FactoryTalk® Optix™ v1.7

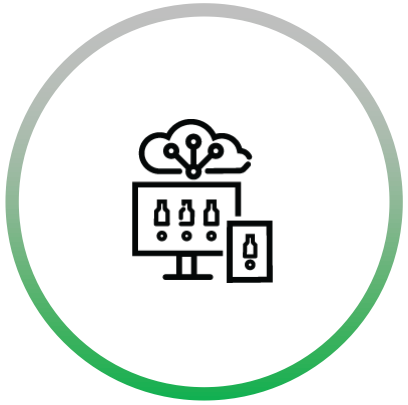
January 2026

FactoryTalk by ROCKWELL AUTOMATION

FactoryTalk® Optix™ Program Priorities

Core Capabilities

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

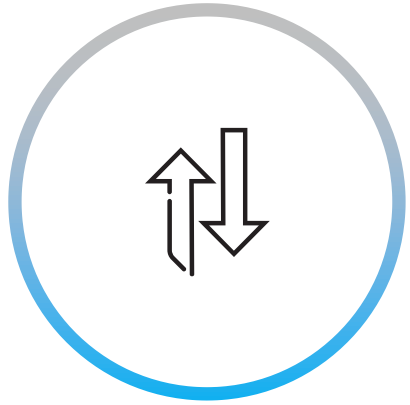


Expanded Architectures

- 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

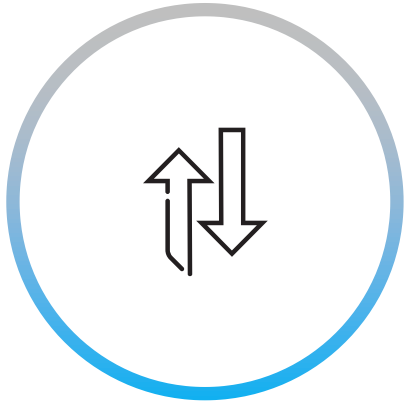
- Recipe Enhancements
- ListView data control
- UI / DPI scaling property for responsive design
- Unresolved and broken dynamic links view
- Optimizations for improved alarms, dynamic links and web client performance
- Library Enhancements
- “Tile” fill mode for SVG images
- Text box option for text 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 connecter (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

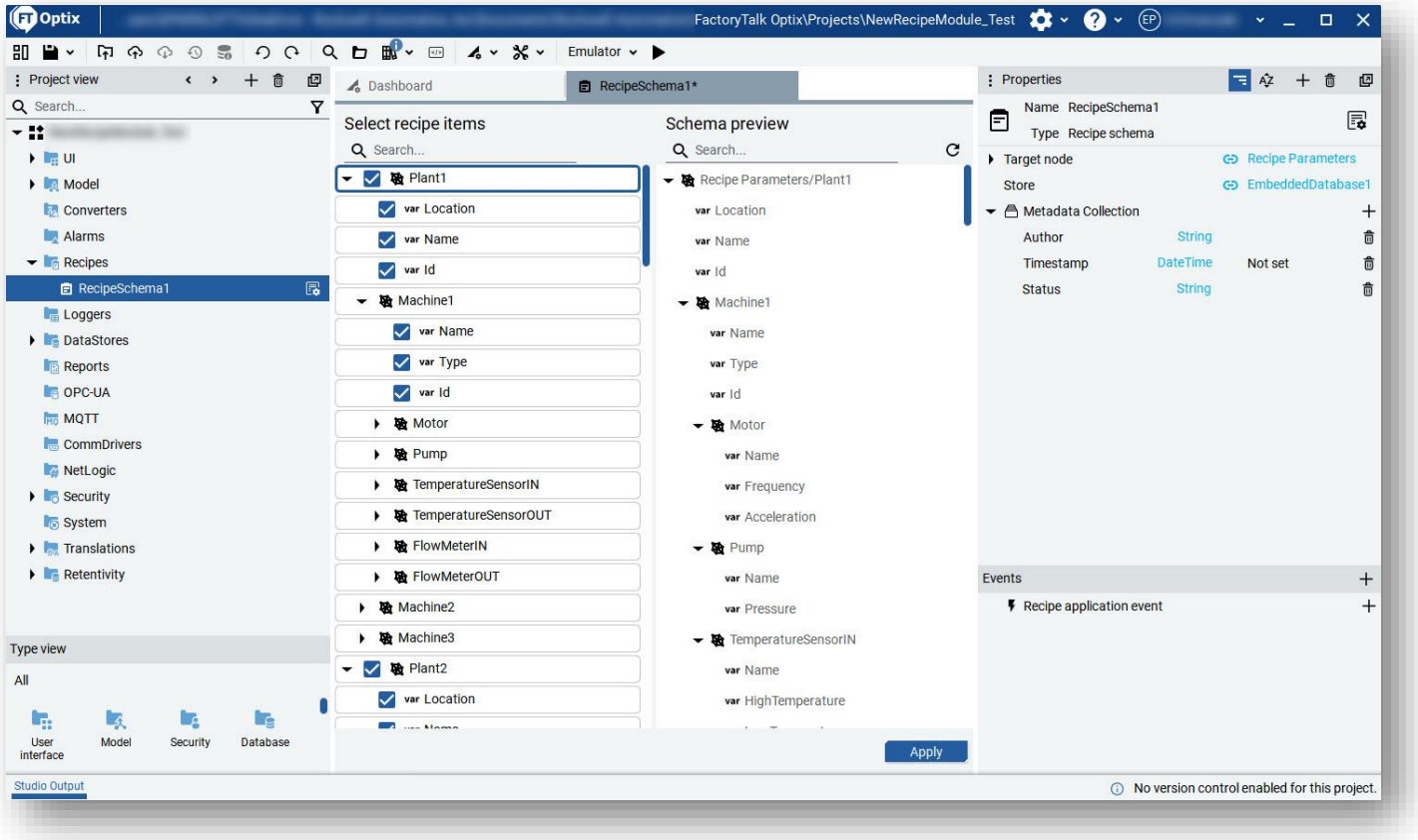
Add **user-defined metadata** to enrich recipes with context.

New Recipe Module: Schema

Core Capabilities

Enhanced Recipe Schema configurator

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

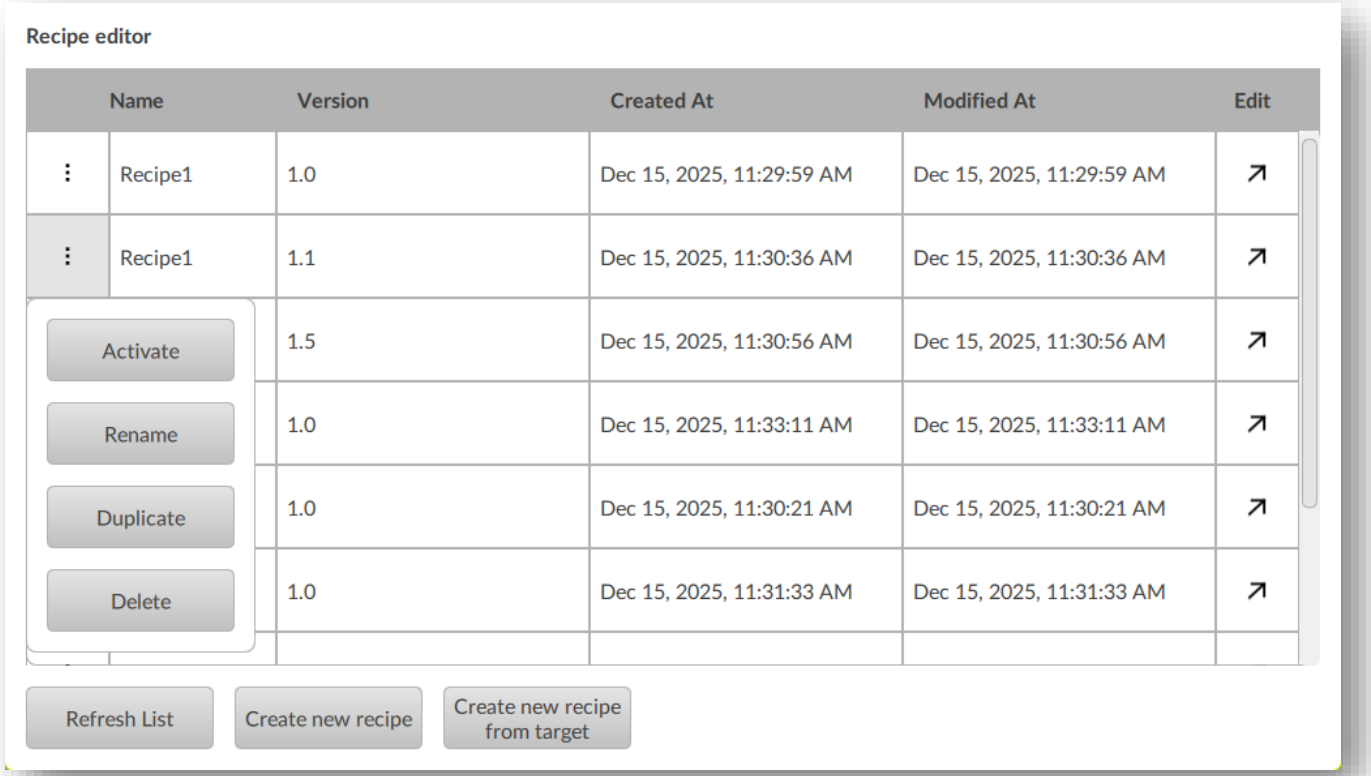


New Recipe Module: Widget

Core Capabilities

Modern UI integration

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



ListView and ListViewRow

Core Capabilities

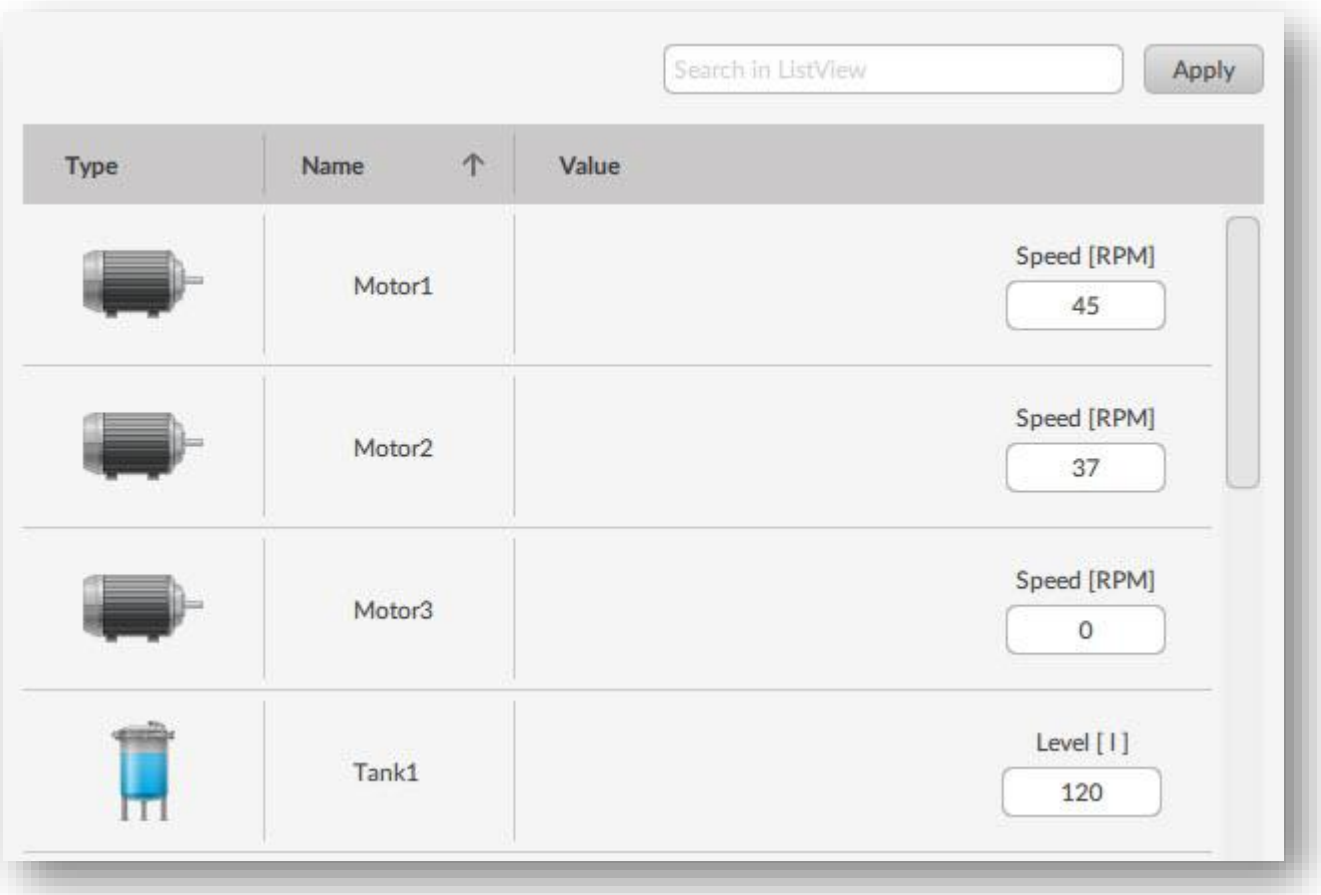
ListView is a DataControl that dynamically generates multiple **ListViewRow** Containers at **runtime.**

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



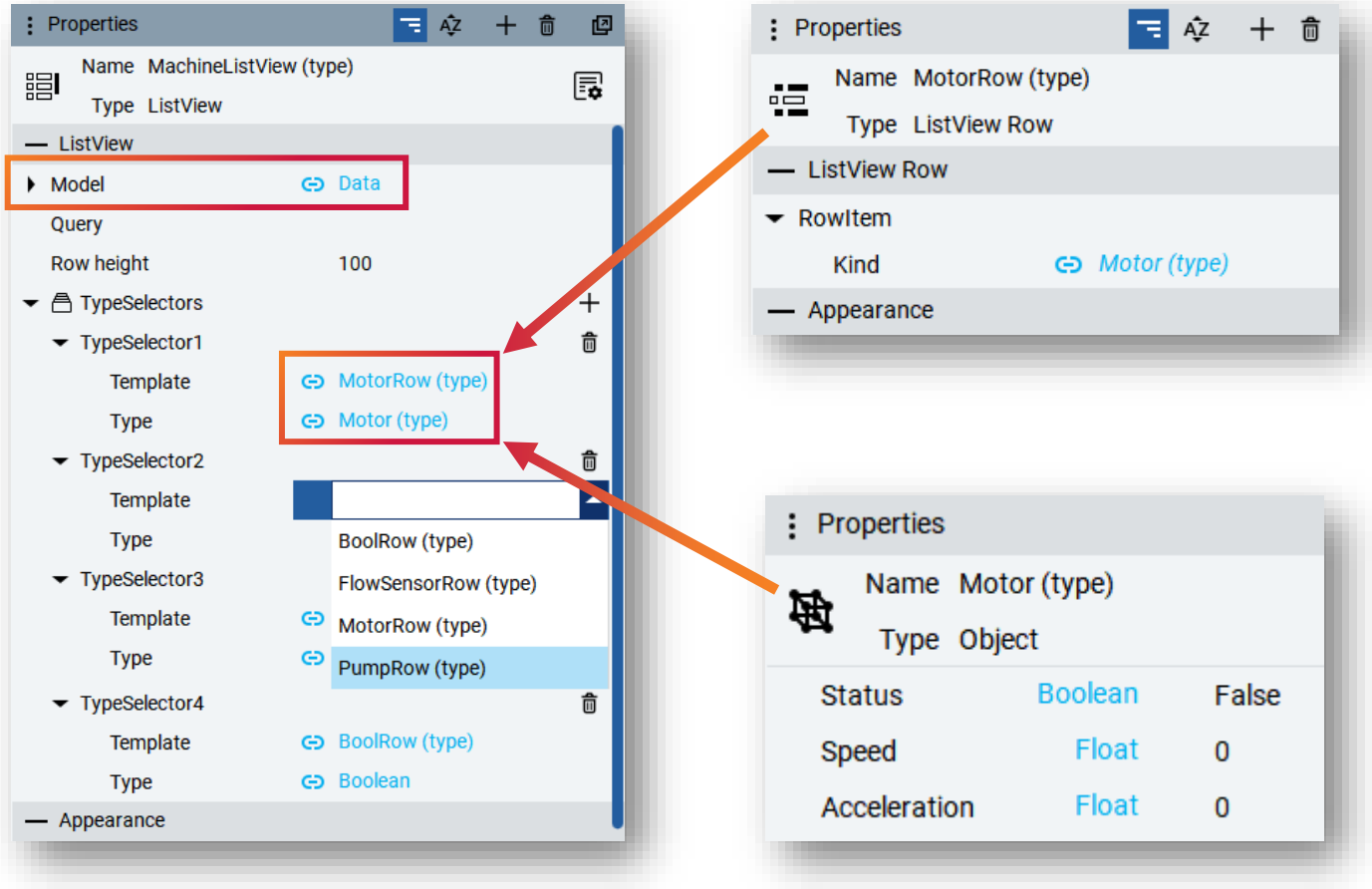
ListView and ListViewRow: Details

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



Unresolved and Broken DynamicLink View

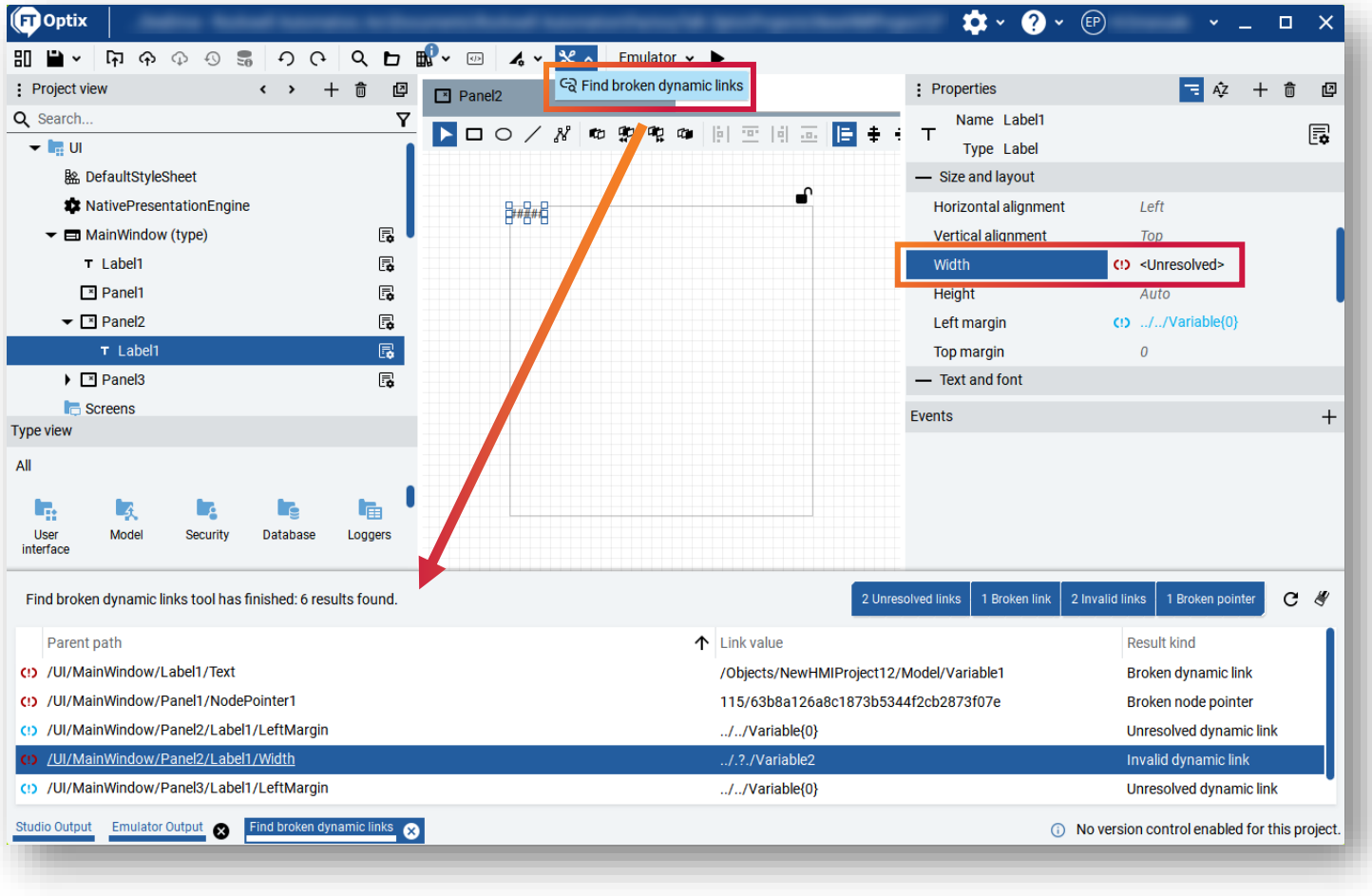
Core Capabilities

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.**

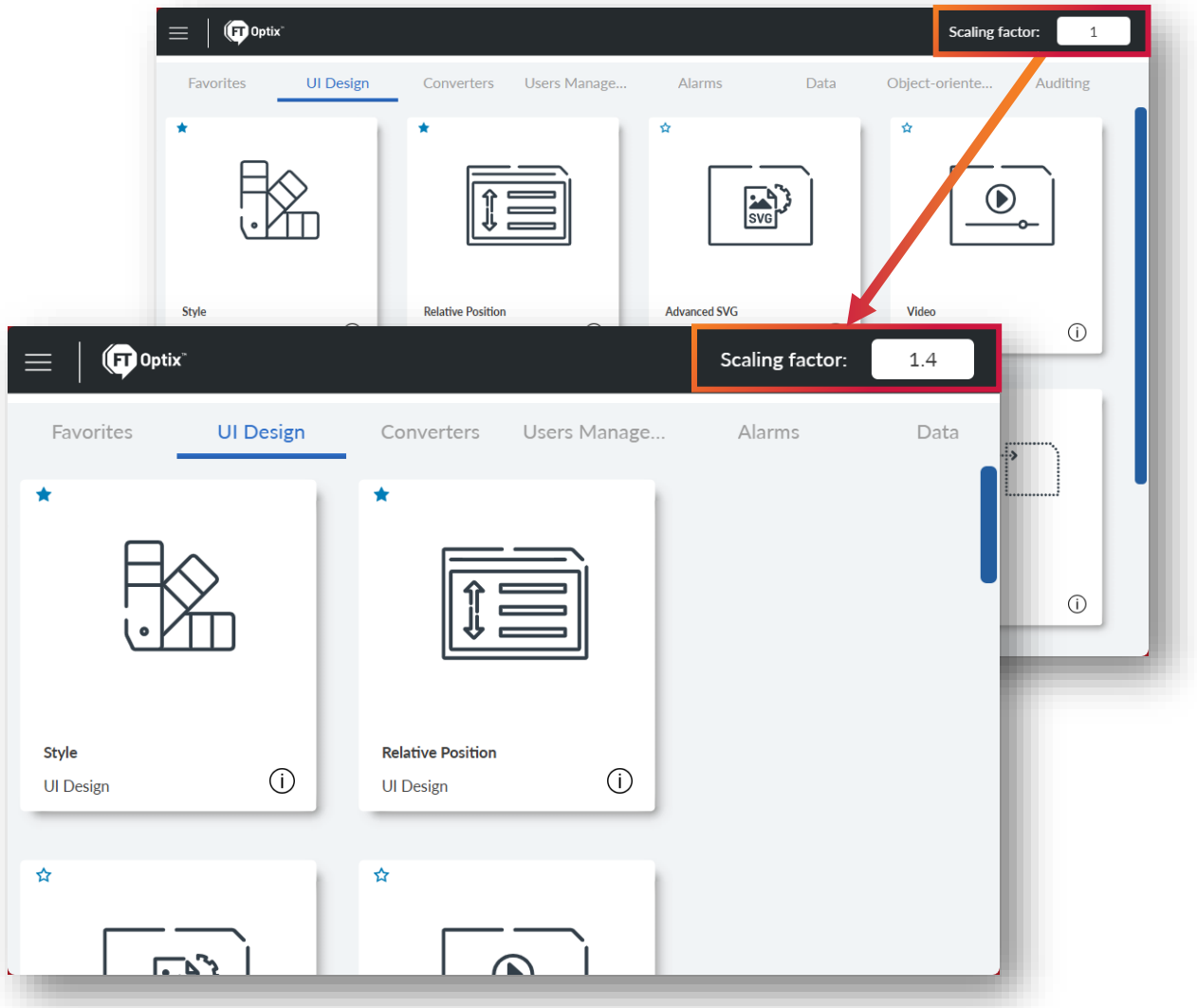


UI Scaling Factor

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

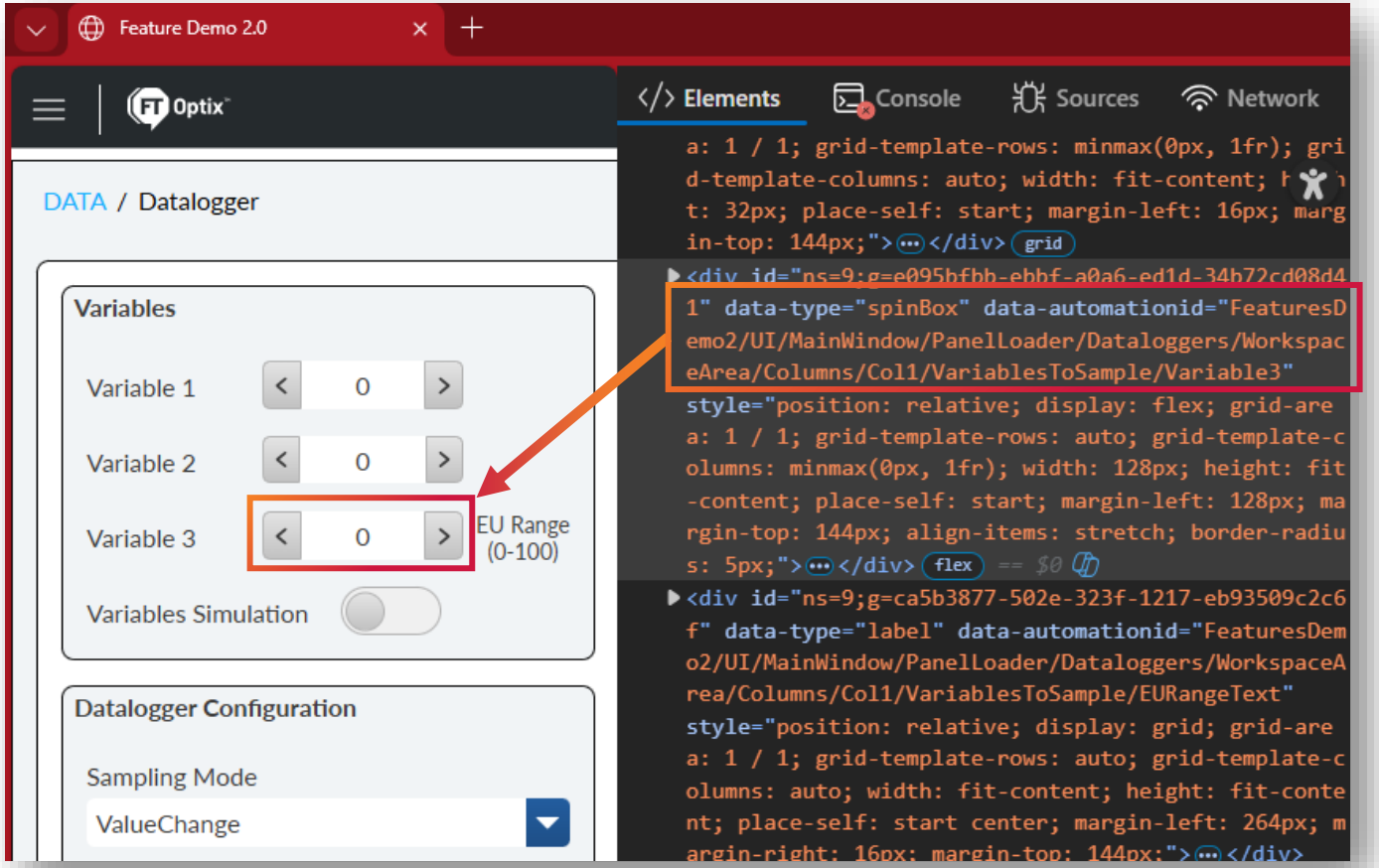


WebUI Testing

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

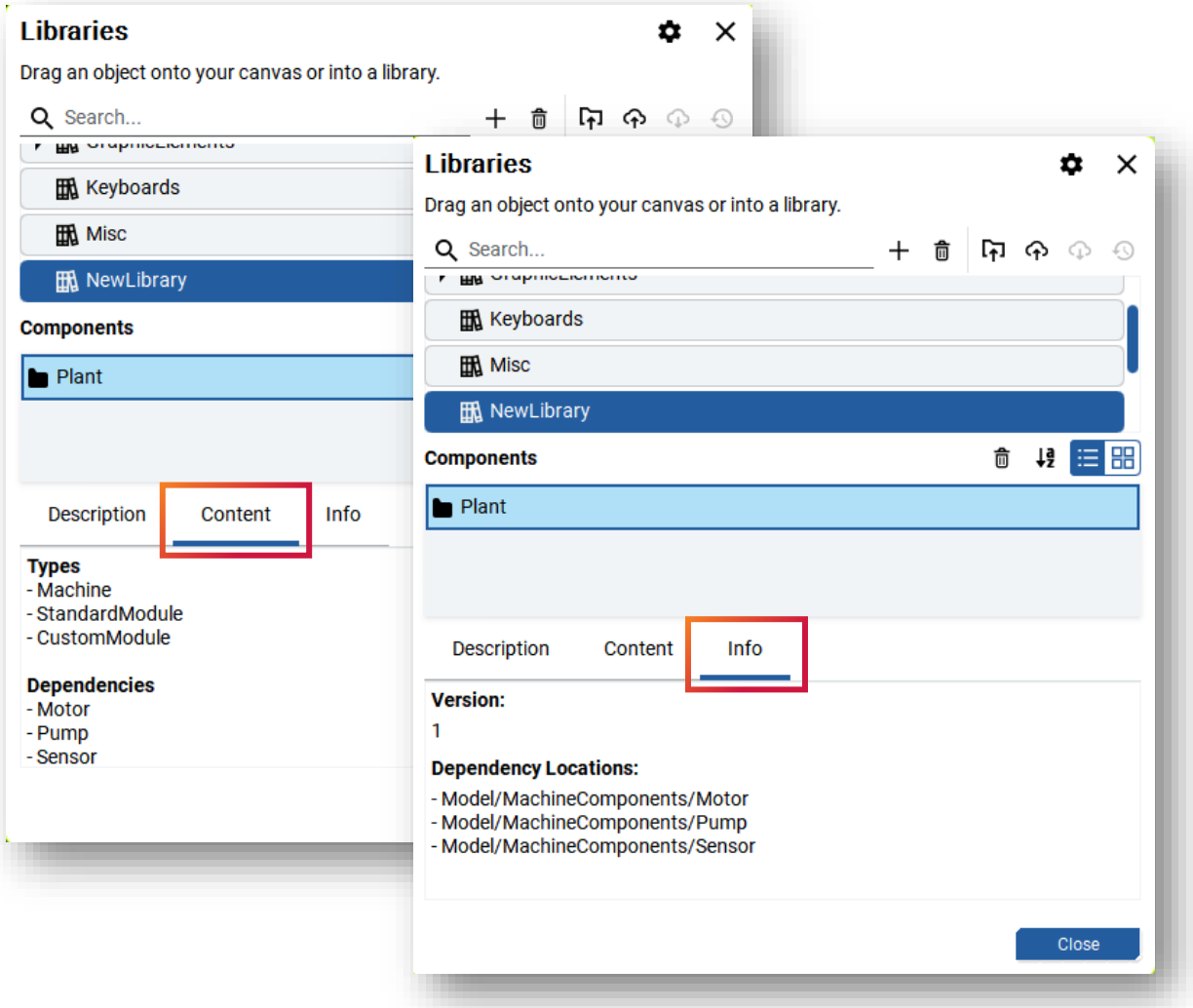
Core Capabilities

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

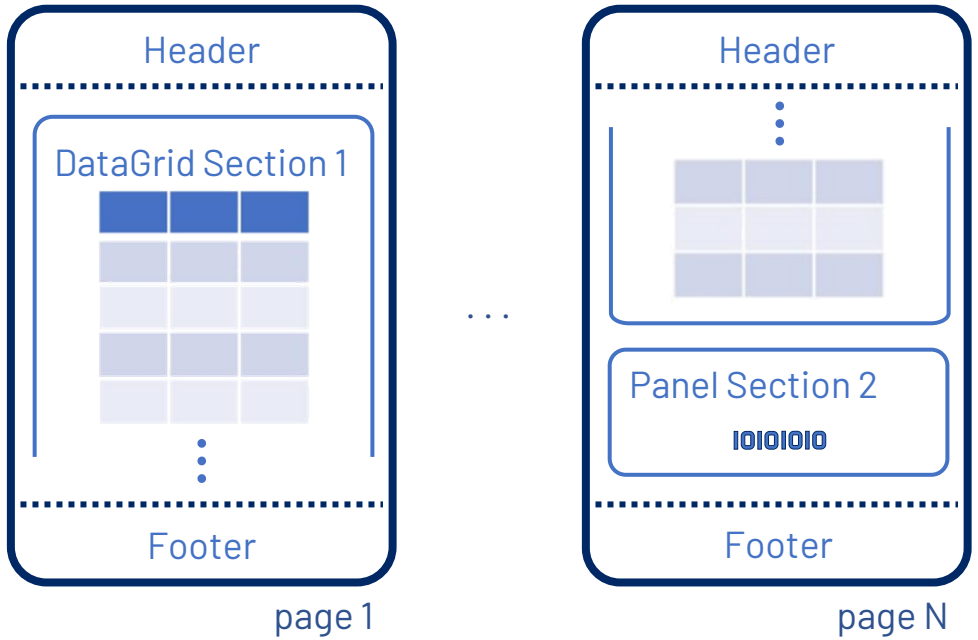
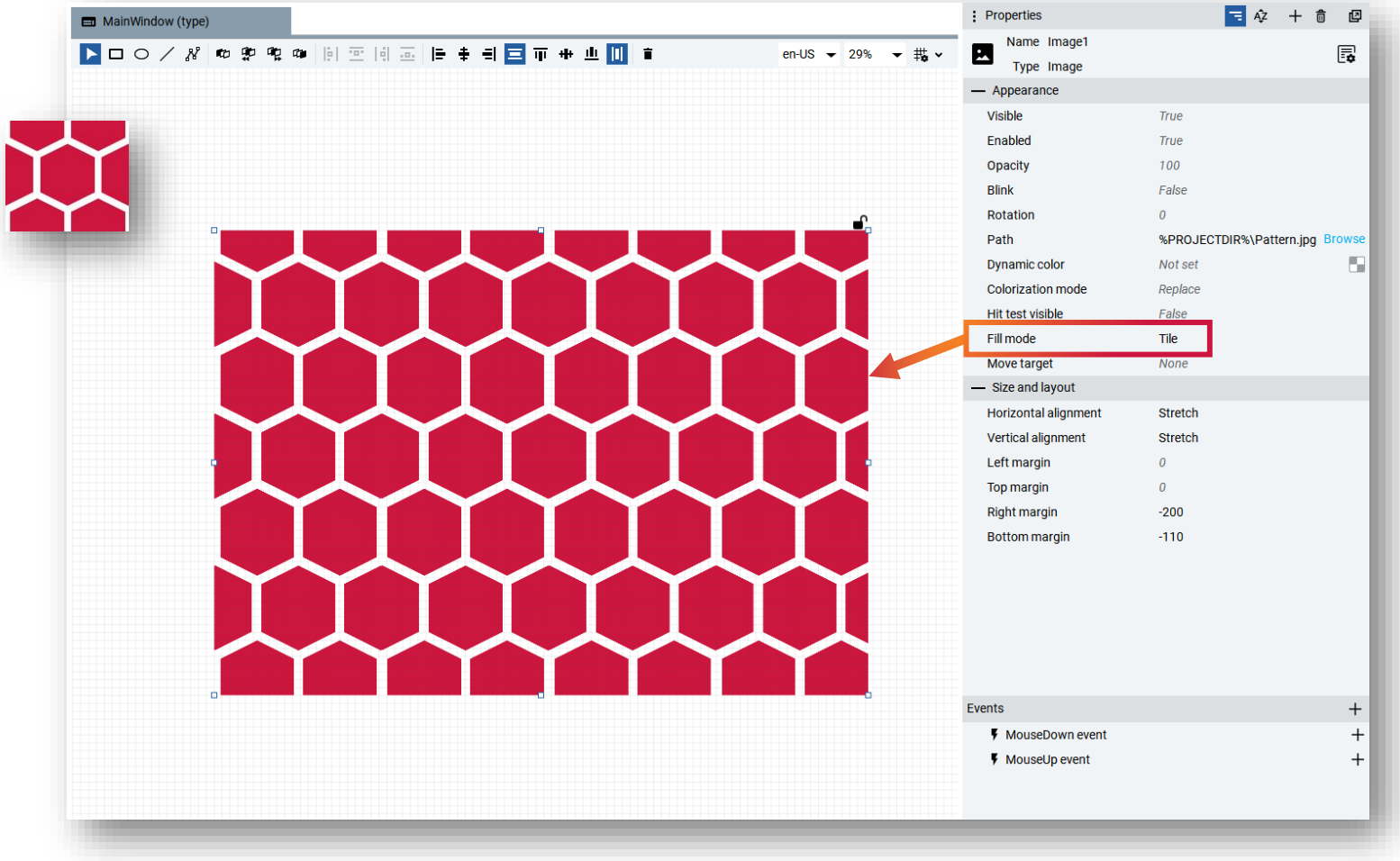


Image Tiling

Core Capabilities

Added new **Tile** fill mode for:

- Images
- Multistate image
- Advanced SVG image



Virtual Keyboard Enhancements

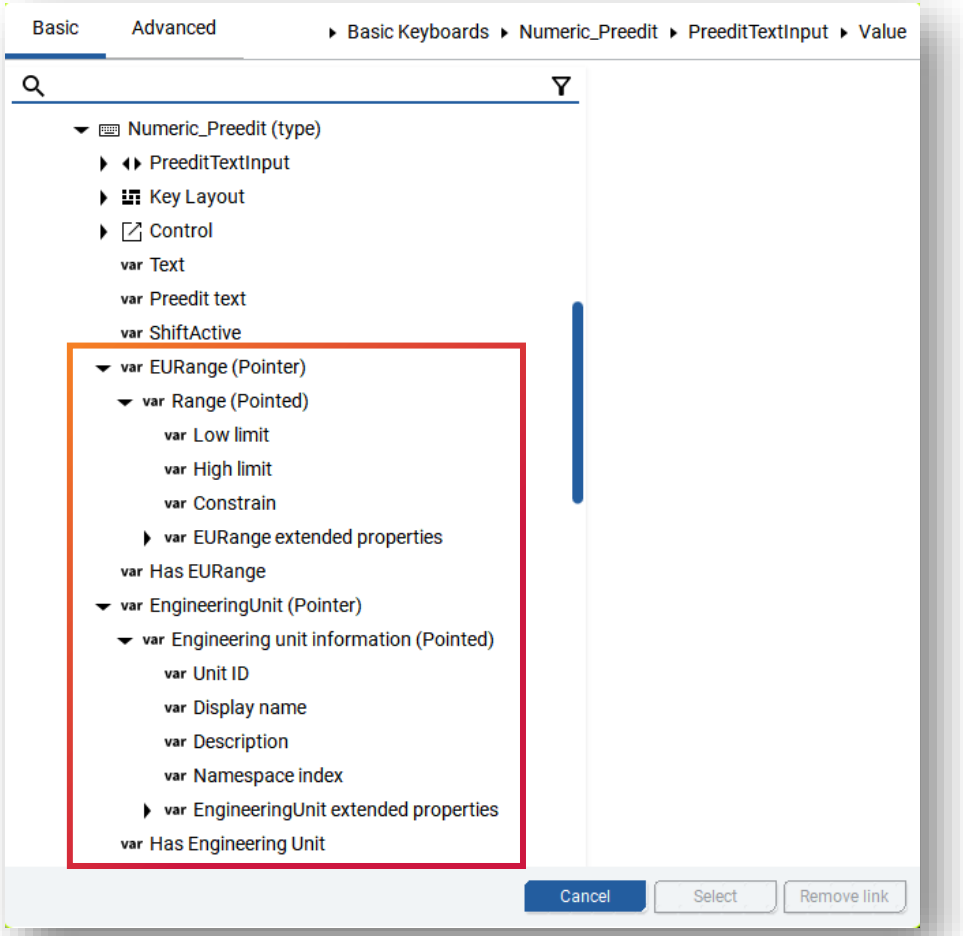
Core Capabilities

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

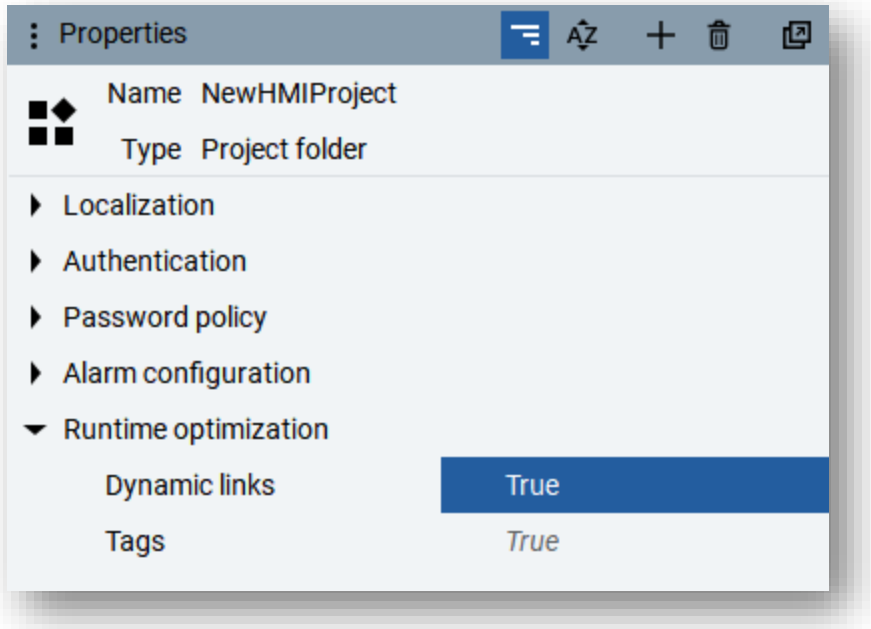
- Introduced an option to **optimize DynamicLinks** during the deployment phase

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**

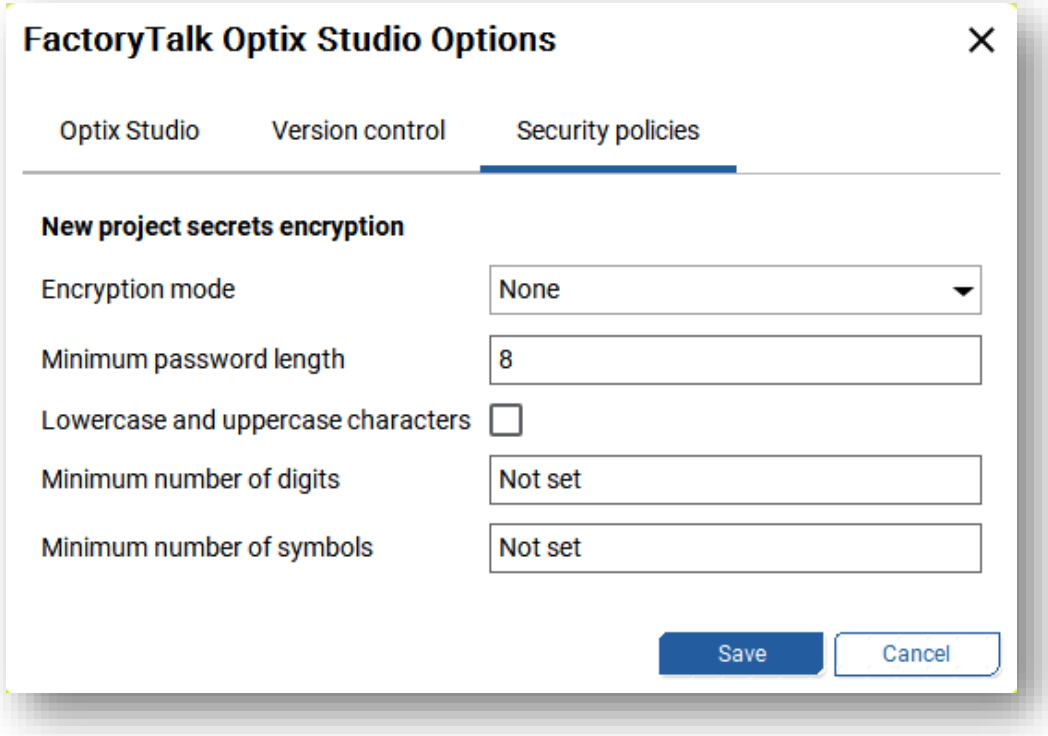


Security Enhancements

Core Capabilities

Project secrets encryption:

- Introduced **password complexity**



Security Enhancements

Core Capabilities

OAuth 2.0:

- **OAuth 2.0** is now supported in **Web UI**

LDAPS:

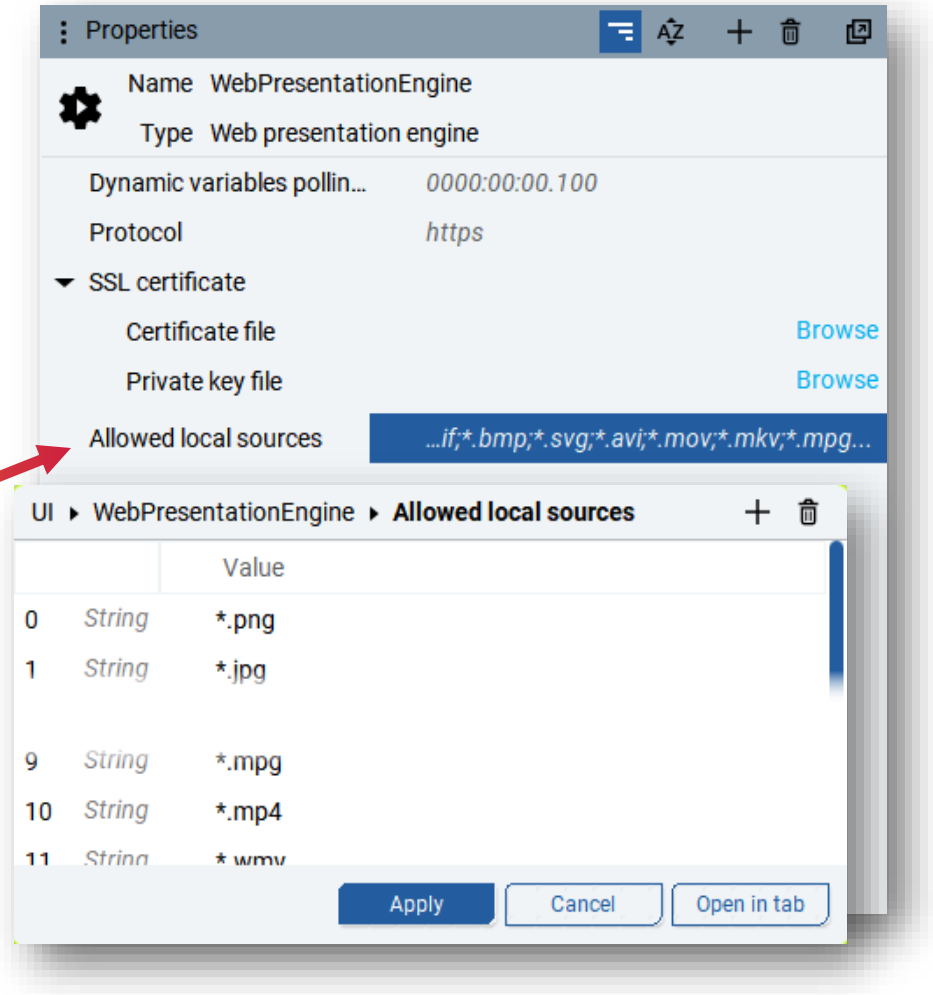
- **Secure LDAP** is now supported

Web Presentation Engine:

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

Project secrets encryption:

- Introduced **password complexity**

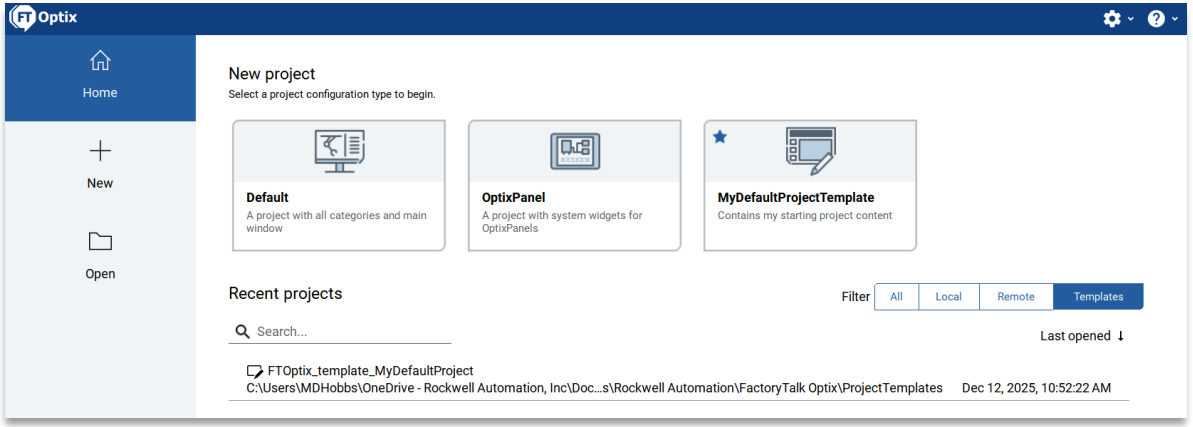


User-defined Project Template Enhancements

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

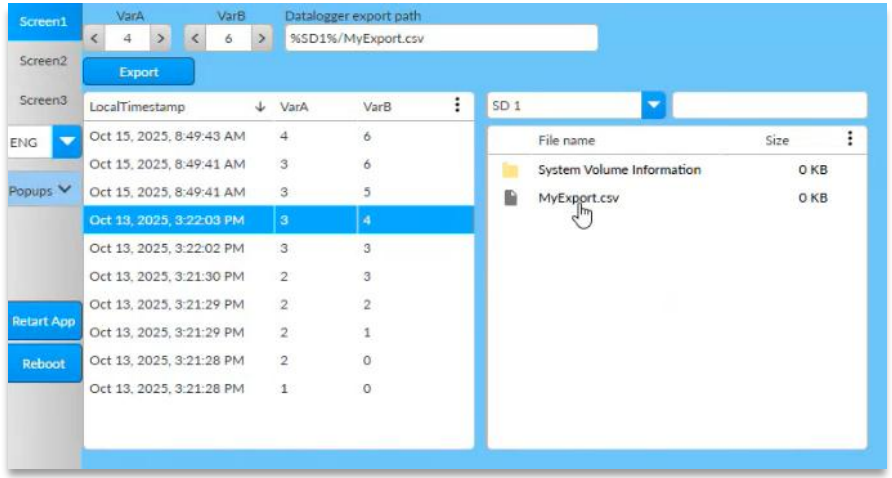
Core Capabilities

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

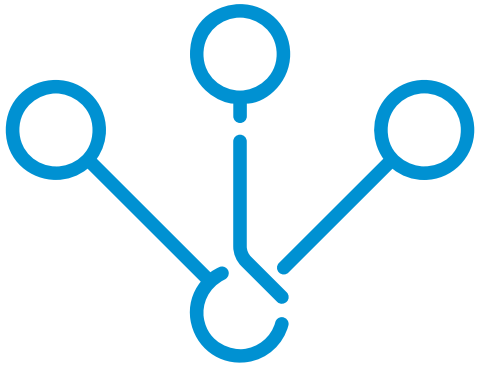
- It is now possible to **import TwinCAT tags** with a design-time **NetLogic**

Siemens TIA Profinet

- Protected communication with **passwords and certificates**

Codesys

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

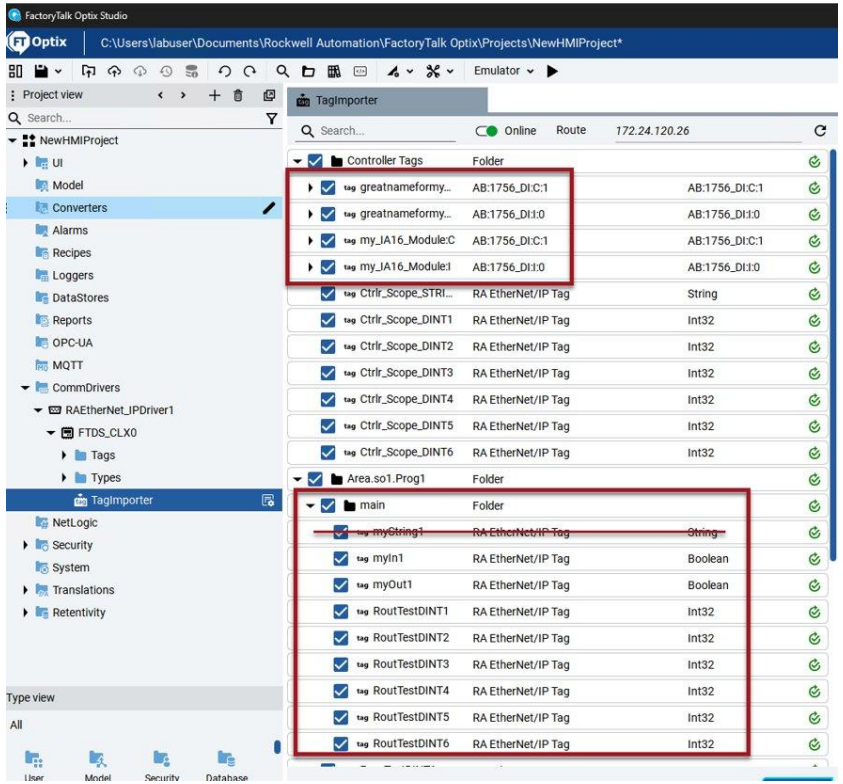


Digital Design Experience

FactoryTalk® Design Studio™ Support

Digital Design Experience

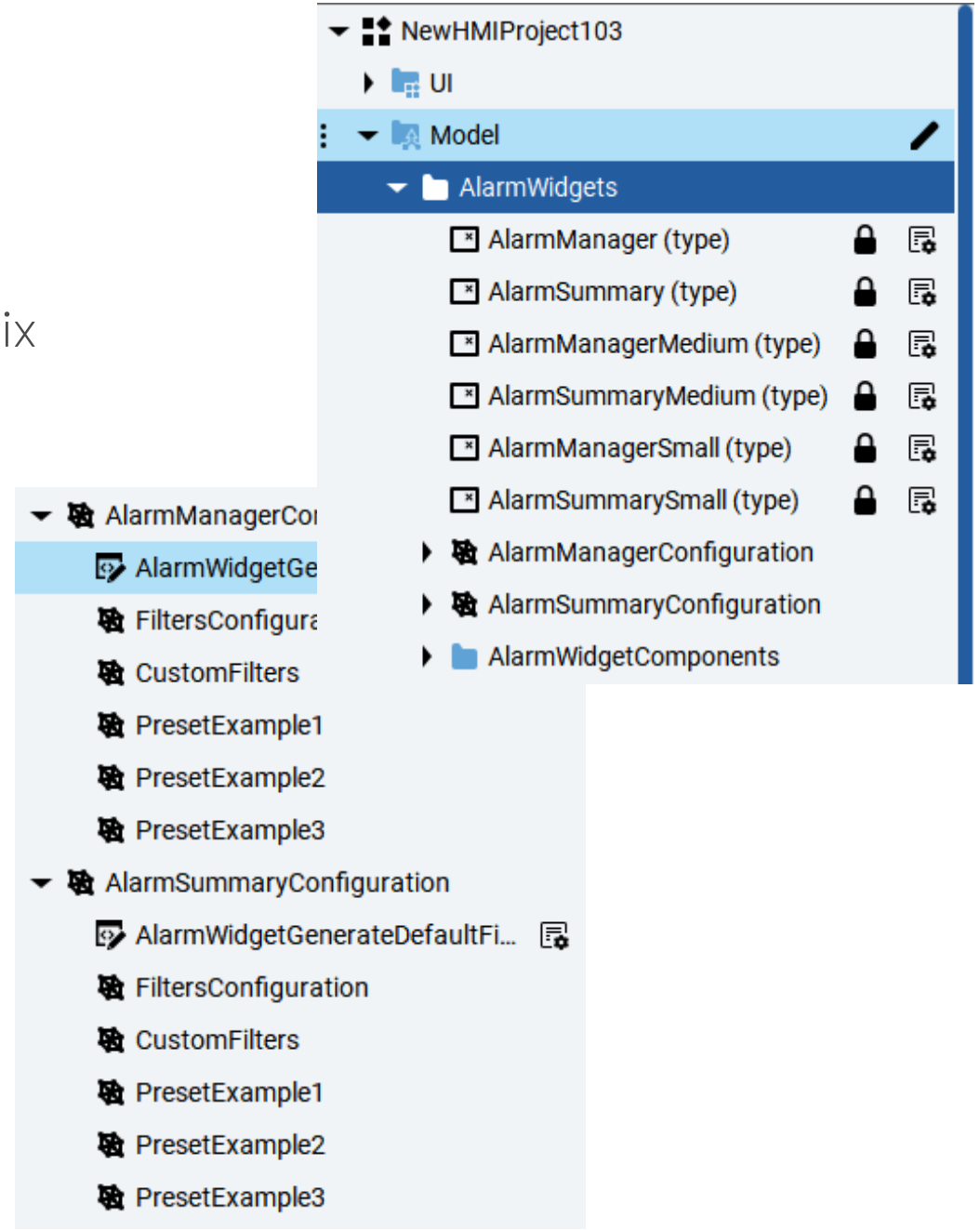
- Runtime communications with Logix controllers containing an FTDS deployed application
- Online tag import from Logix controllers containing an FTDS deployed application
- Utilizes existing Logix Designer application process:
  - Rockwell Automation Ethernet/IP driver
  - Rockwell Automation Ethernet/IP 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

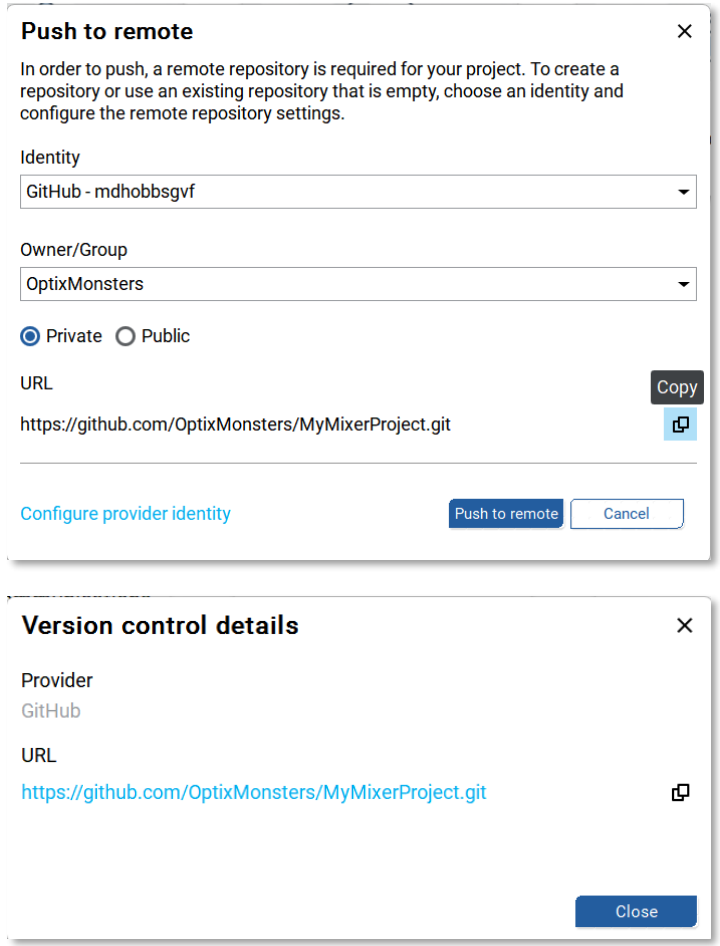


Version Control Git Enhancements

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

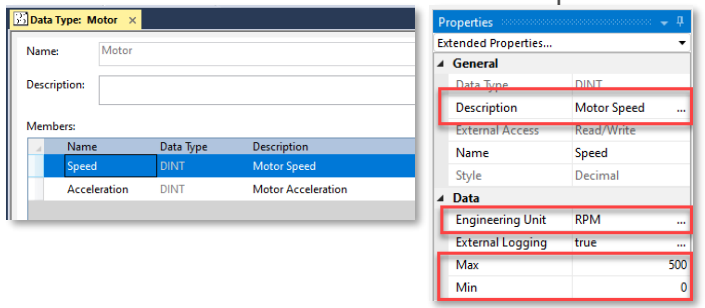


Data Connectivity

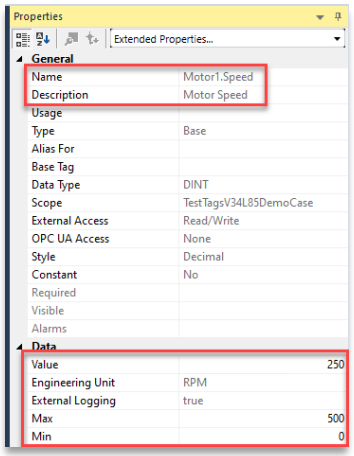
Extended Tag Property Pass-Through Support

Data Connectivity

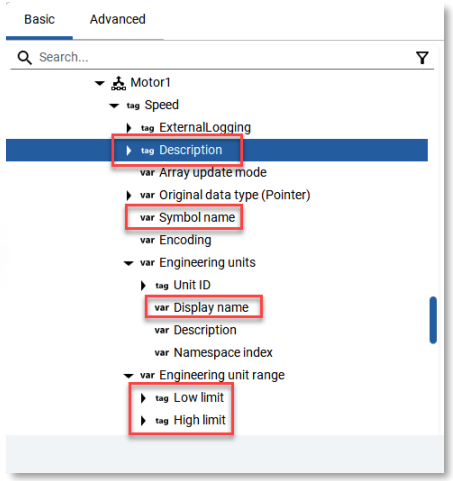
- Support for Logix Designer application extended tag properties configured with pass-through values
  - Extended tag property values defined on tag definitions are passed-through to instances in Logix
- References to Logix Designer application extended tag properties with pass-through values contained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



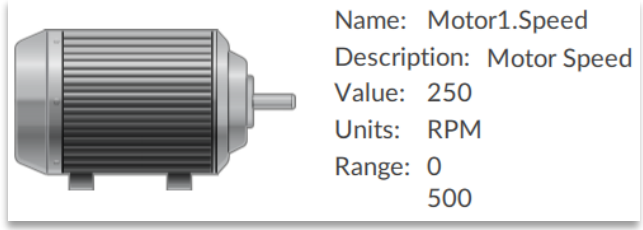
Logix Designer application
Motor Speed Tag Definition



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



Optix Studio Motor 1 Speed
Extended Tag Property References

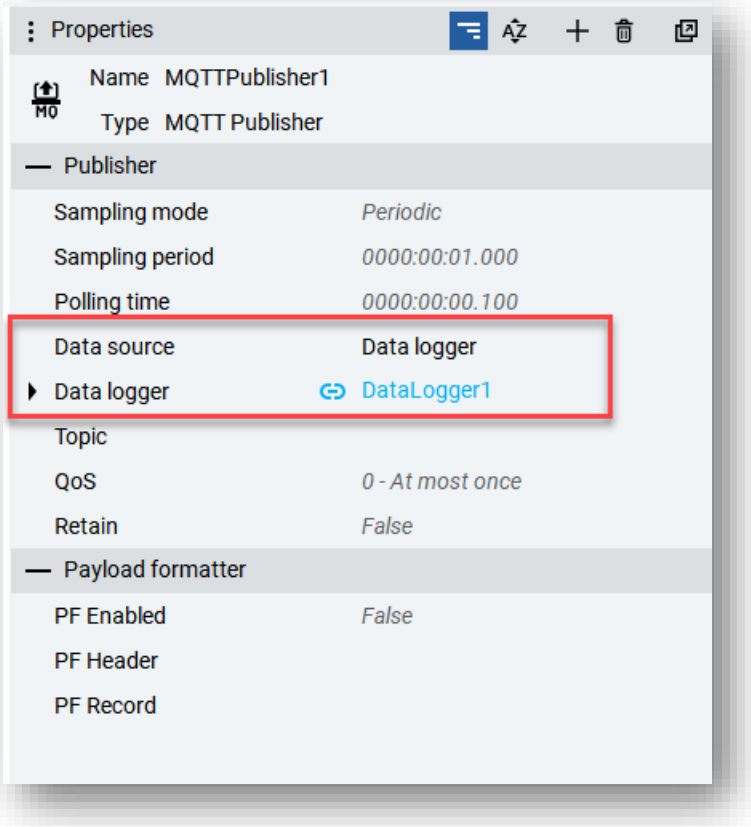


Optix Runtime Motor 1 Speed Widget
with extended tag property references
showing pass-through values

MQTT Client – Datalog Publishing

Data Connectivity

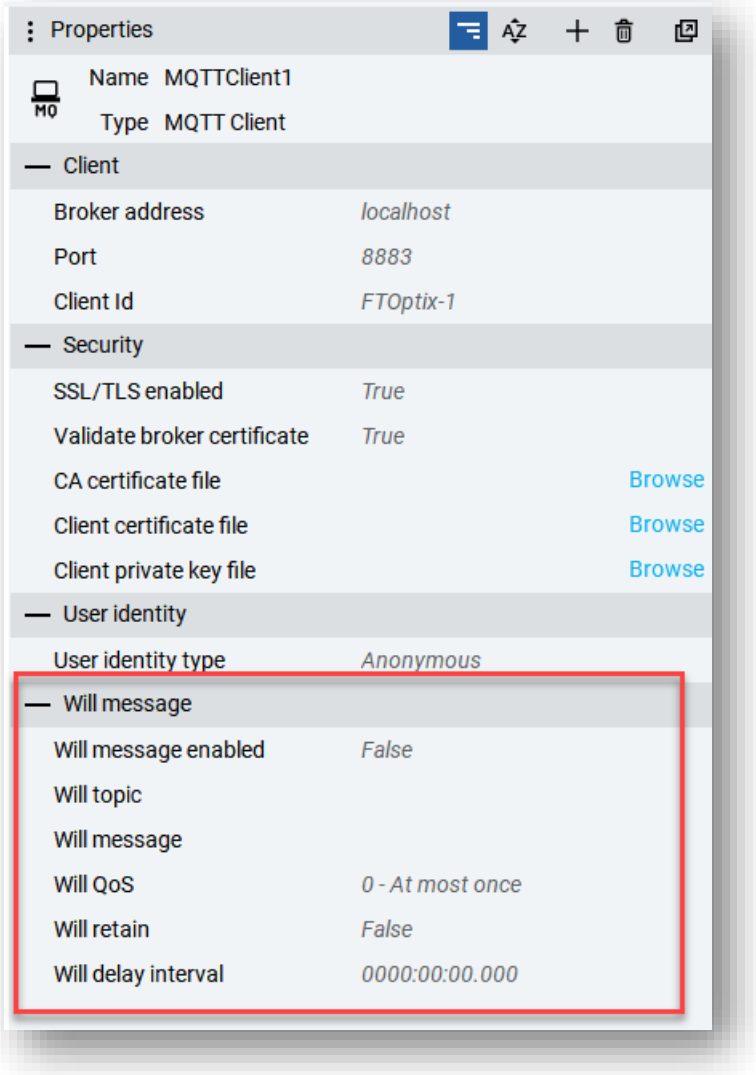
- Users can now **publish data loggers to an MQTT broker**
- MQTT publisher uses its own sampling mode and period
- Users can log data (e.g., local storage) at a different rate than publishing data via MQTT (e.g., Azure cloud services)
- Note:
  - Time stamps between data logger and MQTT publisher may 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



MQTT Client – Last Will & Testament (LWT) Message

Data Connectivity

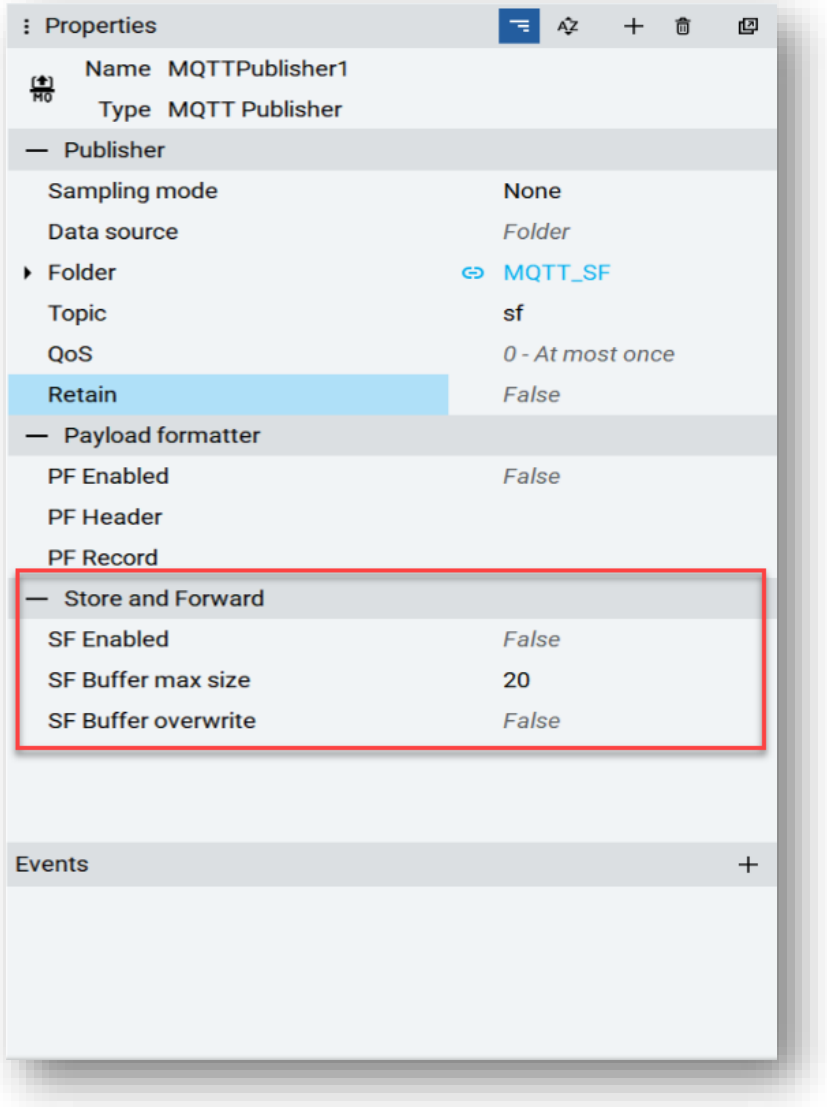
- User can set a **Last Will and Testament (LWT) message** so the broker can **notify other clients if a device disconnects unexpectedly.**
  - Clients know immediately when a device goes offline without a proper shutdown.
  - The broker sends the LWT when:
    - *Network connection fails*
    - *Client 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.



MQTT Client – Store & Forward Support

Data Connectivity

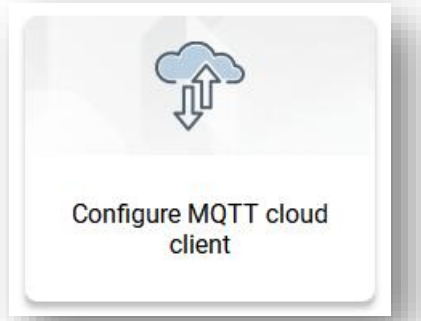
- Store & Forward (SF) lets MQTT clients **save messages locally** when it cannot reach the broker.
- The client **forwards saved messages** once the connection is restored.
- SF helps **prevent message loss** during network outages and devices with intermittent connectivity.
- User can set:
  - How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

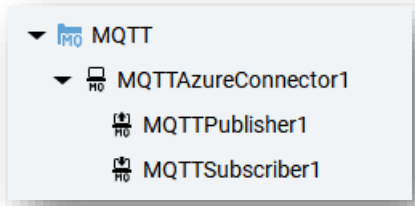


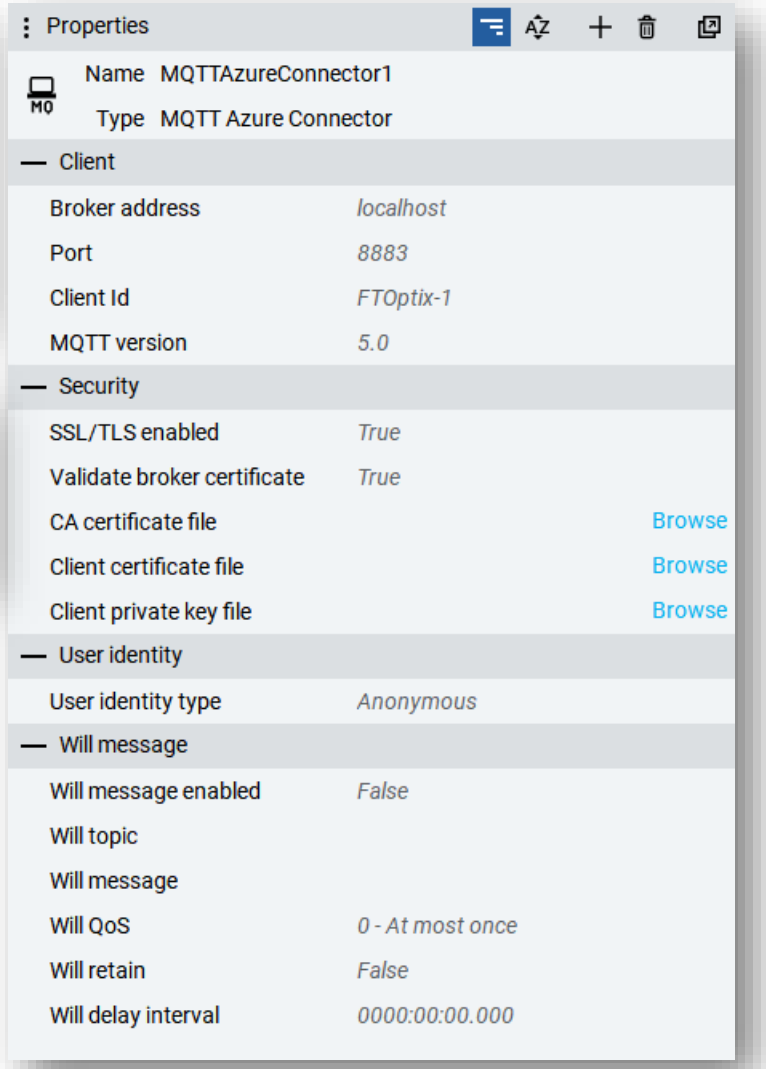
MQTT Client – Azure Connector

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





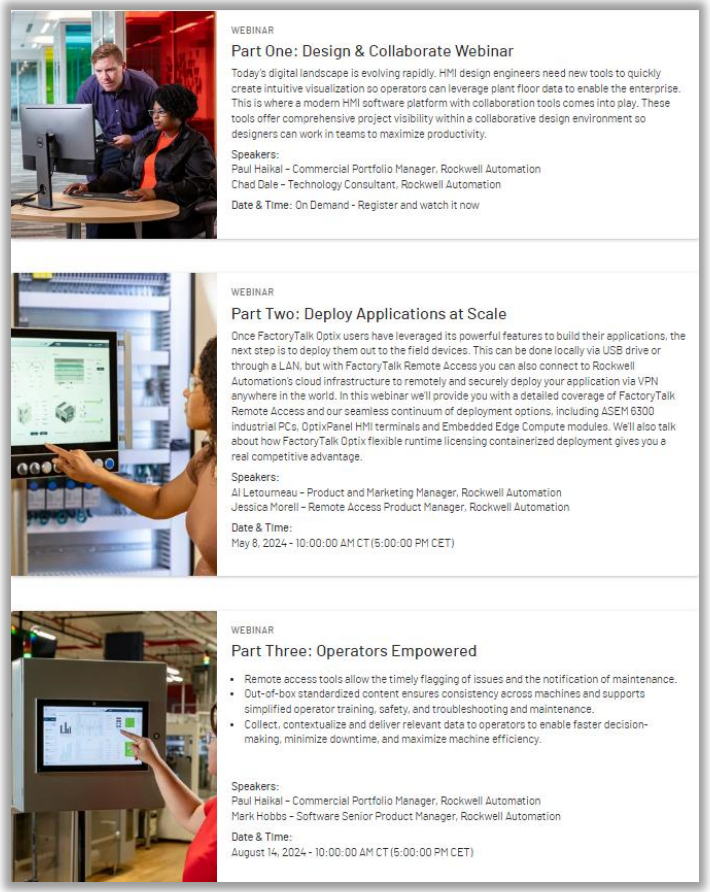


Webinars

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 Haikal - 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 the 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 Haikal - 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.

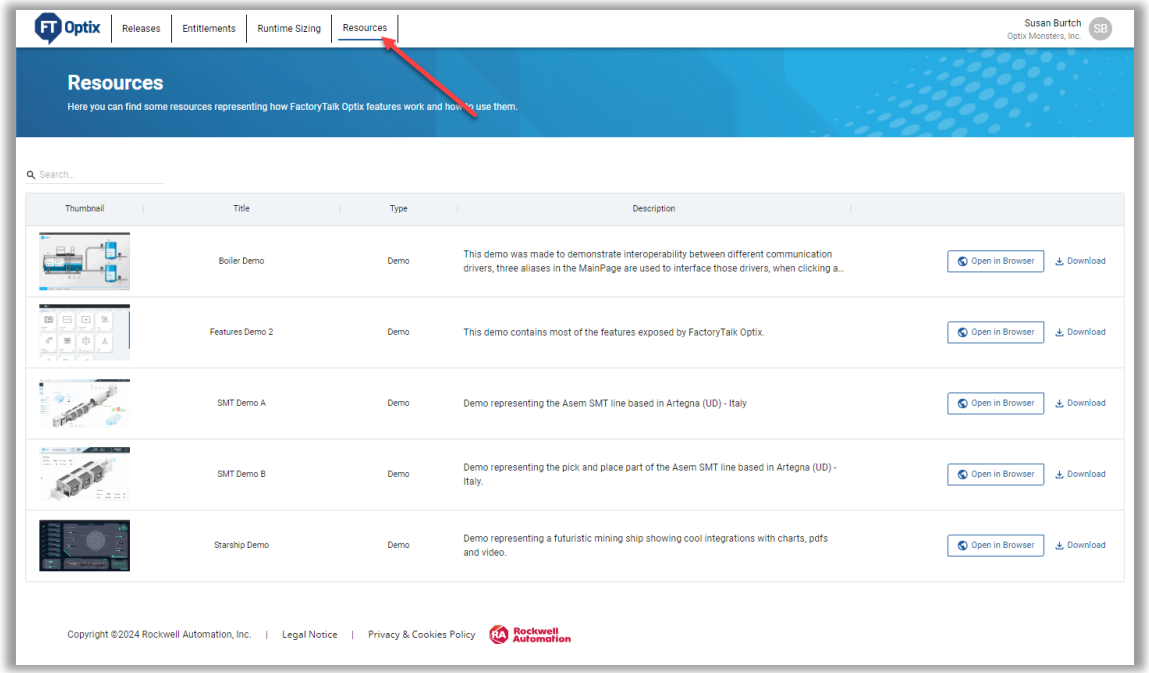
Maximize Your HMI Potential:
Modernization Strategies for Success

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!



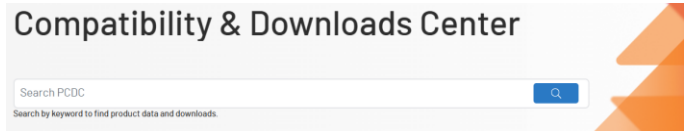
Now available: Preview demo application in browser, then download demo application files from GitHub on the Resources tab

PCDC Release Notifications

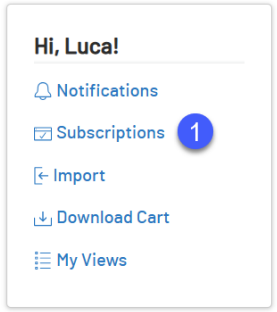
How to get notification of a new release on PCDC

PCDC allows you to subscribe to new releases

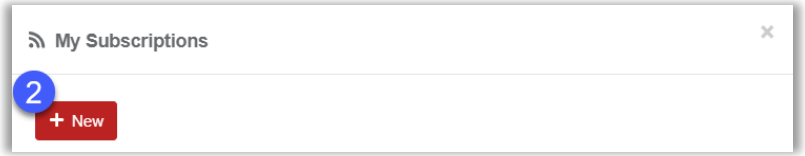
1. Log in to PCDC



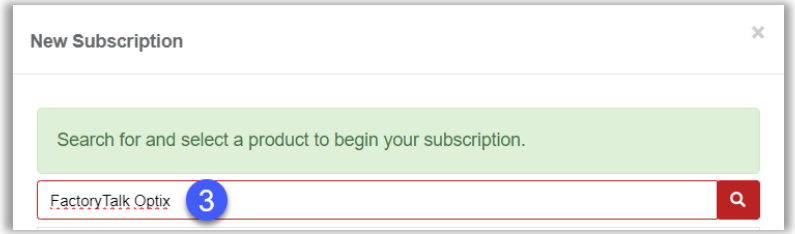
and on the right pane
select “Subscriptions”



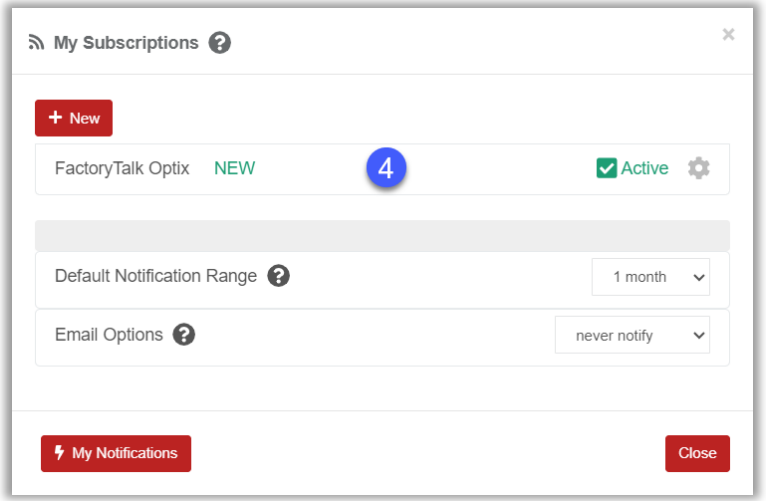
2. Click on **+ New** button



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

FactoryTalk
by ROCKWELL AUTOMATION

Thank you

www.rockwellautomation.com