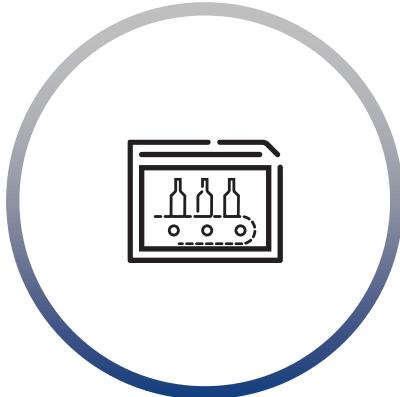


FactoryTalk® Optix™ v1.7

January 2026



| FactoryTalk® Optix™ Program Priorities



Core Capabilities

- Core product capabilities that create a **strong** and **sustainable** platform for core automation **visualization** and **edge applications**.



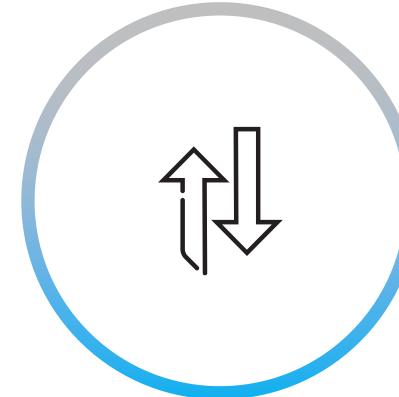
Expanded Architectures

- Support for **integrated hardware**, larger distributed architectures, process systems, remote control, and cloud-based operations.



Digital Design Experience

- FactoryTalk® Hub™ integrated workflows for a cohesive customer experience when building a system using SaaS-based design tools.



Data Connectivity

- Robust **edge connectivity** and application platform to enable data and **analytics** with core **operations** data.



FactoryTalk® Optix™ v1.7



Core Capabilities

- Recipe Enhancements
- ListView data control
- UI / DPI scaling property for responsive design
- Unresolved and broken dynamic links view
- Optimizations for improved alarms, dynamic links and web client performance
- Library Enhancements
- "Tile" fill mode for SVG images
- Text box option for text trimming
- Report generation on EEC / OptixEdge
- Virtual Keyboard Enhancements
- Alarm Widgets enhancements, layouts for smaller screens and pre-configured filters
- User-defined project templates enhancements



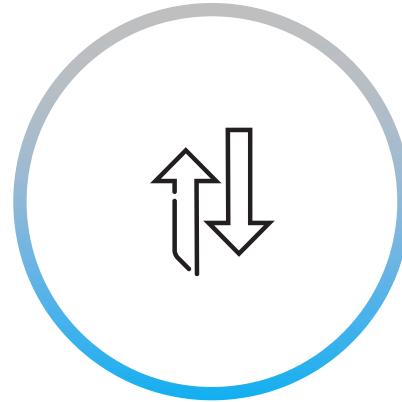
Expanded Architectures

- Enhanced security policies - password complexity for secrets encryption
- OAuth2.0 support for Web UI
- LDAPS - secure LDAP support
- Beckhoff tag import using design-time NetLogic
- Siemens password-protected communication
- Codesys Protected communication with users, passwords and certificates
- FactoryTalk® AssetCentre integration – disaster recovery
- PlantPAx® Process Library 5.20 support



Digital Design Experience

- FactoryTalk® Design Studio™ integration
 - Online tag import
 - Runtime communications
- Tag Importer auto-refresh enable/disable
- Git enhancements



Data Connectivity

- Logix extended tag properties - pass-through support
- MQTT Enhancements
 - Data Logger publishing
 - MQTT client store & forward
 - Azure connector(publish & subscribe)
- Last will & testament



Core Capabilities



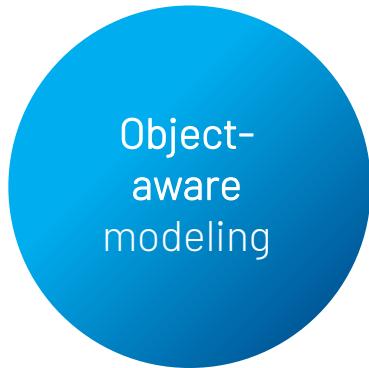
| New Recipe Module: Architecture

Core Capabilities



Scalable parameter management

Handle an unlimited number of recipe parameters thanks to an optimized database structure.



Object-aware modeling

Manage recipe parameters either as individual discrete variables or as variables within an object.



Extended & simplified methods

Access a broader, more intuitive set of OPC UA methods for recipe management through Studio and APIs



Concurrent runtime editing

Enable multiple users to edit recipes simultaneously without interrupting the configuration workflow.



Custom metadata support

Add user-defined metadata to enrich recipes with context.

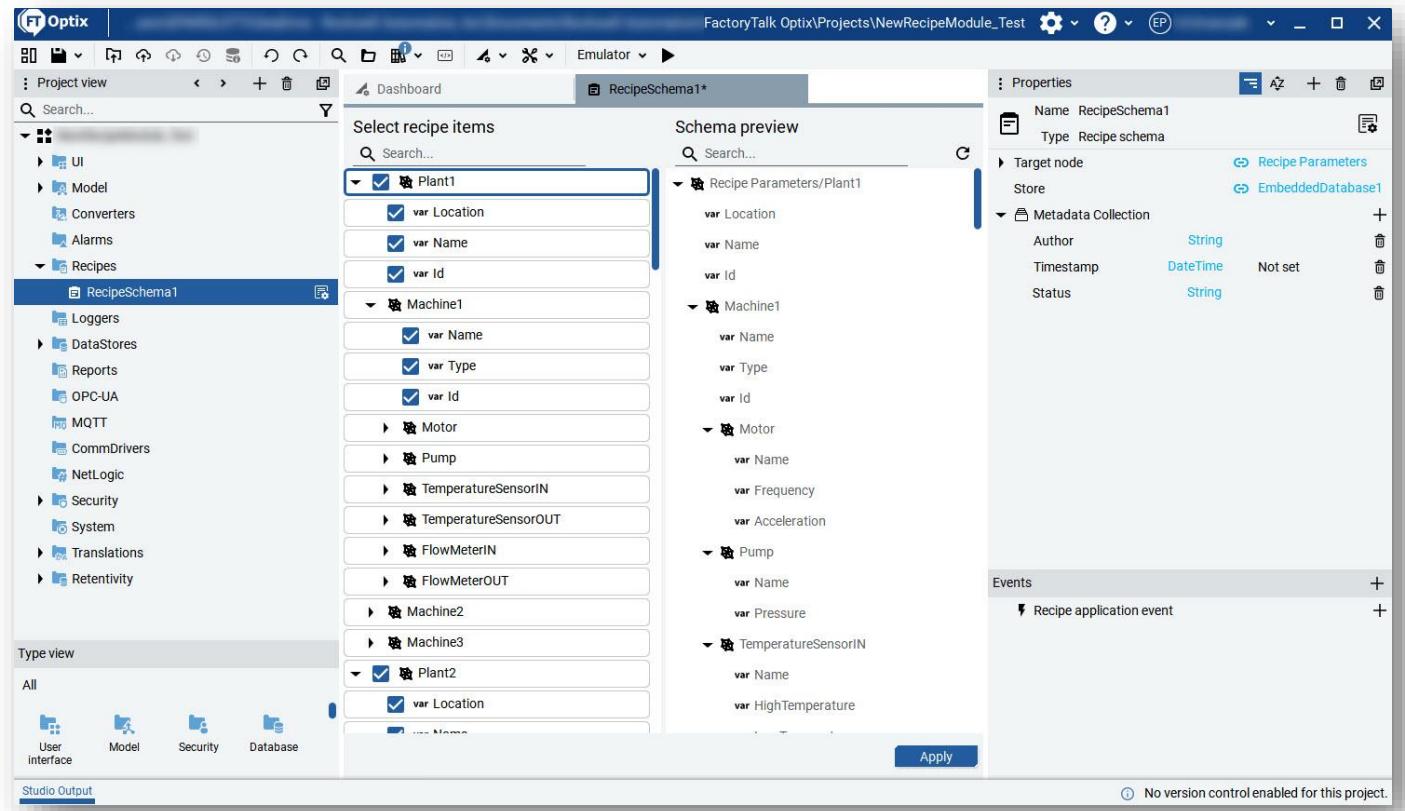


New Recipe Module: Schema

Core Capabilities

Enhanced Recipe Schema configurator

- Leverage the improved configurator with preview for faster and easier setup.





New Recipe Module: Widget

Core Capabilities

Modern UI integration

- Redesigned widget for an intuitive configuration based on the new ListView data control.

Recipe editor

Name	Version	Created At	Modified At	Edit
⋮ Recipe1	1.0	Dec 15, 2025, 11:29:59 AM	Dec 15, 2025, 11:29:59 AM	↗
⋮ Recipe1	1.1	Dec 15, 2025, 11:30:36 AM	Dec 15, 2025, 11:30:36 AM	↗
⋮	1.5	Dec 15, 2025, 11:30:56 AM	Dec 15, 2025, 11:30:56 AM	↗
⋮	1.0	Dec 15, 2025, 11:33:11 AM	Dec 15, 2025, 11:33:11 AM	↗
⋮	1.0	Dec 15, 2025, 11:30:21 AM	Dec 15, 2025, 11:30:21 AM	↗
⋮	1.0	Dec 15, 2025, 11:31:33 AM	Dec 15, 2025, 11:31:33 AM	↗

Activate

Rename

Duplicate

Delete

Refresh List

Create new recipe

Create new recipe from target



ListView and ListViewRow

Core Capabilities

ListView is a DataControl that dynamically generates multiple **ListViewRow** Containers at runtime.

It represents data with maximum UI flexibility from heterogeneous sources:

- Model
- Database
- Recipe Schema

It enables:

- Sorting and **filtering** widgets using queries
- **Efficient handling** of large datasets through virtualization

Type	Name	Value	
	Motor1	Speed [RPM]	45
	Motor2	Speed [RPM]	37
	Motor3	Speed [RPM]	0
	Tank1	Level [!]	120



ListView and ListViewRow: Details

Core Capabilities

- Configure the Model data source
- Set up a list of pairs:
 - Row Template
 - Type
- Configure the query
- At runtime, rows will match the Model content.

Suitable for:

- Listing machines in a plant
- Listing machine components
- Recipe parameters
- Alarms

The screenshot shows the configuration of a ListView named "MachineListView". The "Model" property is set to "Data" (indicated by a red box). The "TypeSelectors" section contains four type selectors: TypeSelector1 (Template: MotorRow, Type: Motor), TypeSelector2 (Template: BoolRow, Type: Boolean), TypeSelector3 (Template: FlowSensorRow, Type: Object), and TypeSelector4 (Template: PumpRow, Type: Boolean). A red arrow points from the "MotorRow" entry in the TypeSelector1 list to the "MotorRow" entry in the "MotorRow" configuration window. Another red arrow points from the "PumpRow" entry in the TypeSelector3 list to the "PumpRow" entry in the "Motor" configuration window. The "Motor" configuration window displays properties for "Name" (Motor), "Type" (Object), "Status" (Boolean, False), "Speed" (Float, 0), and "Acceleration" (Float, 0).

Name	Type	Status	Speed	Acceleration
Motor	Object	False	0	0



Unresolved and Broken DynamicLink View

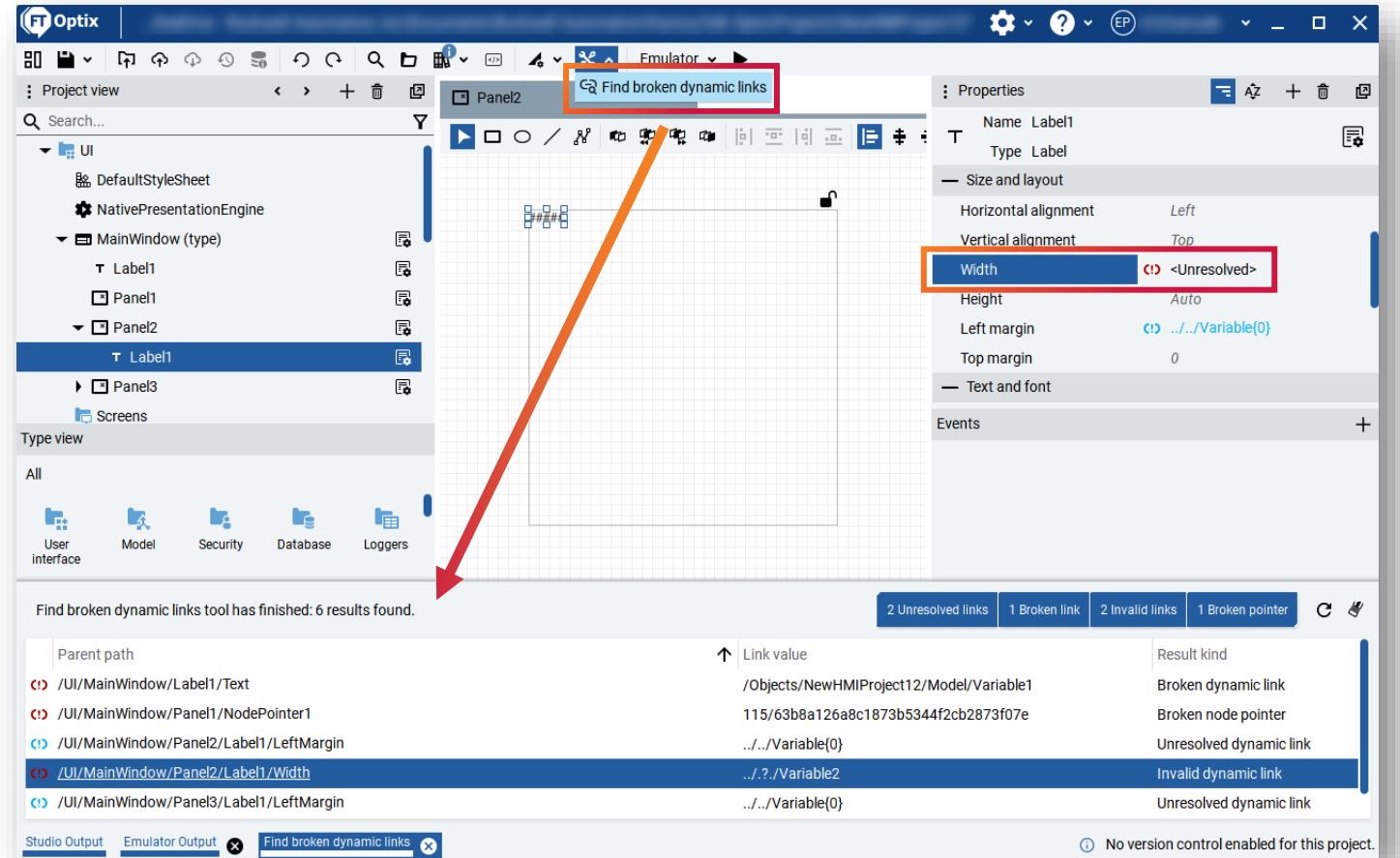
Core Capabilities

Added new tool Find broken dynamic links.

Check in a dedicated Studio section if your project contains:

- Broken DynamicLinks
- Broken Node Pointers
- Unresolved DynamicLinks
- Invalid DynamicLinks

Select one of the results and navigate to the location of the issue.



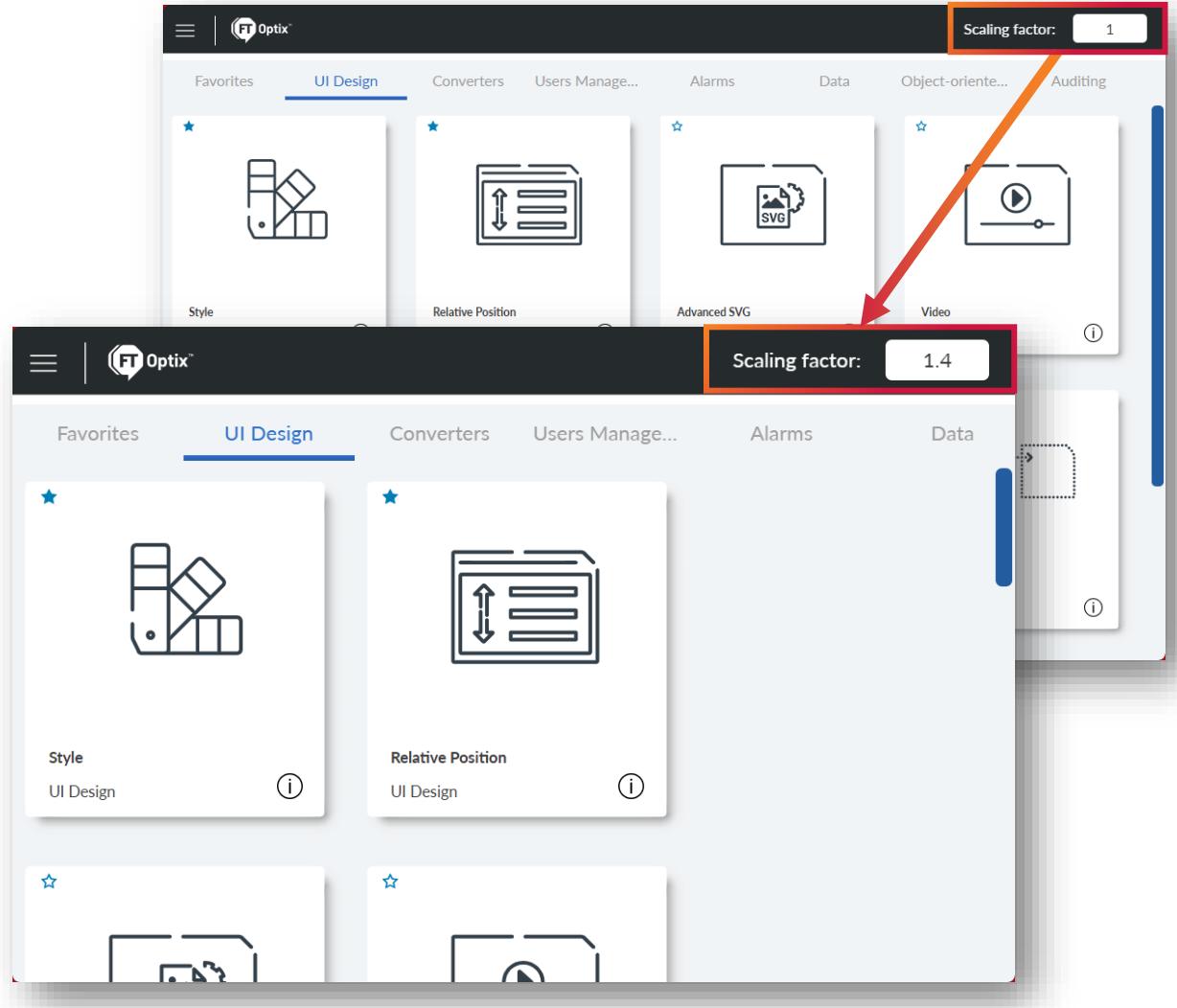


UI Scaling Factor

Core Capabilities

Allow the **UI content scaling** to be adjusted at runtime with a single parameter:

- The **Scaling factor** can be accessed from the UI session
 - Default value is "1", indicating "no scaling"
 - The value is **saved** and persists for each target device or origin



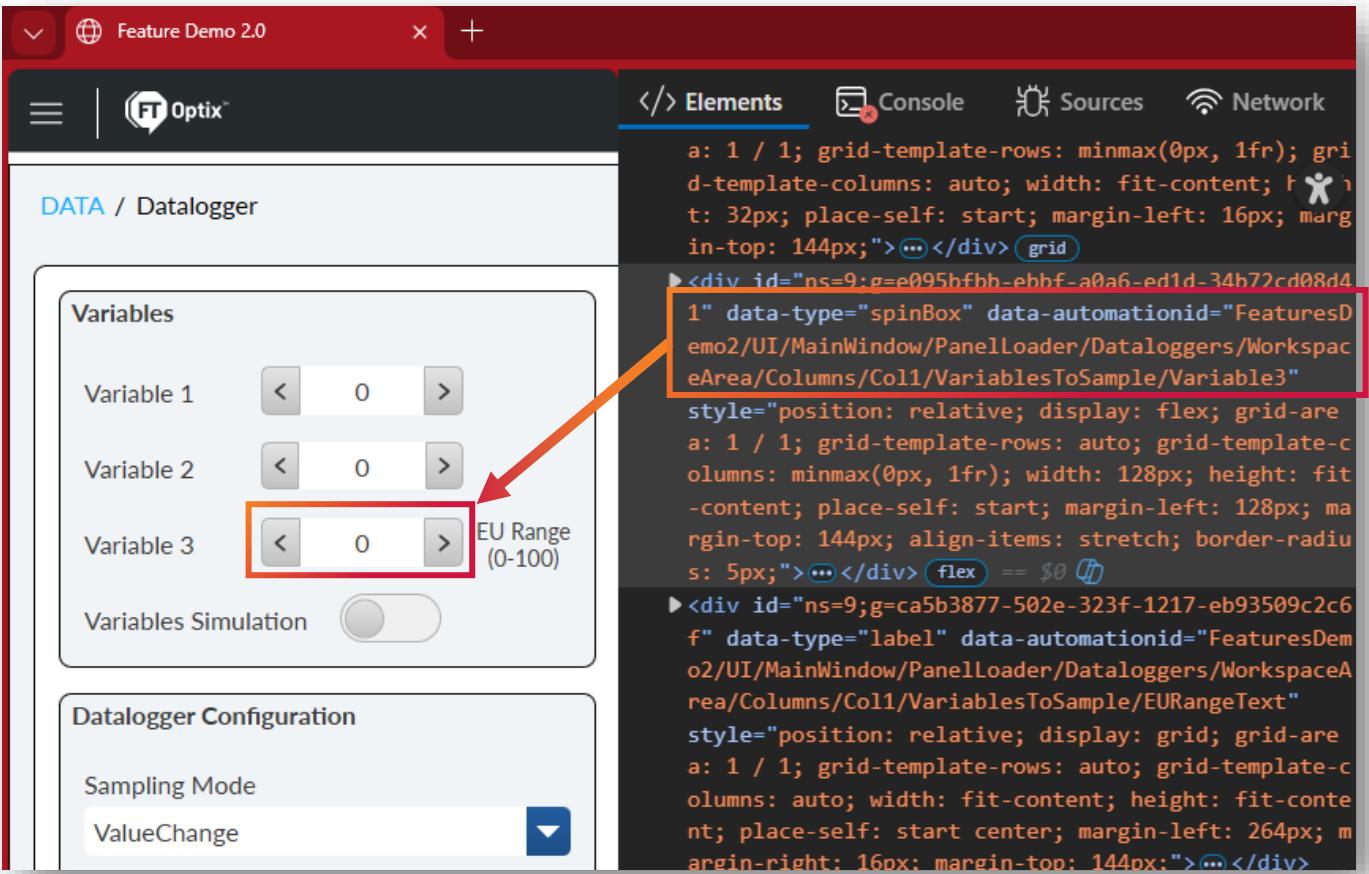


| WebUI Testing

Core Capabilities

A unique **data-automationid** can be automatically assigned to each WebUI object for testing purposes.

- The option to enable automation IDs is available only when FactoryTalk® Optix Studio™ Advanced mode is enabled.





Library Enhancements

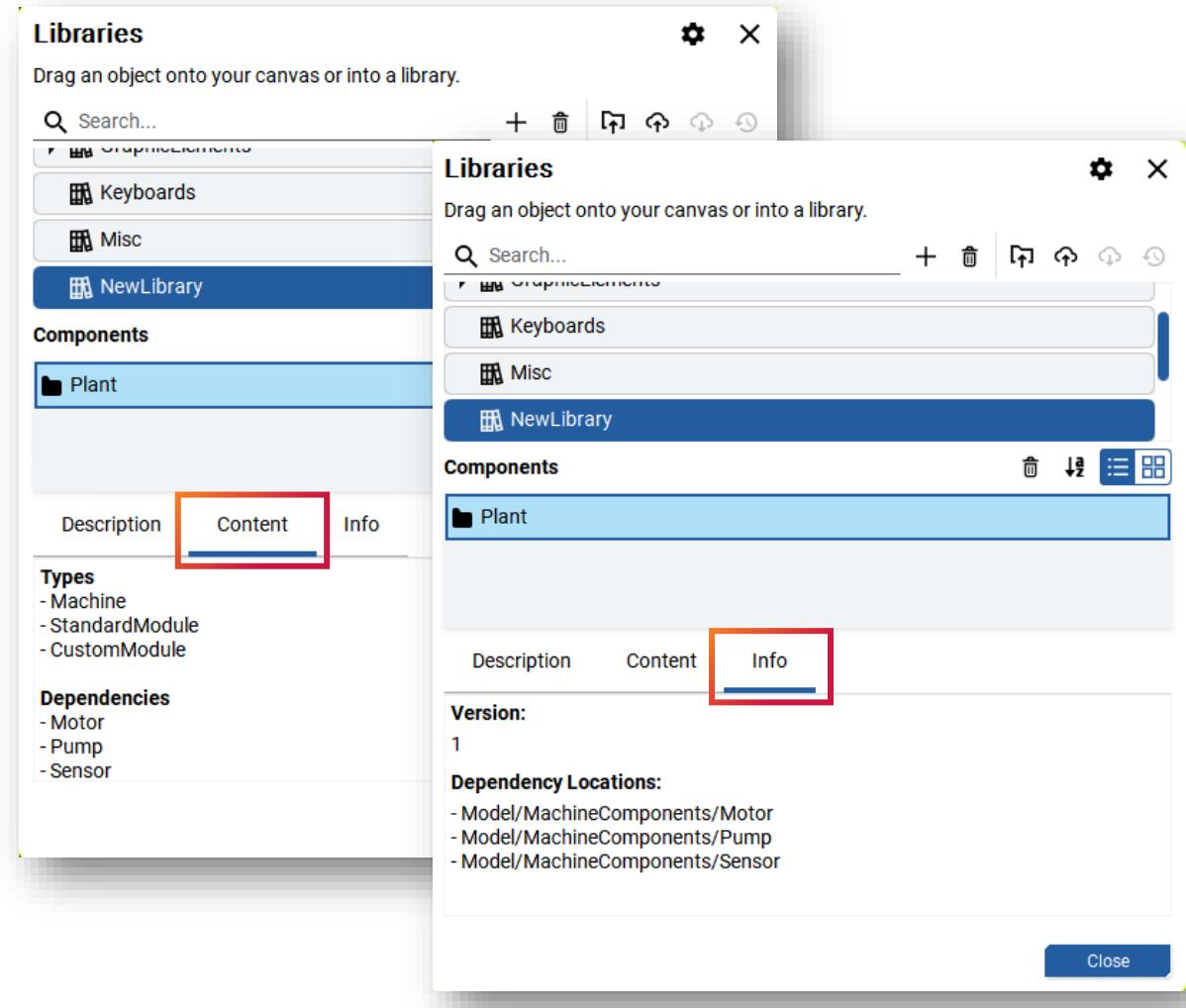
Core Capabilities

More details are now shown to provide clarity on the **content** and **metadata** of each Library item:

- Added **Content** tab
- Added **Info** tab

Additional improvements

- **Type management:** when adding a folder to the Library, types already present in the Library are automatically detected.
- **Dependencies management**
- **Dialogs:** reduced the number of user interactions required





| Report on Headless Devices

Core Capabilities

Reports can now be generated on headless devices such as 1756-CMEE and OptixEdge™.

This feature ensures that even without a graphical interface, reports are correctly rendered and printed using an offscreen platform.

NOTE: A firmware update to version 6.0.3.x is required

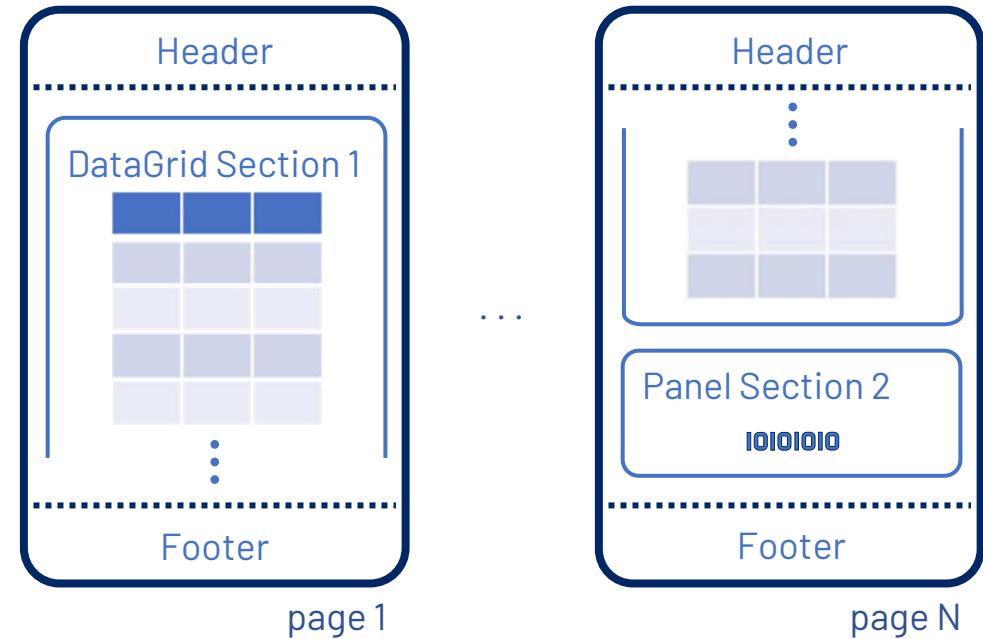


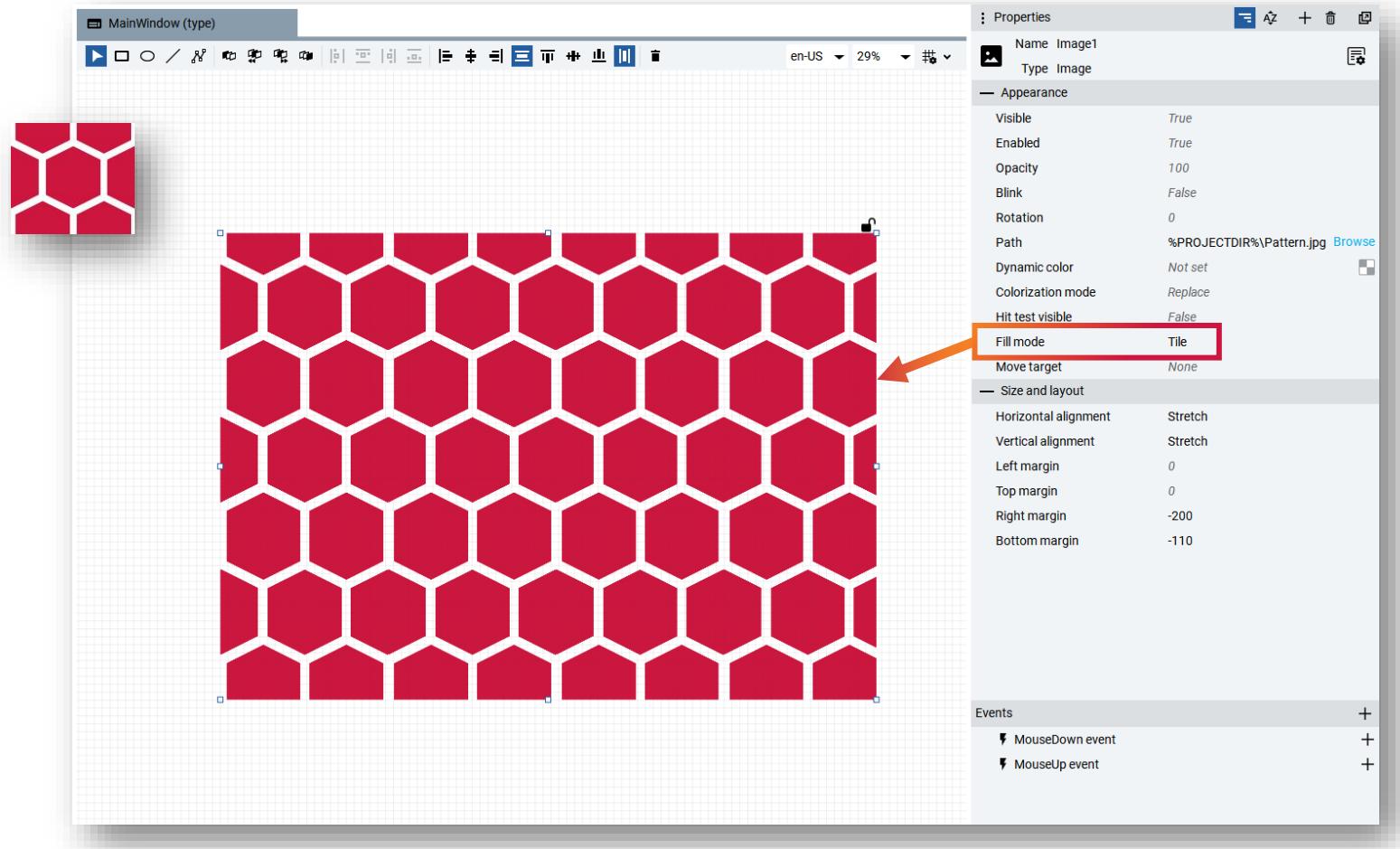


Image Tiling

Core Capabilities

Added new Tile fill mode for:

- Images
- Multistate image
- Advanced SVG image





Virtual Keyboard Enhancements

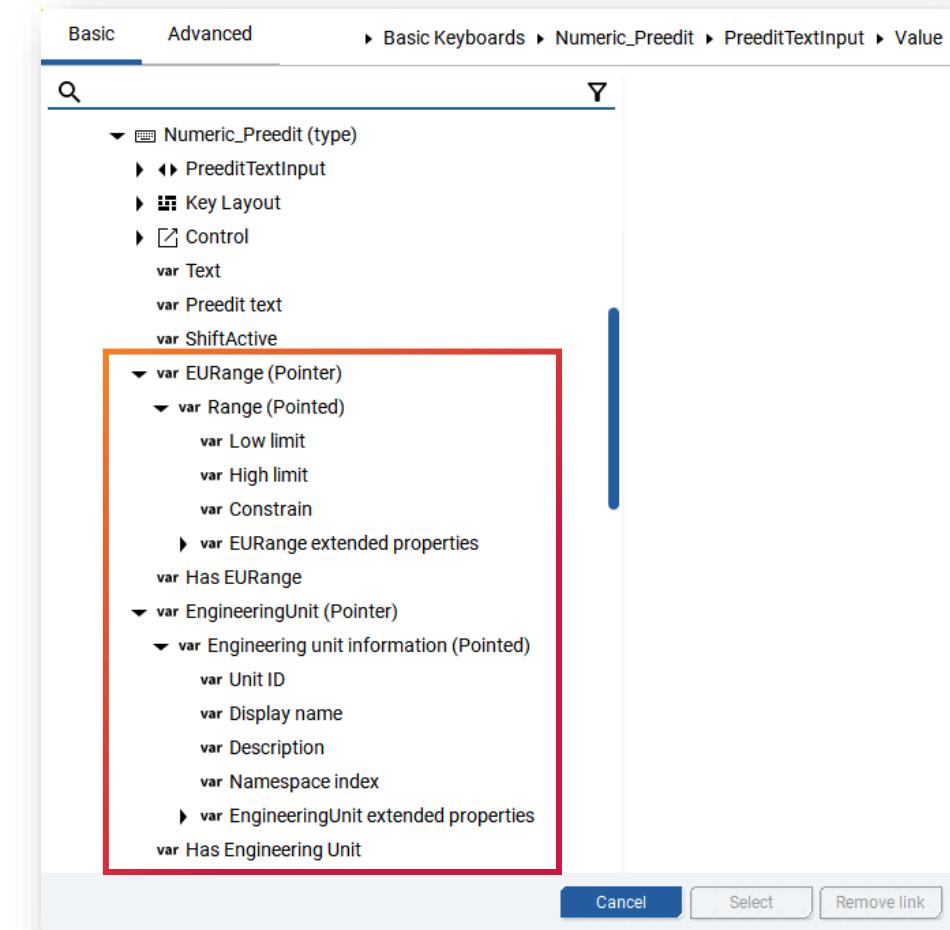
Core Capabilities

Custom virtual keyboard can now display target variable properties:

- EURange
- EngineeringUnit

Added new “Open virtual keyboard” method to open a keyboard from non-text-input controls

Added new “NumberSign” symbol button function to toggle the number sign (+/-)





Performance Enhancements

Core Capabilities

Static links

- Introduced an option to optimize DynamicLinks during the deployment phase

All alarm collection

- Lower memory usage thanks to converting alarms into structures

Web Presentation Engine

- Redesign of Web UI components for better performance
- Major performance improvement on-page change time thanks to architectural optimizations

Properties	
Name	NewHMIProject
Type	Project folder
Localization	
Authentication	
Password policy	
Alarm configuration	
Runtime optimization	
Dynamic links	True
Tags	True



Security Enhancements

Core Capabilities

Project secrets encryption:

- Introduced password complexity

FactoryTalk Optix Studio Options X

Optix Studio Version control Security policies

New project secrets encryption

Encryption mode	<input type="text" value="None"/>
Minimum password length	<input type="text" value="8"/>
Lowercase and uppercase characters	<input type="checkbox"/>
Minimum number of digits	<input type="text" value="Not set"/>
Minimum number of symbols	<input type="text" value="Not set"/>

Save Cancel



Security Enhancements

Core Capabilities

OAuth 2.0:

- OAuth 2.0 is now supported in Web UI

LDAPS:

- Secure LDAP is now supported

Web Presentation Engine:

- It is now possible to specify the **allowed local sources** for Web Presentation Engine

The screenshot shows the 'Properties' dialog for a 'WebPresentationEngine' configuration. The 'Name' is set to 'WebPresentationEngine' and the 'Type' is 'Web presentation engine'. The 'Protocol' is set to 'https'. Under the 'SSL certificate' section, there are fields for 'Certificate file' and 'Private key file', each with a 'Browse' button. The 'Allowed local sources' field contains the value: ...if,*.bmp;*.svg;*.avi;*.mov;*.mkv;*.mpg... A red arrow points from the text 'allowed local sources' in the previous slide to this field. Below the main properties, a detailed view shows a table of allowed file extensions:

	Value
0	String *.png
1	String *.jpg
9	String *.mpg
10	String *.mp4
11	String *.wmv

Buttons at the bottom of the dialog include 'Apply', 'Cancel', and 'Open in tab'.

Project secrets encryption:

- Introduced **password complexity**

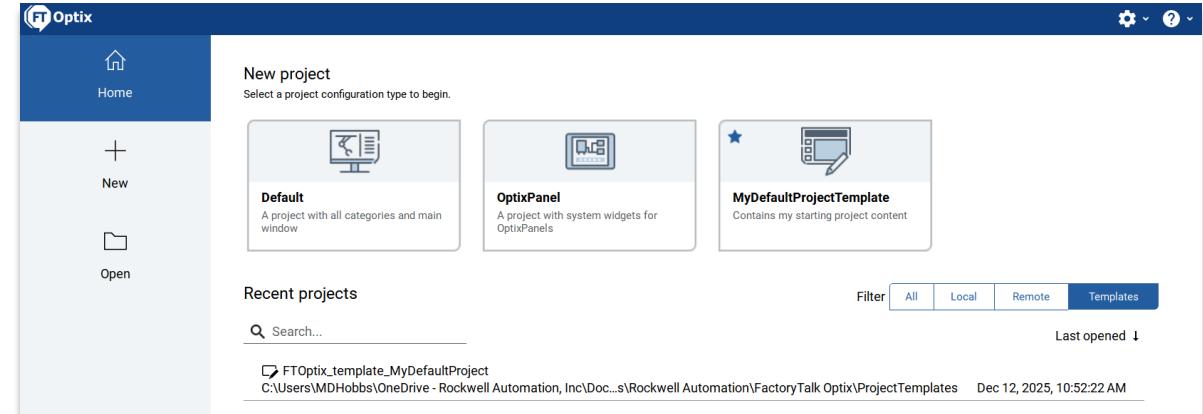


User-defined Project Template Enhancements

Core Capabilities

Project template usability enhancements:

- Support for “favorites” provides quick access to commonly used templates
- Added Display Name and Description properties to templates for easier template identification
- Recent project list now supports filtering on template projects
- New information banner provides visual indication that a project template is opened for editing





SD Card Support

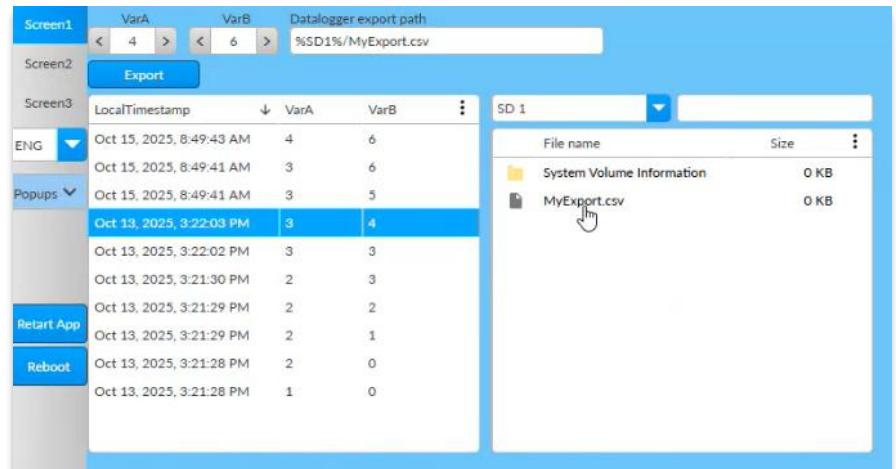
Core Capabilities

Library widgets have been updated to support SD cards as a runtime file storage device

- File System Browser
- Select File DialogBox
- FTP Server

Enables the ability to read from / write to SD cards

Reference the SD card using the %SD<n>% syntax





Expanded Architectures



| Communication Driver Enhancements

Expanded Architectures

Beckhoff

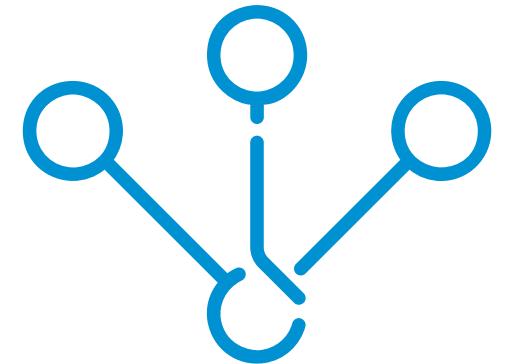
- It is now possible to import TwinCAT tags with a design-time NetLogic

Siemens TIA Profinet

- Protected communication with **passwords and certificates**

Codesys

- Protected communication with **users, passwords and certificates**





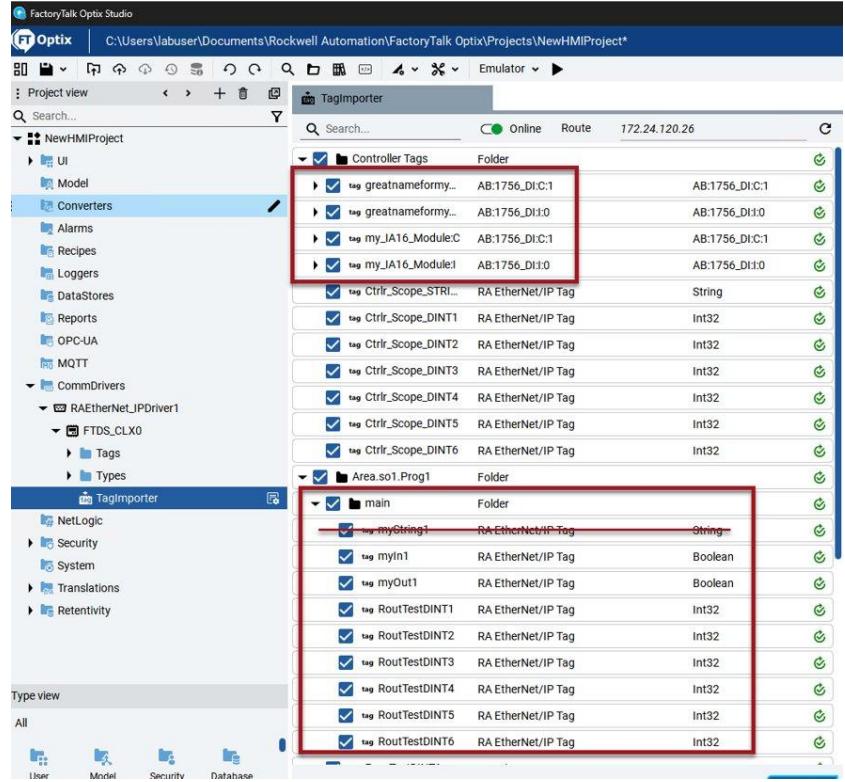
Digital Design Experience



FactoryTalk® Design Studio™ Support

Digital Design Experience

- Runtime communications with Logix controllers containing an FTDS deployed application
- Online tag import from Logix controllers containing an FTDS deployed application
- Utilizes existing Logix Designer application process:
 - Rockwell Automation Ethernet/IP driver
 - Rockwell Automation Ethernet/IP Station
 - Input IP address / backplane
- Support for FTDS device names and routine-scoped tags
- Offline tag import capability targeted for Optix v1.8





Alarm Widgets Enhancements

Digital Design Experience

- Alarm Widgets library collection, integrated with Logix controller alarms has been updated with few enhancements:
 - Predefined layouts dedicated for smaller screen sizes
 - Filters configuration for using predefined and custom filtering of alarm list
 - Enhanced widget configuration element to set main properties of the widget in simpler way

The screenshot shows a software interface with a navigation tree on the left and a list of items on the right.

Navigation Tree:

- Project: NewHMIProject103
 - UI
 - Model
 - AlarmWidgets

List of Items (under Model/AlarmWidgets):

- AlarmManager (type) [Lock] [Edit]
- AlarmSummary (type) [Lock] [Edit]
- AlarmManagerMedium (type) [Lock] [Edit]
- AlarmSummaryMedium (type) [Lock] [Edit]
- AlarmManagerSmall (type) [Lock] [Edit]
- AlarmSummarySmall (type) [Lock] [Edit]

Sub-folders under AlarmWidgets:

- AlarmManagerConfigurations
 - AlarmWidgetGenerator [Edit]
 - FiltersConfiguration
 - CustomFilters
 - PresetExample1
 - PresetExample2
 - PresetExample3
- AlarmSummaryConfigurations
 - AlarmWidgetGenerateDefaultFilter [Edit]
 - FiltersConfiguration
 - CustomFilters
 - PresetExample1
 - PresetExample2
 - PresetExample3
- AlarmWidgetComponents

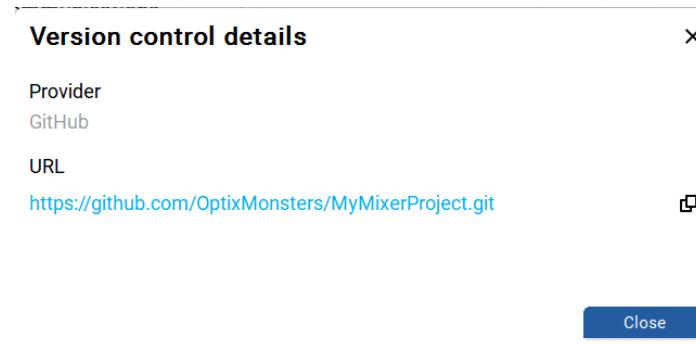
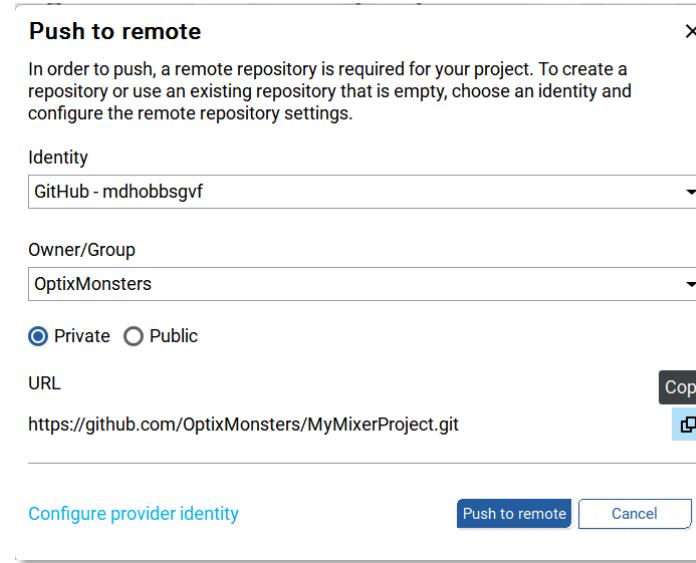


Version Control Git Enhancements

Digital Design Experience

Version control usability enhancements:

- Improved asynchronous project retrieval
- Push and create repo operation supports navigation to repository with URL direct link or copy
- Improved git provider identity management
- New version control details dialog shows git provider and repository associated with a project
- Support for GitLab provider subgroups





Data Connectivity



Extended Tag Property Pass-Through Support

Data Connectivity

- Support for Logix Designer application extended tag properties configured with pass-through values
 - Extended tag property values defined on tag definitions are passed-through to instances in Logix
 - References to Logix Designer application extended tag properties with pass-through values contained within Optix are now shown at runtime

The screenshot shows the 'Properties' dialog for a 'Motor' data type. Under the 'General' section, the 'Description' is set to 'Motor Speed'. In the 'Data' section, the 'Engineering Unit' is set to 'RPM' and 'External Logging' is set to 'true'. The 'Value' field shows '250'. Below these, 'Max' is set to '500' and 'Min' is set to '0'. A red box highlights the 'Description' and 'Data' sections.

Logix Designer application
Motor Speed Tag Definition

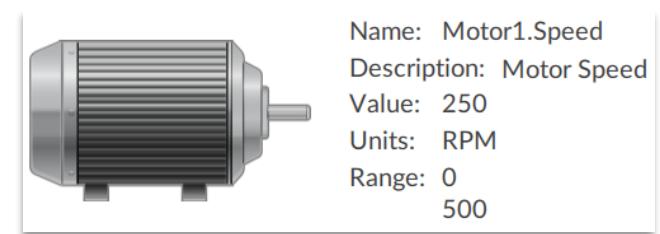
The screenshot shows the 'Properties' dialog for a 'Motor1.Speed' tag instance. It has the same general settings as the tag definition. In the 'Data' section, the 'Value' is '250', 'Engineering Unit' is 'RPM', and 'External Logging' is 'true'. The 'Max' value is '500' and 'Min' is '0'. A red box highlights the 'Description' and 'Data' sections.

Logix Designer application
Motor 1 Speed Tag Instance
with pass-through values



The screenshot shows the 'Extended Properties...' dialog for the 'Speed' tag under 'Motor1'. It lists various references such as 'External.logging', 'Symbol name', 'Display name', and 'Low limit'. A red box highlights the 'tag Description' reference.

Optix Studio Motor 1 Speed
Extended Tag Property References



Optix Runtime Motor 1 Speed Widget
with extended tag property references
showing pass-through values



MQTT Client - Datalog Publishing

Data Connectivity

- Users can now publish data loggers to an MQTT broker
- MQTT publisher uses its own sampling mode and period
- Users can log data (e.g., local storage) at a different rate than publishing data via MQTT (e.g., Azure cloud services)
- Note:
 - Time stamps between data logger and MQTT publisher may differ when the datalog sampling mode is set to "On Value Change" with deadband filtering due to MQTT publisher data collection process being independent from data logger

The screenshot shows a software interface for configuring an MQTT Publisher. The 'Properties' tab is selected. The 'Name' is set to 'MQTTPublisher1' and the 'Type' is 'MQTT Publisher'. Under the 'Publisher' section, the 'Sampling mode' is 'Periodic', 'Sampling period' is '0000:00:01.000', and 'Polling time' is '0000:00:00.100'. The 'Data source' is set to 'Data logger' and the 'Data logger' is set to 'DataLogger1'. This last row is highlighted with a red box. Other settings include 'Topic' (empty), 'QoS' (0 - At most once), 'Retain' (False), and sections for 'Payload formatter' (PF Enabled False, PF Header, PF Record). The top right of the interface has icons for sorting, adding, deleting, and saving.



MQTT Client - Last Will & Testament (LWT) Message

Data Connectivity

- User can set a **Last Will and Testament (LWT)** message so the broker can **notify other clients** if a device disconnects unexpectedly.
 - Clients know immediately when a device goes offline without a proper shutdown.
 - The broker sends the LWT when:
 - *Network connection fails*
 - *Client fails to communicate past its “keep alive” time*
 - *Client drops the connection without sending DISCONNECT*
 - *The broker closes the connection due to an error*
- Control timing before the LWT is published to help prevent false alarms in unstable networks.

The screenshot shows the 'Properties' dialog for an 'MQTT Client' named 'MQTTClient1'. The 'Will message' section is highlighted with a red border. The properties listed are:

Property	Value
Name	MQTTClient1
Type	MQTT Client
Broker address	localhost
Port	8883
Client Id	FTOptix-1
SSL/TLS enabled	True
Validate broker certificate	True
CA certificate file	Browse
Client certificate file	Browse
Client private key file	Browse
User identity type	Anonymous
Will message enabled	False
Will topic	
Will message	
Will QoS	0 - At most once
Will retain	False
Will delay interval	0000:00:00.000



MQTT Client - Store & Forward Support

Data Connectivity

- Store & Forward (SF) lets MQTT clients **save messages locally** when it cannot reach the broker.
- The client **forwards saved messages** once the connection is restored.
- SF helps **prevent message loss** during network outages and devices with intermittent connectivity.
- User can set:
 - How many messages to store (1 – 100,000)
 - Overwrite oldest messages when the buffer is full

The screenshot shows the 'Properties' dialog for an 'MQTTPublisher1' component. The 'Store and Forward' section is highlighted with a red border. The configuration includes:

Setting	Value
SF Enabled	False
SF Buffer max size	20
SF Buffer overwrite	False



MQTT Client - Azure Connector

Data Connectivity

- Publish and subscribe to Azure
 - IoT Hub (pub only)
 - Event Grid (pub and sub)
- Supports MQTT version 3.1.1 and 5.0
 - IoT Hub requires v3.1.1
- Supports datalog publishing
- Supports “Last Will & Testament”
- Ease of configuration via wizard

The screenshot shows the configuration interface for the MQTT Client - Azure Connector. On the left, there's a tree view under the 'MQTT' node, which includes 'MQTTAzureConnector1' (selected), 'MQTTPublisher1', and 'MQTTSubscriber1'. To the right is a 'Properties' panel with the following settings:

Properties	
Name	MQTTAzureConnector1
Type	MQTT Azure Connector
Client	
Broker address	localhost
Port	8883
Client Id	FTOptix-1
MQTT version	5.0
Security	
SSL/TLS enabled	True
Validate broker certificate	True
CA certificate file	Browse
Client certificate file	Browse
Client private key file	Browse
User identity	
User identity type	Anonymous
Will message	
Will message enabled	False
Will topic	
Will message	
Will QoS	0 - At most once
Will retain	False
Will delay interval	0000:00:00.000



Webinars



FactoryTalk® Optix™ Continuous Webinar Series

On-demand to fit your schedule

Revitalize Your HMI 3-Part Webinar Series ON DEMAND

WEBINAR
Part One: Design & Collaborate Webinar
Today's digital landscape is evolving rapidly. HMI design engineers need new tools to quickly create intuitive visualization so operators can leverage plant floor data to enable the enterprise. This is where a modern HMI software platform with collaboration tools comes into play. These tools offer comprehensive project visibility within a collaborative design environment so designers can work in teams to maximize productivity.
Speakers:
Paul Halik - Commercial Portfolio Manager, Rockwell Automation
Chad Dale - Technology Consultant, Rockwell Automation
Date & Time: On Demand - Register and watch it now

WEBINAR
Part Two: Deploy Applications at Scale
Once FactoryTalk Optix users have leveraged its powerful features to build their applications, the next step is to deploy them out to the field devices. This can be done locally via USB drive or through a LAN, but with FactoryTalk Remote Access you can also connect to Rockwell Automation's cloud infrastructure to remotely and securely deploy your application via VPN anywhere in the world. In this webinar we'll provide you with a detailed coverage of FactoryTalk Remote Access and our seamless continuum of deployment options, including ASEM 6300 industrial PCs, OptixPanel HMI terminals and Embedded Edge Compute modules. We'll also talk about how FactoryTalk Optix flexible runtime licensing containerized deployment gives you a real competitive advantage.
Speakers:
Al Letourneau - Product and Marketing Manager, Rockwell Automation
Jessica Morell - Remote Access Product Manager, Rockwell Automation
Date & Time:
May 8, 2024 - 10:00:00 AM CT (5:00:00 PM CET)

WEBINAR
Part Three: Operators Empowered
• Remote access tools allow for timely flagging of issues and the notification of maintenance.
• Out-of-box standardized content ensures consistency across machines and supports simplified operator training, safety, and troubleshooting and maintenance.
• Collect, contextualize and deliver relevant data to operators to enable faster decision-making, minimize downtime, and maximize machine efficiency.
Speakers:
Paul Halik - Commercial Portfolio Manager, Rockwell Automation
Mark Hobbs - Software Senior Product Manager, Rockwell Automation
Date & Time:
August 14, 2024 - 10:00:00 AM CT (5:00:00 PM CET)

Maximize Your HMI Potential 3-Part Webinar Series ON DEMAND

Modernization Strategies for Success

- Elevate Operations with Cutting-edge HMI Features
- Operational Efficiency through Machine Equipment Data
- Supplement your DCS

Digital transformation, edge-to-cloud and modernization are important concepts to recognize when developing a forward-looking strategy for your automation system.



Maximize Your HMI Potential:
Modernization Strategies for Success



Online Demos





FactoryTalk® Optix™ Instant Online Customer Demos!

Online demos

- Resources tab provides access to many FactoryTalk® Optix™ demo applications
 - These demo applications can be viewed using your browser
 - A description for each demo is also available
 - Use the Search bar to look for a specific demo
- Available to anyone with a FactoryTalk® Hub™ account, including customers!
- Click **Open in Browser** to run each demo application in your web browser
 - Boiler demo
 - Features demo
 - ASEM™ factory machines demo
 - Trade show and event demo applications
 - More coming soon!

The screenshot shows the 'Resources' tab selected in the top navigation bar of the FactoryTalk Optix website. Below the header, there is a search bar and a table listing five demo applications. Each row in the table includes a thumbnail image, the demo title, its type (Demo), a brief description, and two buttons: 'Open in Browser' and 'Download'. A red arrow points to the 'Resources' tab in the navigation bar.

Thumbnail	Title	Type	Description	Action	Action
	Boiler Demo	Demo	This demo was made to demonstrate interoperability between different communication drivers, three aliases in the MainPage are used to interface those drivers, when clicking a...	Open in Browser	Download
	Features Demo 2	Demo	This demo contains most of the features exposed by FactoryTalk Optix.	Open in Browser	Download
	SMT Demo A	Demo	Demo representing the Asem SMT line based in Artegna (UD) - Italy	Open in Browser	Download
	SMT Demo B	Demo	Demo representing the pick and place part of the Asem SMT line based in Artegna (UD) - Italy.	Open in Browser	Download
	Starship Demo	Demo	Demo representing a futuristic mining ship showing cool integrations with charts, pdfs and video.	Open in Browser	Download

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Now available: Preview demo application in browser, then download demo application files from GitHub on the Resources tab



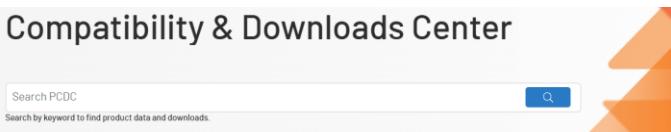
PCDC Release Notifications



How to get notification of a new release on PCDC

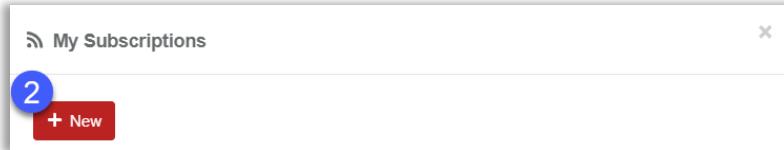
PCDC allows you to subscribe to new releases

1. Log in to [PCDC](#)

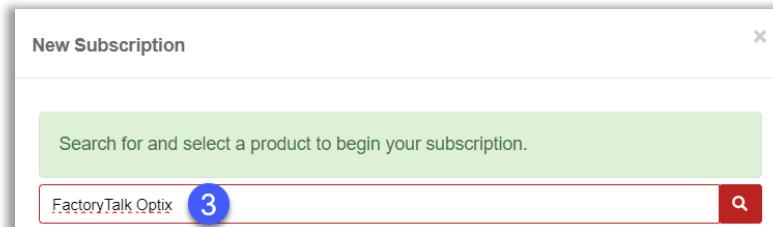


and on the right pane select "Subscriptions"

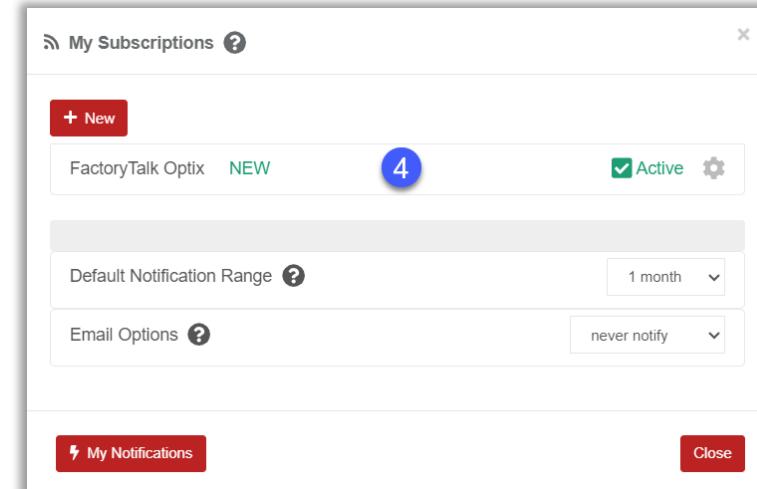
2. Click on **+ New** button



3. Search for "FactoryTalk® Optix™" and select it



4. FactoryTalk® Optix™ is added to your subscription list



5. With the settings button you can select the notification types that interest you, and with the Email Options you can be notified via email when you have new notifications



Thank you

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