecipeID	Flour	Butter	Salt	Baking Soda	White Sugar
1	1	2	3	4	5
2	6	7	8	9	10
3	10	20	30	40	50



Recipe ID: Recipe00

Ingredient	Target Qty	New Input	Units
FLOUR	0.0	0.0	g
BUTTER	0.0	0.0	g
SALT	0.0	0.0	g
BAKING SODA	0.0	0.0	g
WHITE SUGAR	0.0	0.0	g

 Input new values and upload to a recipe file

Client tags for customizing client behavior and functionality

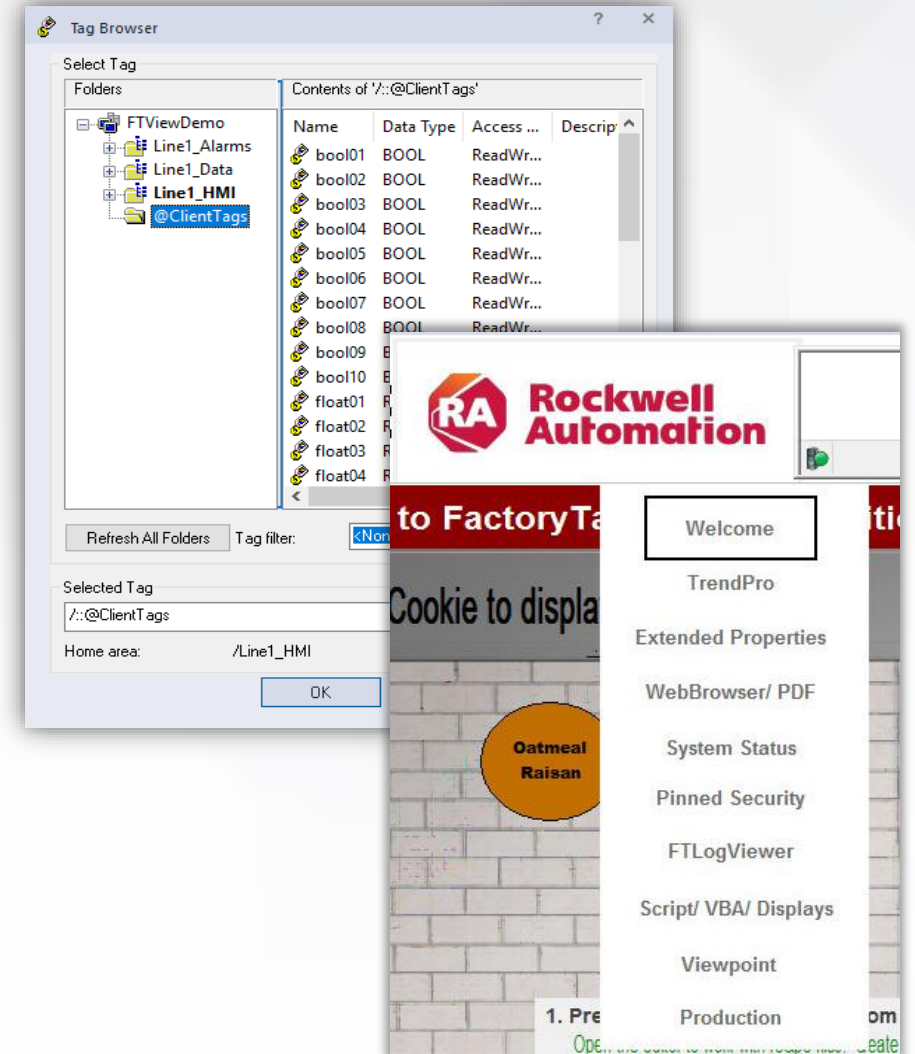
Drive operator-specific display functionality with tag values specific to each client/user session in a distributed system

Four pre-defined data types: BOOL, dint, float, and string

Available for distributed systems with multiple clients or Network Station applications

BENEFITS

- Customize client-specific:
 - Animation
 - Object visibility
 - Custom navigation menus
- Enables client-specific behavior that does not affect other clients in the system, driven by tag values specific to one client



Native .NET control object support

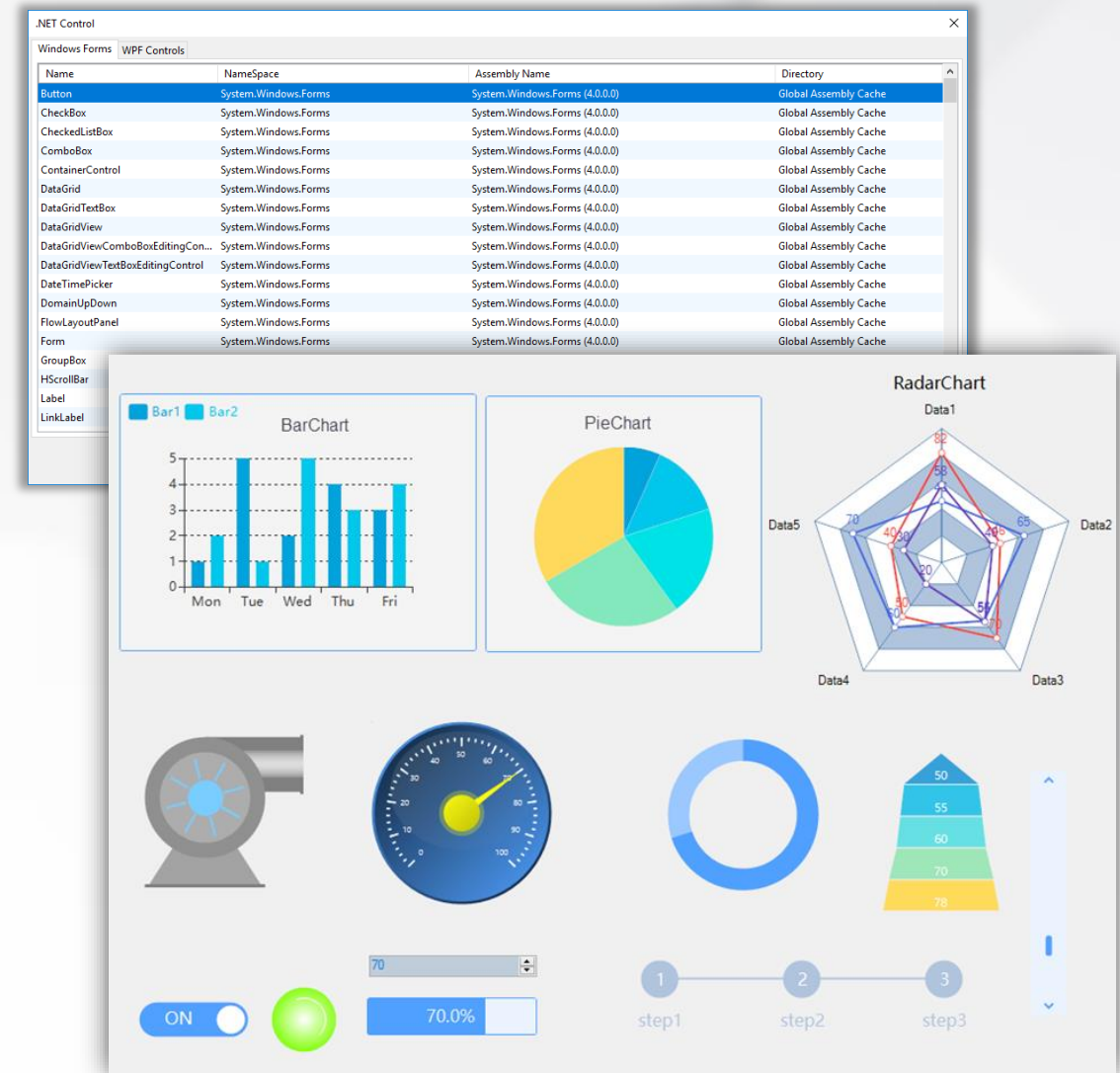
Leverage reusable custom tools in the FactoryTalk View platform

.NET objects are developed with the .NET Framework to provide a graphical interface to a business function

Support for Windows Form Control and Windows Presentation Foundation (WPF Control)

BENEFITS

- Provides greater flexibility with control system connectivity
- Users can develop their own .NET controls and use them in FactoryTalk View SE applications (ex: systems integrators)
- Native support for .NET means no need to convert from .NET to ActiveX
- Third-party libraries of .NET controls can be added to FactoryTalk View SE applications





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Improved application design

FactoryTalk View SE Add Component tool enhancements

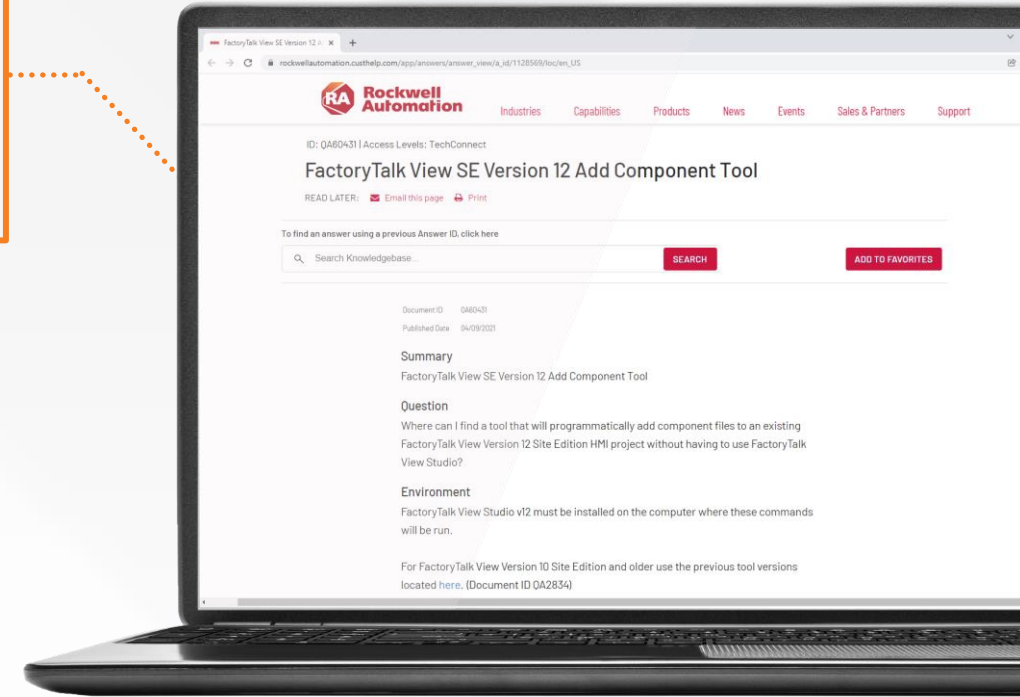
The FactoryTalk View SE Add Component tool allows users to add project elements to an existing FactoryTalk View SE HMI project via command line

Command-line utility capable of adding or updating components in a deployed FactoryTalk View SE application

Add displays, global objects, macros, or data log models programmatically

BENEFITS

- Update a running application without FactoryTalk View Studio (ex: OEM/SI updates)
- No longer necessary to back up and restore the entire application
- Added security:
 - Username and password
 - Account must have Create Children, Delete, List Children, Read, and Write access
- Support for XML file format
- Enhanced to allow import for applications that leverage Language Switching
- Support for FactoryTalk® Alarms and Events configurations



Did YOU KNOW?

The FactoryTalk View SE Add Component tool is available for all versions back to v3.2

Download the v12/13 tool from the [Knowledgebase](#)

Use and Evaluate Tag-based Alarms

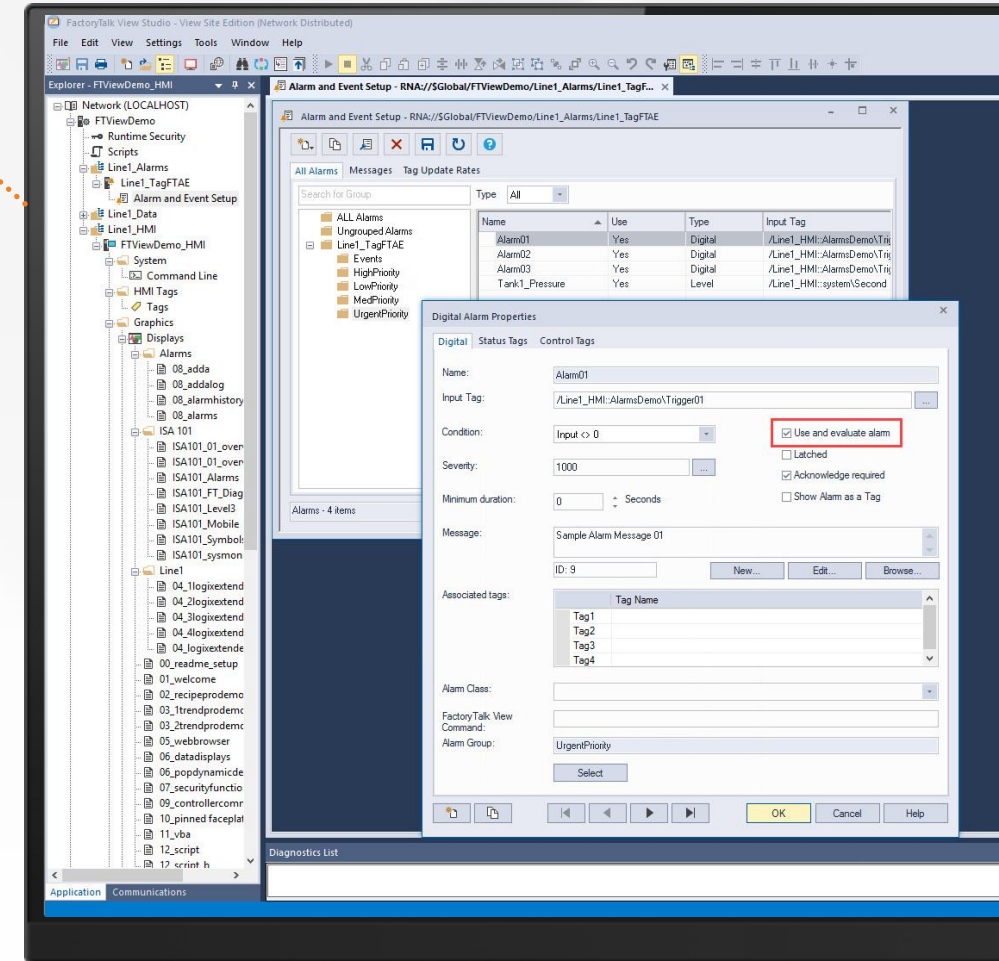
FactoryTalk Alarms and Events v6.21.00

Design time property allowing users to specify whether an alarm configuration should be evaluated

For alarms defined in FactoryTalk View SE (OPC alarms / legacy or third-party controllers)

BENEFITS

- If building a project from a template or importing XML, you must define alarms, but not use them for certain applications
 - Helpful in commissioning and maintenance of systems
 - Check box to use and evaluate the alarm once all components are in place
- Alarms with “Use and Evaluate” unchecked will not be evaluated or show up in any alarm object





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Improved application maintenance

System Status Portal

Included with FactoryTalk® Services Platform

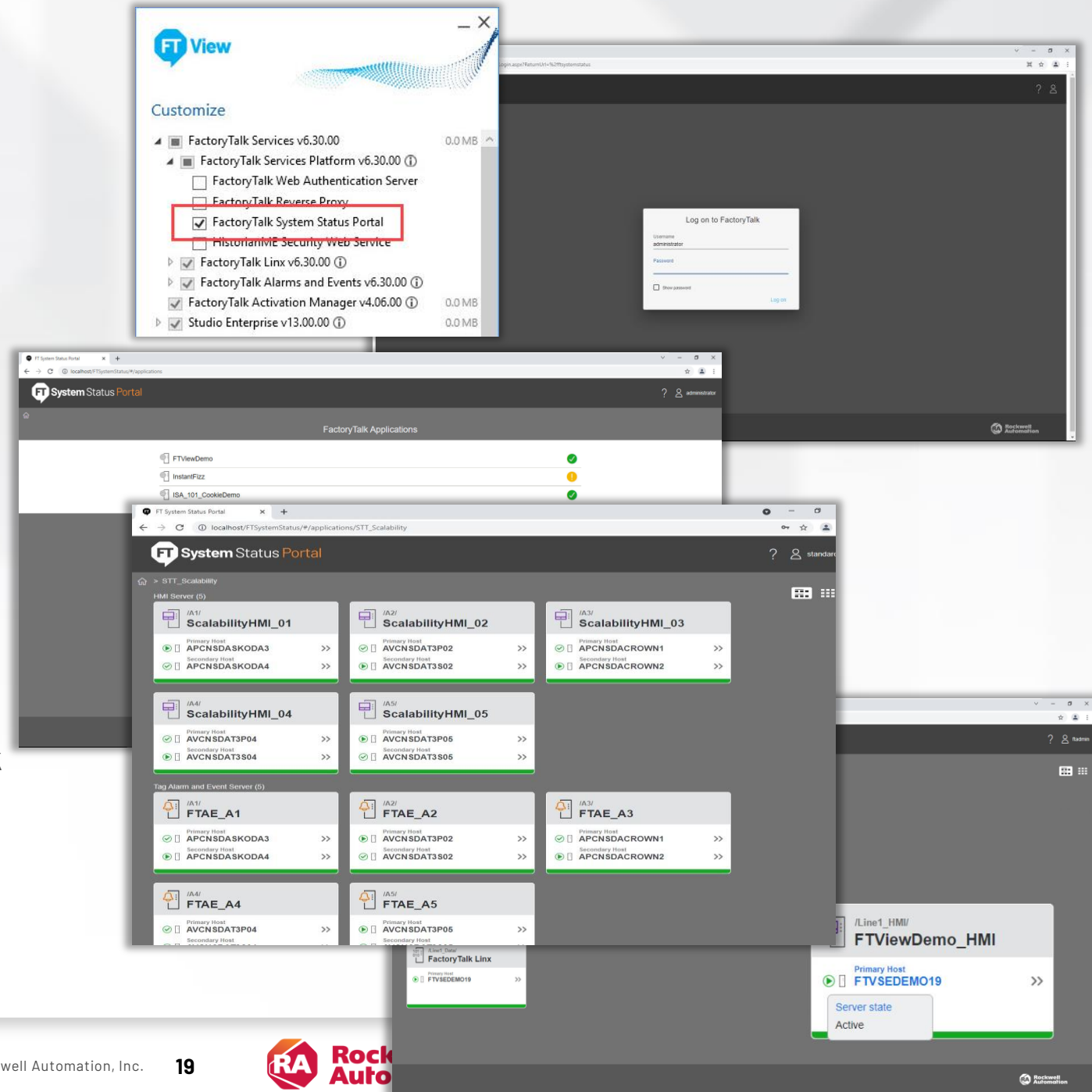
Webpage that provides an overview of all FactoryTalk application servers and their respective status: HMI, Data servers (FactoryTalk® Linx, OPC) and FactoryTalk Alarm and Events servers

Accessible via link:

http://<ftsystemstatus_server>/ftsystemstatus/

BENEFITS

- Enabled with checkbox during install
- Access application server status via web browser, either from a web browser object inside a FactoryTalk View application or from a separate web browser
- Status of application servers
 - Loading, Running, Failed
 - Redundancy – Active, Standby
- Only an indication of server status



Mobile access to Automatic Diagnostics

Automatic device diagnostics and analytics are generated by the controller in a system

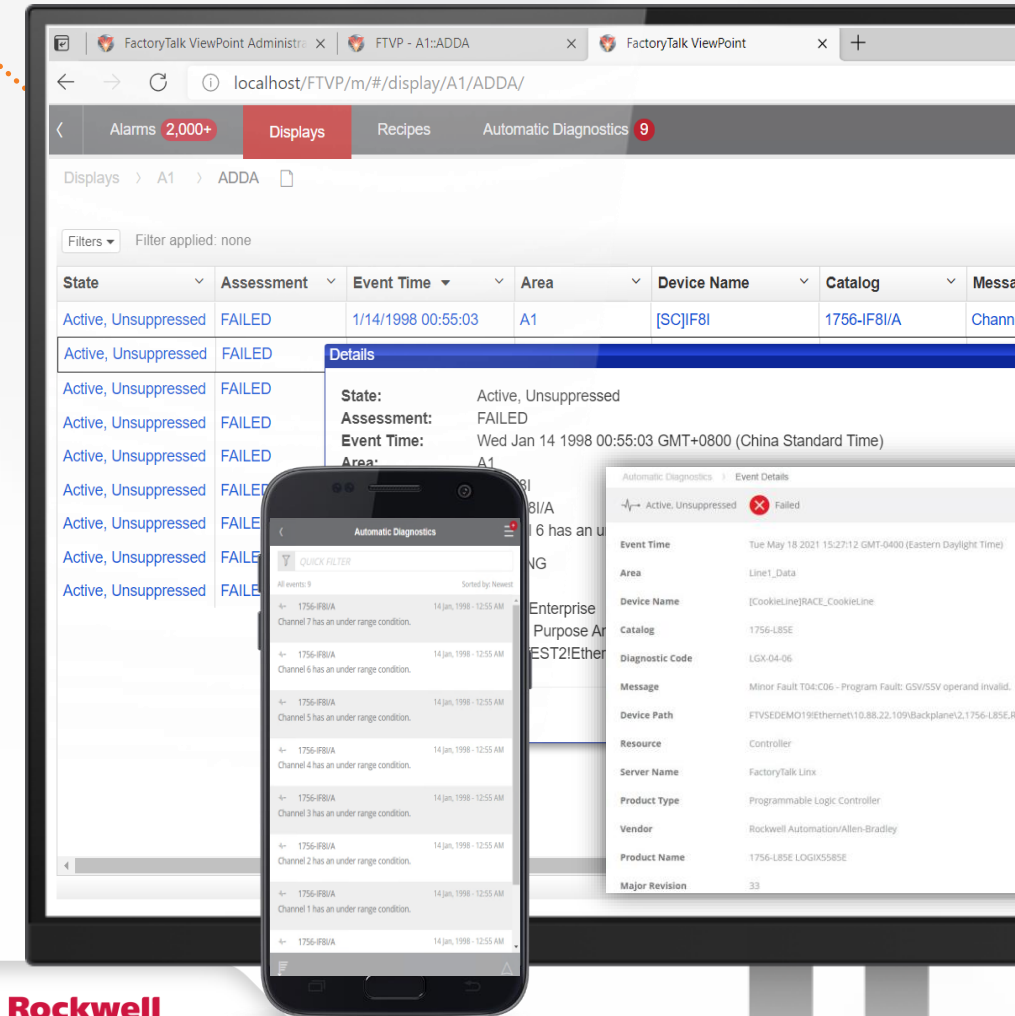
FactoryTalk View SE v12.00 introduced access to these messages via Automatic Diagnostics –v13.00 expands access to Automatic Diagnostics from mobile devices with FactoryTalk ViewPoint

BENEFITS

- Information about I/O communications and faults in the controller code can now be sent automatically to the HMI to provide information to operators
- Easily access information about the devices in a control system in all HMI clients, full or mobile
 - Fault messages
 - Disconnected I/O

DID YOU KNOW?

Automatic Diagnostics are supported by ControlLogix® 5580, CompactLogix™ 5480, and CompactLogix 5380 controllers, V33+



Animation driven by Automatic Diagnostics

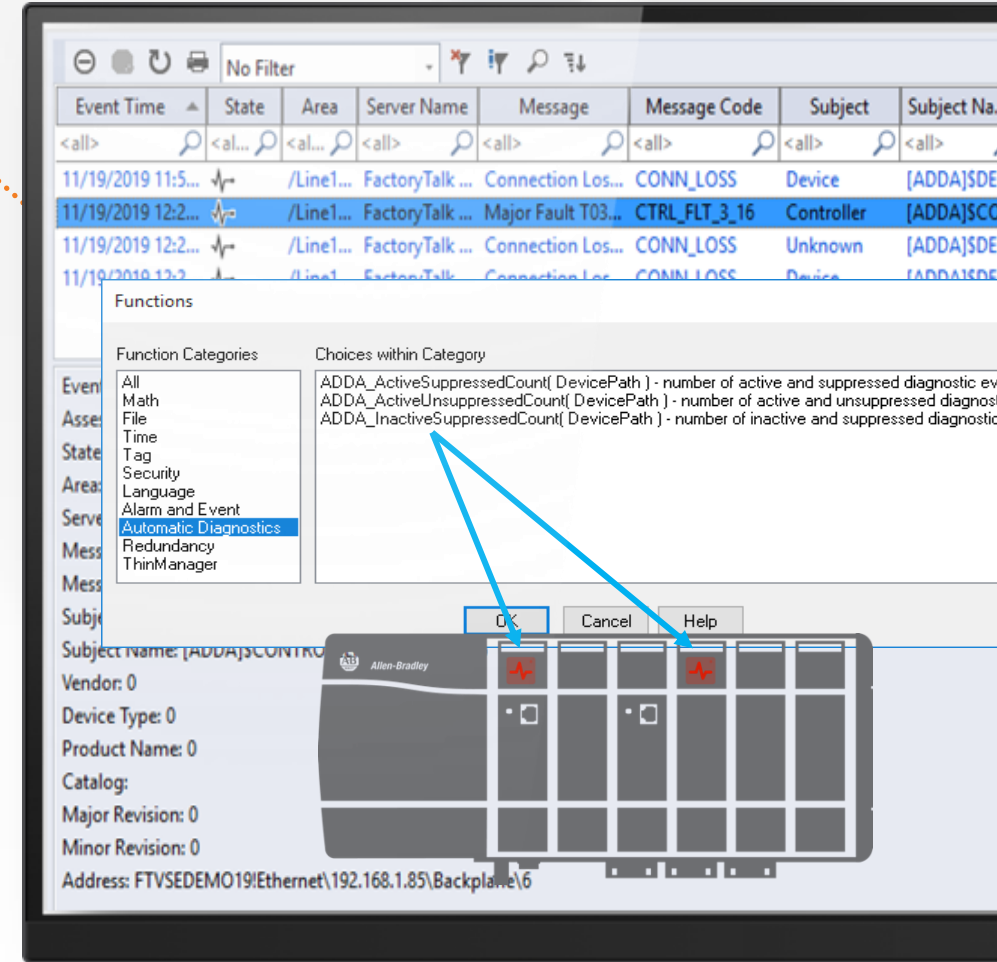
Allows users to drive animation from information retrieved from Automatic Diagnostics

New functions:

- ADDA_ActiveSuppressedCount (Device Path)
- ADDA_ActiveUnSuppressedCount (Device Path)
- ADDA_InactiveSuppressedCount (Device Path)

BENEFITS

- Visual indications of conditions present in devices, provided by diagnostics messages (fault, disconnect, and so on)
- Feature used in Rockwell Automation Process Object Library faceplates, allowing process customers to display problems within the system on display objects



FT Linux OPC UA Connector

OPC UA Alarms and Conditions integration

Simplified integration of FactoryTalk View SE with other systems and vendors

Enabled and configured in the OPC UA Connector

FactoryTalk Alarms and Events will retrieve alarm definitions from the OPC UA Server, receive alarm state change messages, and return operator feedback

BENEFITS

- Eliminates the need to duplicate alarm configurations in the FactoryTalk Alarms and Events Server when third-party OPC UA systems are leveraged
- Automatic integration into FactoryTalk Alarms and Events
 - Subscribe to OPC UA Alarms and Conditions
 - Visualize and interact with existing FactoryTalk Alarms and Events objects, providing consistent interactions for operators
 - Historize the information to the centralized FactoryTalk Alarms and Events database

The image shows two overlapping screenshots of the FactoryTalk Linux OPC UA Connector software. The top screenshot displays a table of alarm events with columns for Event Time, Server Name, Alarm Name, Condition Name, and Message. The bottom screenshot shows the configuration window for the connector, with the 'Alarms Settings' tab selected and highlighted by a red box. This tab includes options to enable alarm and event support, configure priorities, and set diagnostic logging.

Event Time	Server Name	Alarm Name	Condition Name	Message
2/7/2022 10:33:17 AM	UAServer 02	...alarm.TemperatureMonitor 1	LIMIT_HIHI	Alarm S
2/7/2022 10:33:21 AM	UAServer 02	...alarm.TemperatureMonitor 2	LIMIT_HI	Alarm S
2/7/2022 10:40:33 AM	UAServer 01	...ontroller@Alarm.Limit0001	LIMIT	LL
2/7/2022 10:40:33 AM	UAServer 01	...ontroller@Alarm.Limit0002	LIMIT	LL
2/7/2022 10:40:33 AM	UAServer 01	...ontroller@Alarm.Limit0003	LIMIT	LL
2/7/2022 10:40:33 AM	UAServer 01	...ontroller@Alarm.Limit0004	LIMIT	LL
2/7/2022 10:40:33 AM	UAServer 01	...ontroller@Alarm.Limit0005	LIMIT	LL
2/7/2022 10:40:33 AM	UAServer 01	...ontroller@Alarm.Limit0009	LIMIT	LL
2/7/2022 10:40:33 AM	UAServer 01	...ontroller@Alarm.Limit0006	LIMIT	LL

Alarms Settings

- Enable alarm and event support
- Communicating with server
- Enable server-assigned priorities

Priority	Low	High
Urgent	751	1000
High	501	750
Medium	251	500
Low	1	250

History

- Enable history

Database definition

Computer Name:

Database name:

Cache file path: C:\ProgramData\Rockwell\Alarms

Diagnostic Logging

- Log diagnostic message on tag write



Feedback-driven enhancements

Custom user message for Electronic Signature and String Input

Customized diagnostic audit messages for String Input object when new values are downloaded

CUSTOM USER MESSAGE

Displayed to the operator at runtime to confirm they are aware of the impact their activities may have on the production system

Audit messages logged to FactoryTalk® Diagnostics when values are downloaded

BENEFITS

- Aligned with new FDA requirements

STRING INPUT REMARK

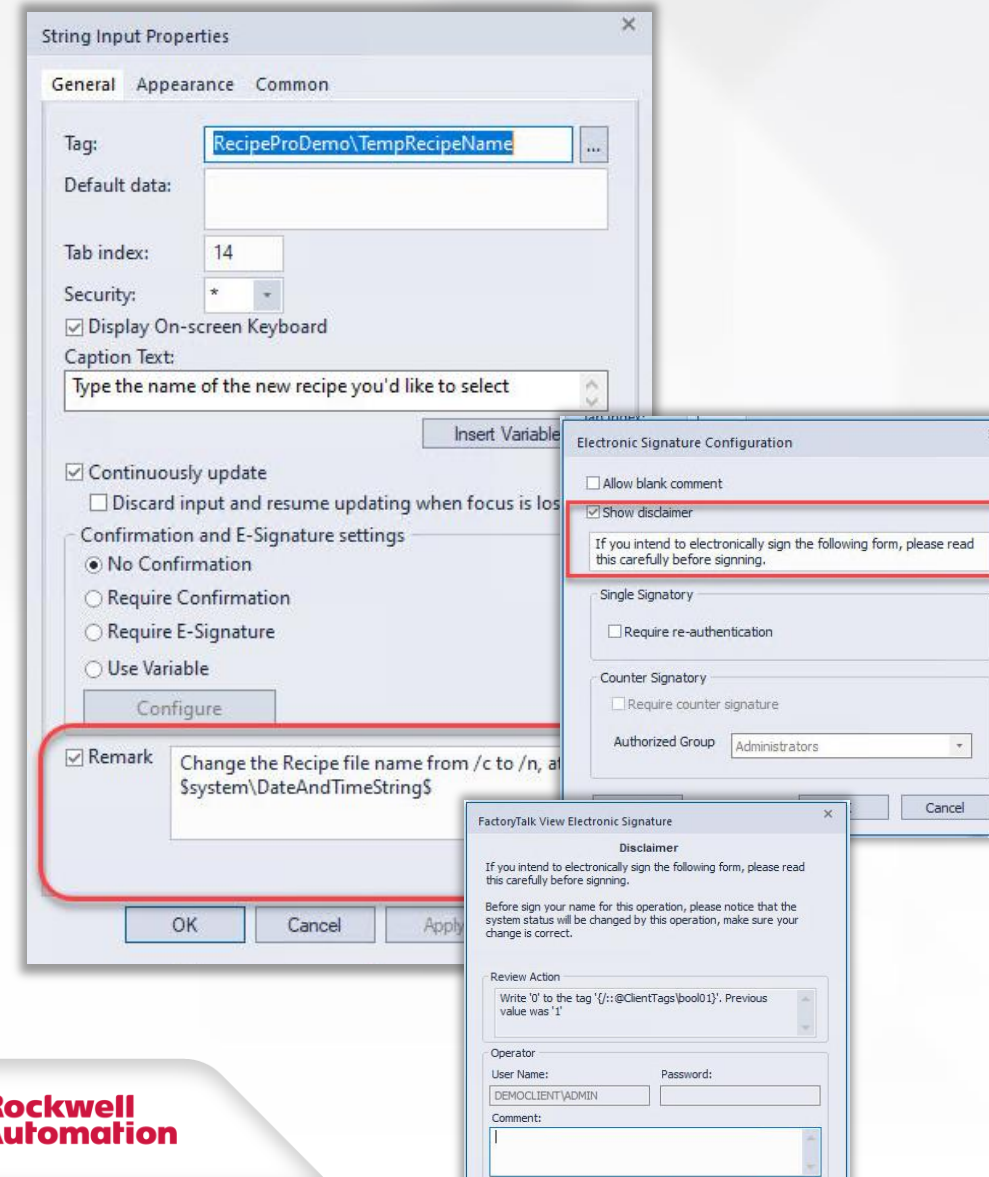
Ability to configure custom remark on string input object

Supports use of tags or parameters

Current and new tag values can be used by leveraging the "/c" and "/n" placeholders

BENEFITS

- Developers can now configure custom diagnostics for Numeric and String inputs to provide granular audit logging



Language switching support in TrendPro and Recipe Pro Plus

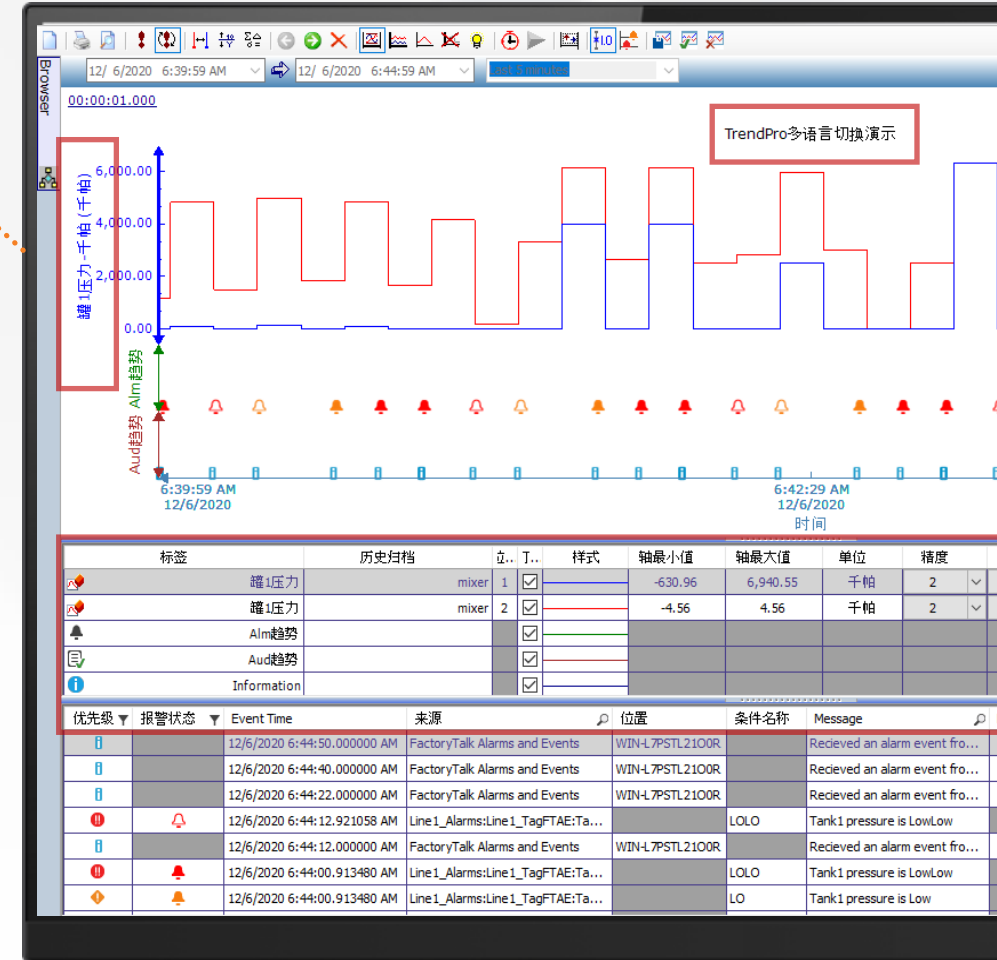
Provides HMI users with an interface that is easy to read and understand in the runtime language they have selected

Language switching extended to tools integrated into FactoryTalk View SE for trending and recipe management

Column headings, tooltips, and other text can now be switched to the language selected by the operator

BENEFITS

- Uniform operator experience across a FactoryTalk View SE client for all components used in an HMI application

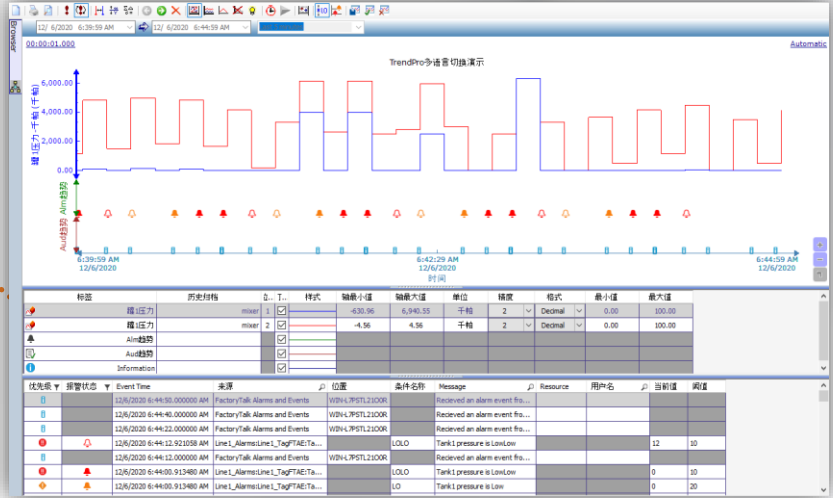


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Column headings, tooltips, and other text can now be switched to the language selected by the operator



BENEFITS

- Uniform operator experience across a FactoryTalk View SE Client for all components used in an HMI application

编号	成分名称	类型	标签集	配方值	当前值
1	Flour	数字	RecipeProDemo\...	44	
2	Butter	数字	RecipeProDemo\Ingreed	44	
3	Salt	数字	RecipeProDemo\Ingreed	44	
4	Baking Soda	数字	RecipeProDemo\Ingreed	44	
5	White Sugar	数字	RecipeProDemo\Ingreed	44	
6	Brown Sugar	数字	RecipeProDemo\Ingreed	44	
7	Egg Powder	数字	RecipeProDemo\Ingreed	44	
8	Water	数字	RecipeProDemo\Ingreed	44	
9	Vanilla	数字	RecipeProDemo\Ingreed	44	
10	Chocolate	数字	RecipeProDemo\Ingreed	44	
11	Ginger	数字	RecipeProDemo\Ingreed	44	
12	Oat Flour	数字	RecipeProDemo\Ingreed	44	



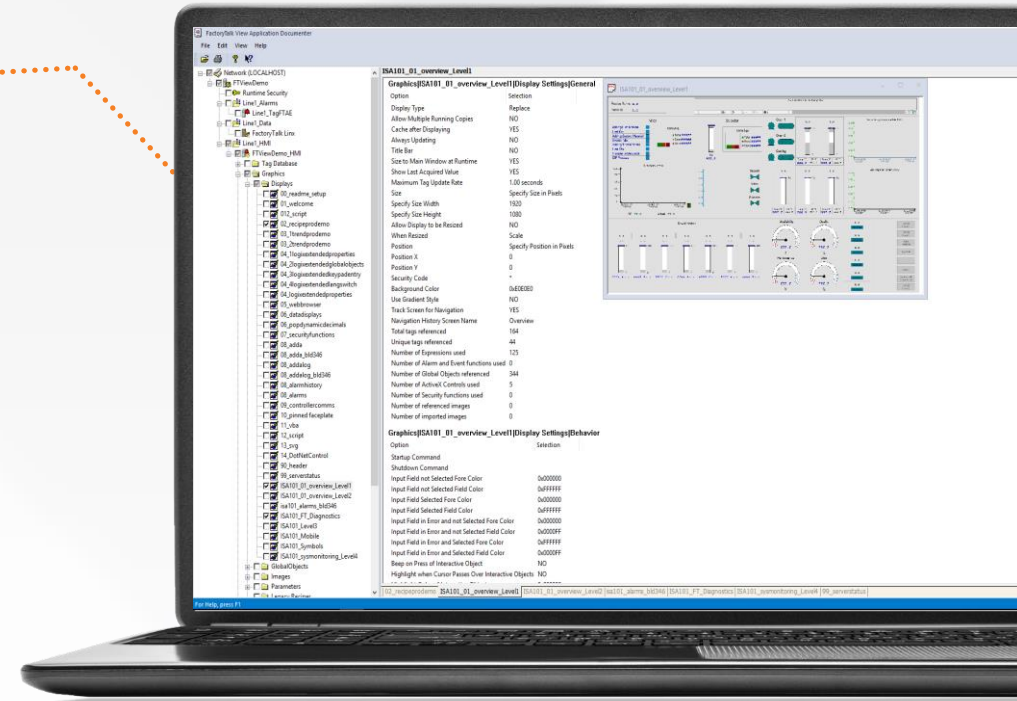
Application Documenter: export to XML

Run Application Documenter via command line to generate an XML export of application details

Intended for comparison of components configured in the application

BENEFITS

- Exports can be loaded into GitHub or other file versioning solutions
- Generate reports on differences and application statistics, identifying changes that were made in the running application



Redundant system synchronization enhancement

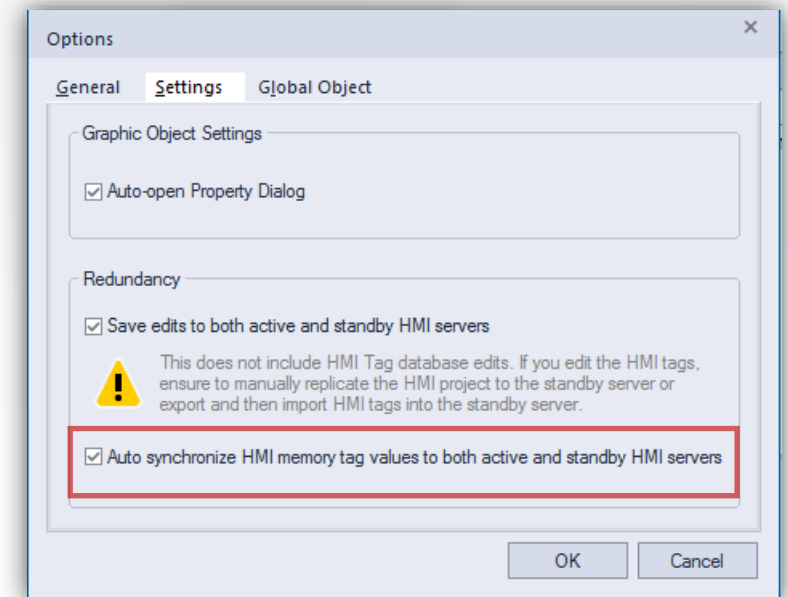
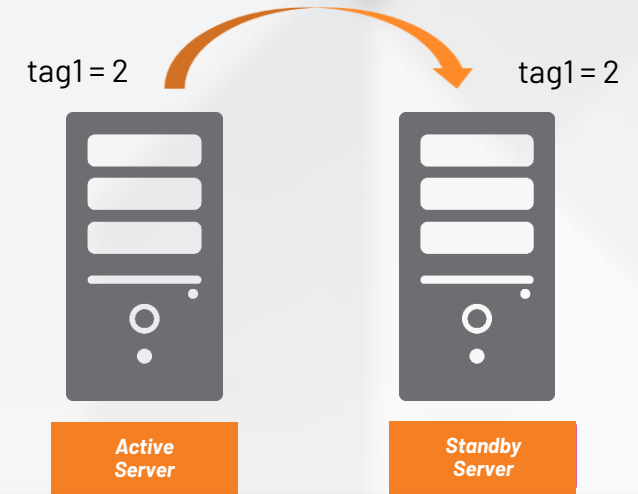
Continued improvements to the behavior and reliability of a redundant system

Synchronization of HMI memory tags between active and standby servers

HMI memory tags are used to store application-specific values that are referenced by the HMI, but not stored in controller tags

Before v13.00, HMI memory tag values were not synchronized in a redundant system; HMI tag value changes were reflected only in the active server

Enable HMI memory tag synchronization with a checkbox in HMI Server settings



BENEFITS

- In a v13.00 redundant system, HMI memory tag values are now synchronized – when failover/switchover occurs, these values remain consistent no matter which server is active



Modernization for FactoryTalk View SE

Microsoft SQL Server LocalDB compatibility update

HMI Tag database maintenance update, with adoption of Microsoft SQL Server 2019 LocalDB

BENEFITS

- Provides continued maintenance and security to the SQL Server LocalDB component of our system
- Maintains the “latest and greatest” from Microsoft



FactoryTalk View v13.00 and aligned products no longer support 32-bit operating systems
Reference Installation documentation for official OS support information

Microsoft Edge web browser adoption

FactoryTalk View SE web browser control update to leverage Microsoft Edge technology from the Windows operating system

Shift in new versions of FactoryTalk View SE after Internet Explorer June 2022 End of Life date was announced by Microsoft



BENEFITS

- No action necessary on existing displays
- Provides added HTML5 / Chromium rendering for
 - ThingWorx dashboards
 - FactoryTalk® Analytics™ DataView

How will the end of support for Internet Explorer affect Rockwell Automation products?

Find an end of support / dependency summary on the [Knowledgebase](#)



Modernization for FactoryTalk View ME

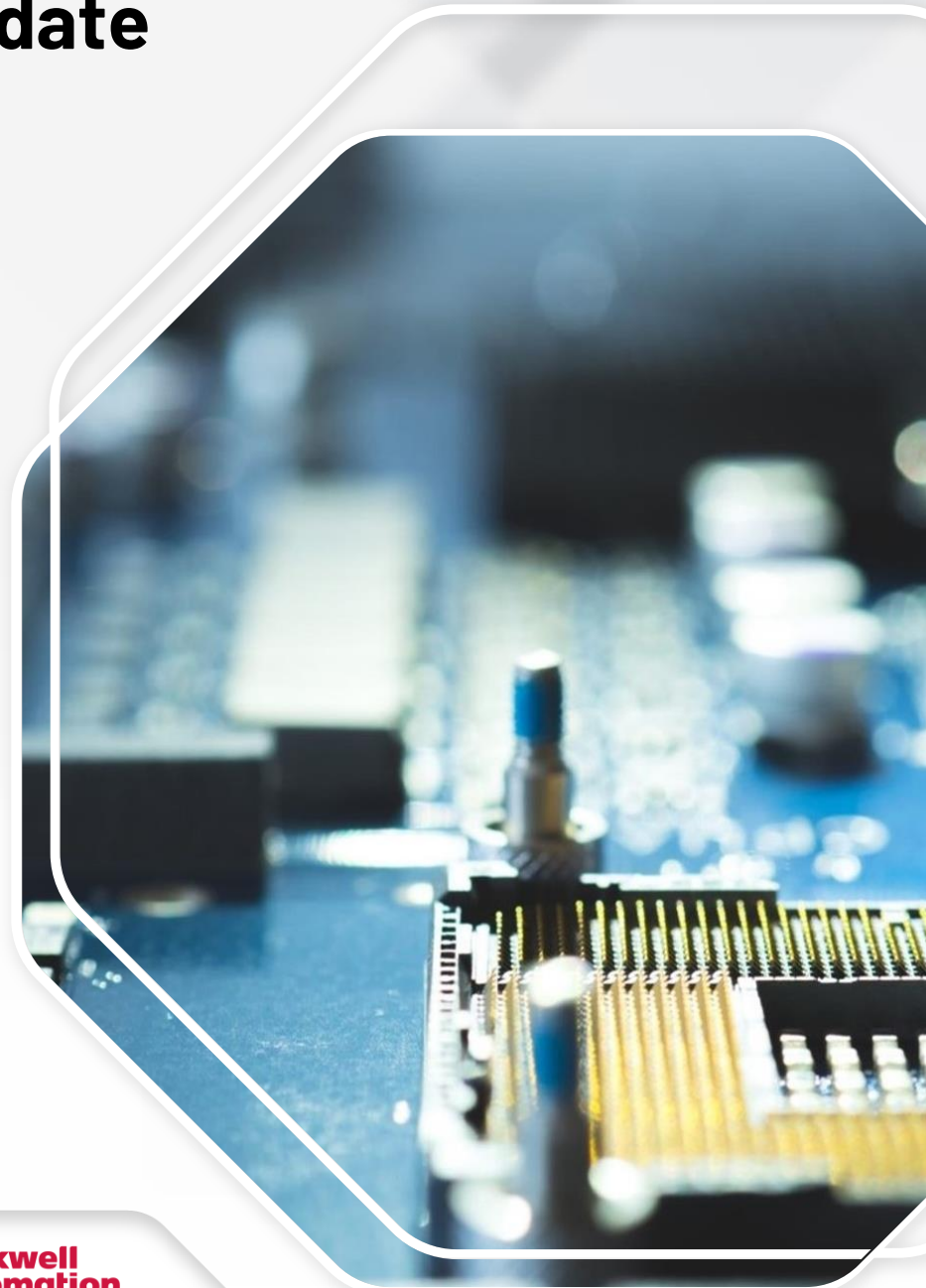
PanelView™ Plus 7 Performance Series B update

FactoryTalk View ME v13.00 adds support for PanelView Plus 7 Performance Series B

Series B offers updated hardware with improved long-term supply chain support

BENEFITS

- Increased user storage
- Enhanced product security
- Support for modern peripherals
- Firmware update via ControlFLASH™, aligned with other Allen-Bradley® products
- Improved ability for customers to restore a terminal to Factory Defaults





OS support and new content for FactoryTalk View v13.00



FactoryTalk

by **ROCKWELL AUTOMATION**



OS support

- Windows Server 2019 (64 bit)
- Windows Server 2016 (64 bit)
- Windows Server 2012 R2 (64 bit)
- Windows 10 (64 bit)
- Windows 11 (64 bit)

Microsoft SQL server support

(for datalog & FactoryTalk A&E)

- MSSQL 2019 (64 bit)
- MSSQL 2017 (64 bit)
- MSSQL 2016 SP2 (64 bit)
- MSSQL 2014 SP3 (64 bit)
- MSSQL 2012 SP4 (64 bit)

No longer supported

- Windows Vista (8.00)
- Windows Server 2003 (8.00)
- Windows Server 2008 R2 (11.00)
- Windows Server 2012 (10.00)
- Windows 7 (12.00)
- Windows 8 & 8.10 (11.00)
- Windows 10 32 bit (12.00)

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

Demo application: FactoryTalk View SE distributed

The demo application included with FactoryTalk View Studio Enterprise has been updated to include new v13.00 features

Walks a user through new features delivered in releases from v9.00 to v13.00

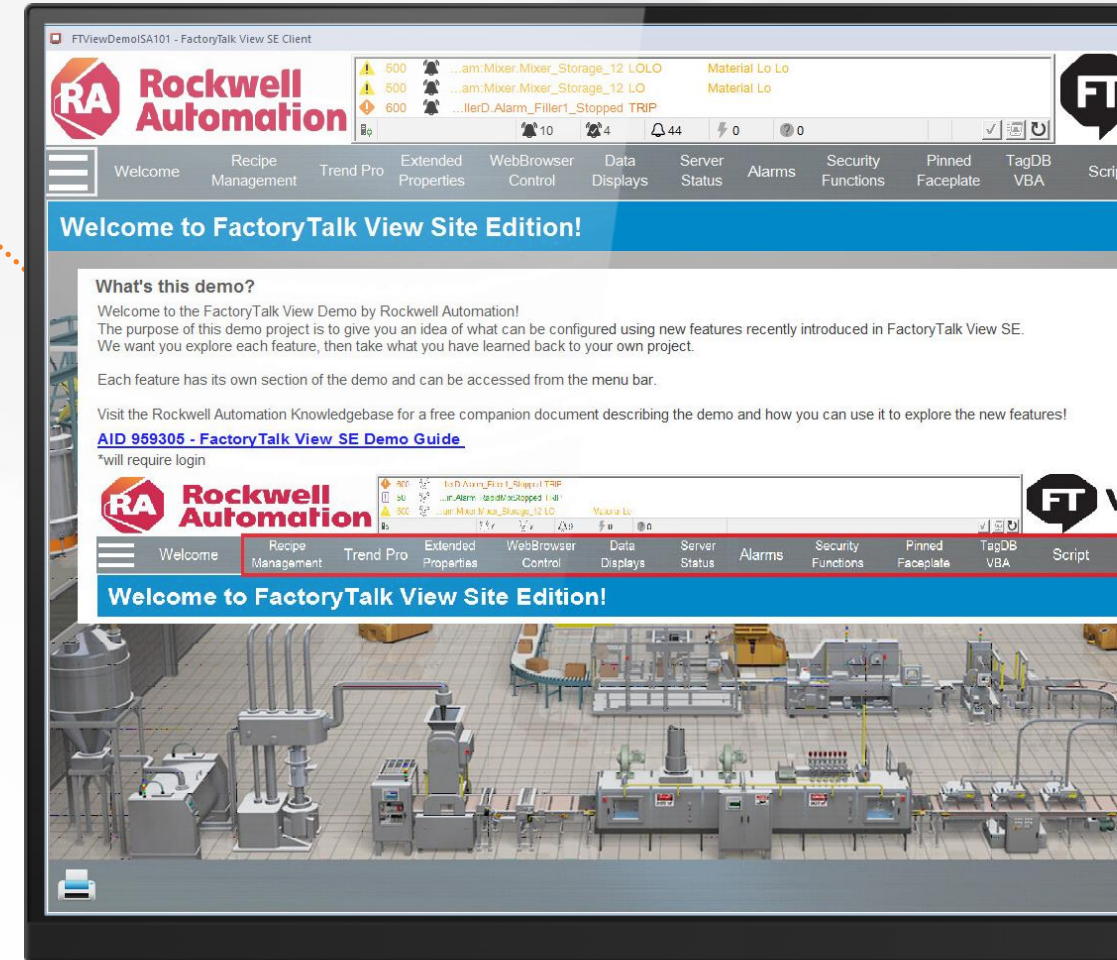
Automatically installed with FactoryTalk View SE v13.00

Setup instructions included in .PDF found in HMI Projects folder

- How to link the demo to a controller
- Location of the .CLI file
- How to configure FactoryTalk ViewPoint

.ACD file is also included in the HMI Project folder

Demo configured guide also found in [Knowledgebase](#)



YouTube video playlists

Rockwell Automation provides “how to” videos for various features in:

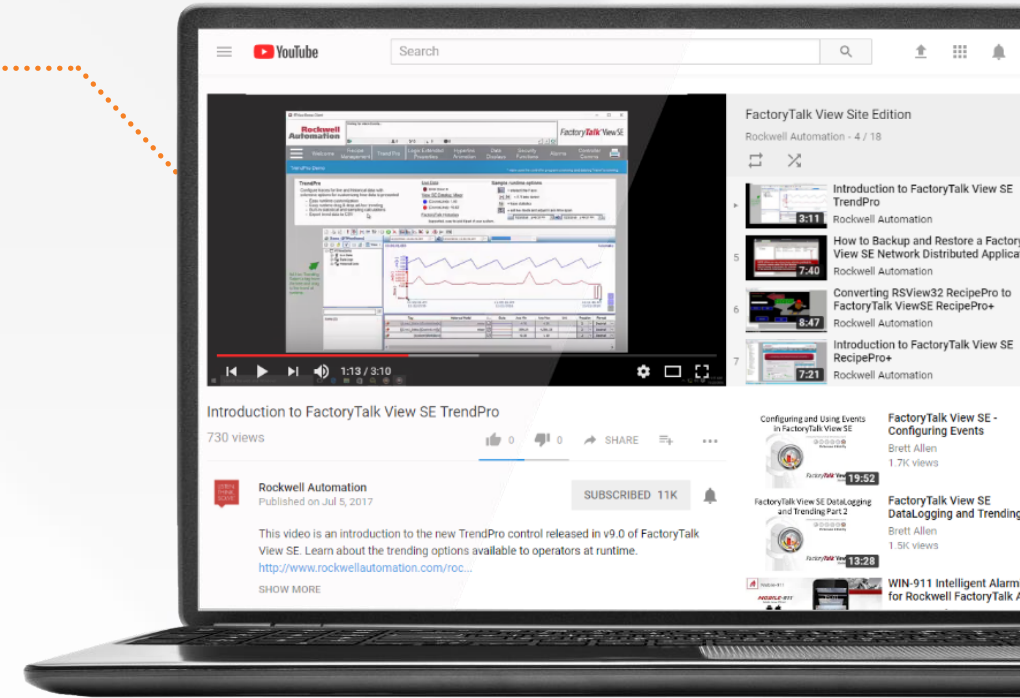
- FactoryTalk View SE
- FactoryTalk View ME with PanelView Plus 7
- View Designer with PanelView 5000
- And many other Rockwell Automation products

Videos created by Commercial Engineering to demonstrate product features and how they are configured

New content added monthly

YouTube playlist links:

- [FactoryTalk® View Site Edition](#)
- [PanelView Plus 7 and FactoryTalk® View Machine Edition](#)
- [FactoryTalk® AssetCentre](#)
- [PanelView 5000 and Studio 5000 View Designer®](#)



THANK YOU



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expanding **human possibility**[®]



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