Rockwell Automation

expanding human possibility®

FT Optix Product Overview

October 2022

ASEM

A ROCKWELL AUTOMATION COMPANY

PUBLIC

Agenda

1 Product Introduction

2 Product Features

3 Deployment Options

4 Release Timeline

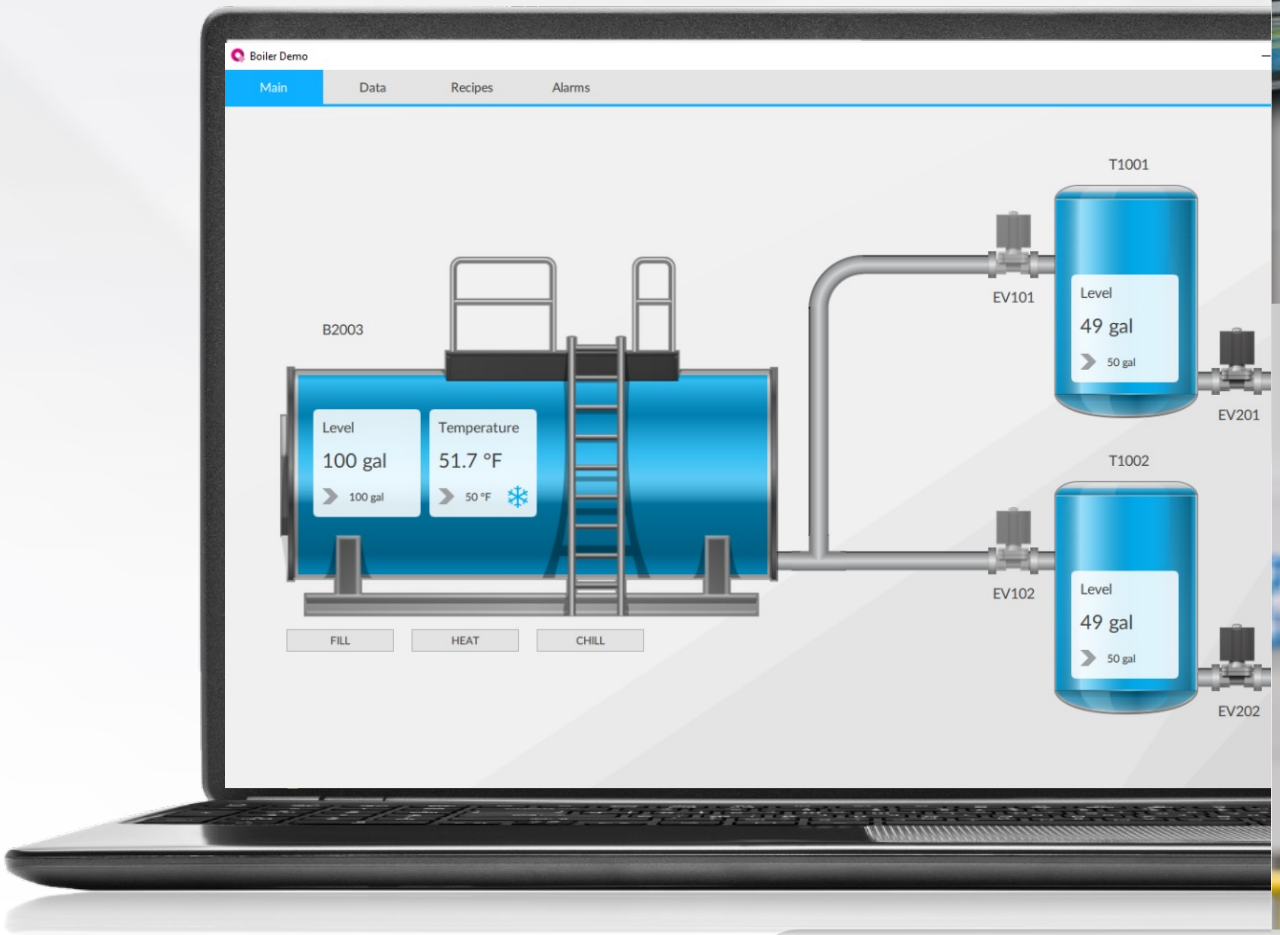
5 More Information

Product Introduction

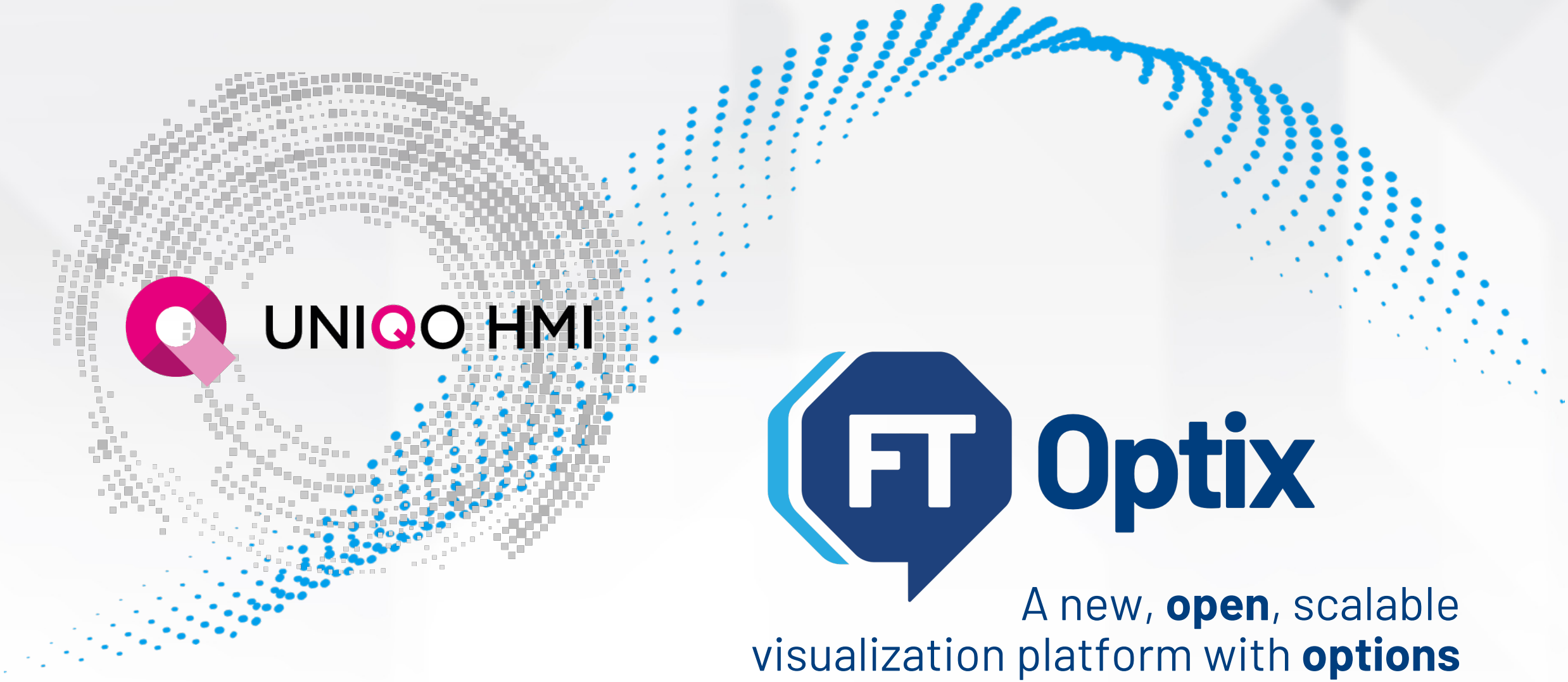
FT Optix

Welcome to FactoryTalk® Optix™

Rockwell Automation and ASEM™ collaborating to bring a new HMI offering to our visualization portfolio



Revolutionary software for HMI, IIoT, and Industry 4.0 applications…



INTRODUCING

VISUALIZATION FOR VISIONARIES

www.factorytalkoptix.com

ASEM A ROCKWELL AUTOMATION COMPANY

FactoryTalk by ROCKWELL AUTOMATION

Product Features

FT Optix

FT Optix

New, **open**, scalable visualization platform with **options**

DESIGN OPTIONS

Design and test your HMI projects in ways that you have only imagined

DEPLOYMENT OPTIONS

Create your application once and deploy to any device

GRAPHIC OPTIONS

Style your HMI graphics for a global audience

EXTENSIBLE OPTIONS

Built from the ground up with OPC UA and incredible extensibility

Build your HMI projects wherever you are

FT Optix
Design options

Don’t have FactoryTalk® Optix™ installed on your PC? No problem!

- Design, test, and deploy your HMI projects directly from a web browser using cloud-based FactoryTalk® Optix Studio™, available from FactoryTalk® Design Hub™
- Collaborative workflows allow modifications anywhere, anytime

No internet connection? No problem!

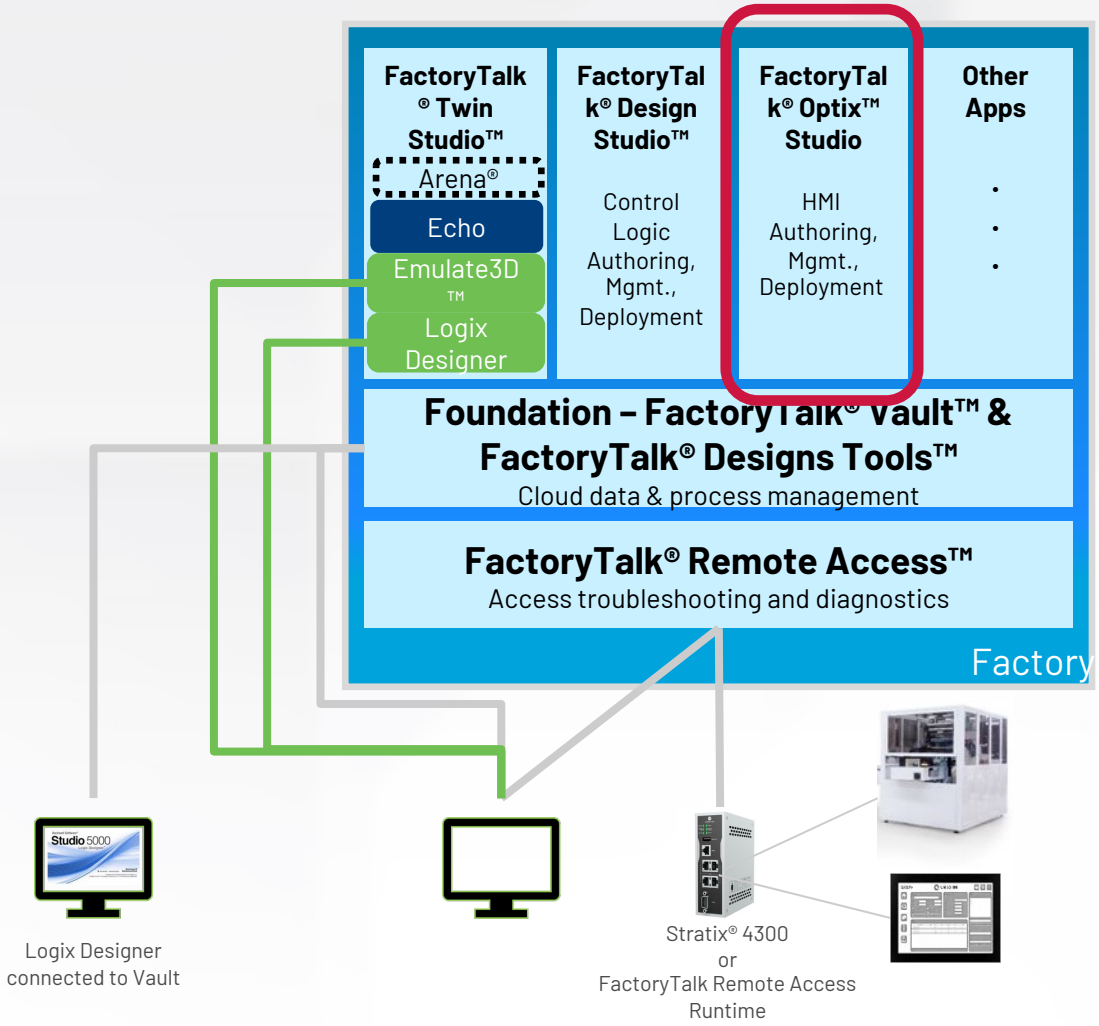
- Install FactoryTalk® Optix Studio™ locally on your laptop
- Seamlessly transitions from browser to desktop app for disconnected editing and deployment

Not sure which HMI device you’ll be using? No problem!

- Build projects and deploy dynamically – even at runtime

Design Hub™

One central location for all automation design needs on-demand



FactoryTalk® Optix™

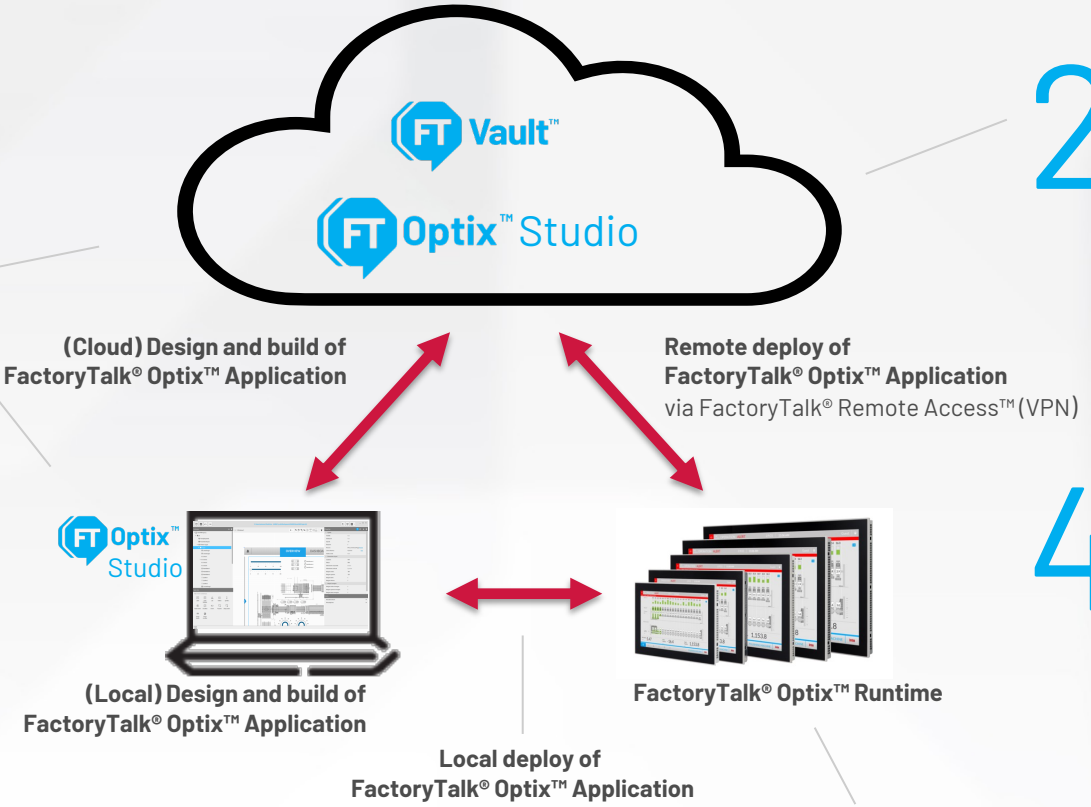
System components explained

1 FactoryTalk® Optix Studio™

- Integrated Design environment for creating FactoryTalk® Optix™ Applications
- Design & test your HMI projects from a web browser or desktop editor

2 FactoryTalk® Hub™ and FactoryTalk® Vault™ Integration

- Design editor available in the cloud
- Project storage and retrieval in the cloud



3 FactoryTalk® Optix™ Application built by FactoryTalk® Optix Studio™

- **Project** – application logic, objects, communication parameters, etc.
- **Runtime** – runtime modules strictly necessary to run a specific application

4 FactoryTalk® Optix™ Application is deployed to devices

- Locally from the computer hosting a local installation of FactoryTalk® Optix Studio™
- Remotely from the cloud-hosted version of FactoryTalk® Optix Studio™

5 FactoryTalk® Optix™ Runtime is running on devices

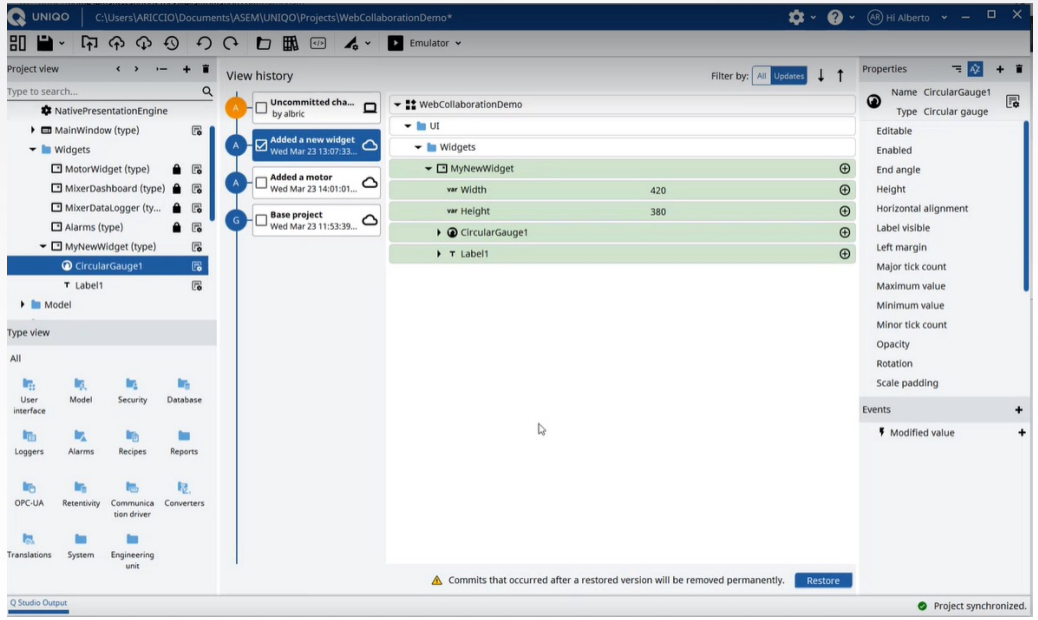
- Rockwell Automation® devices – open and closed
- 3rd Party PCs and devices
- Rockwell Automation® & 3rd party communications

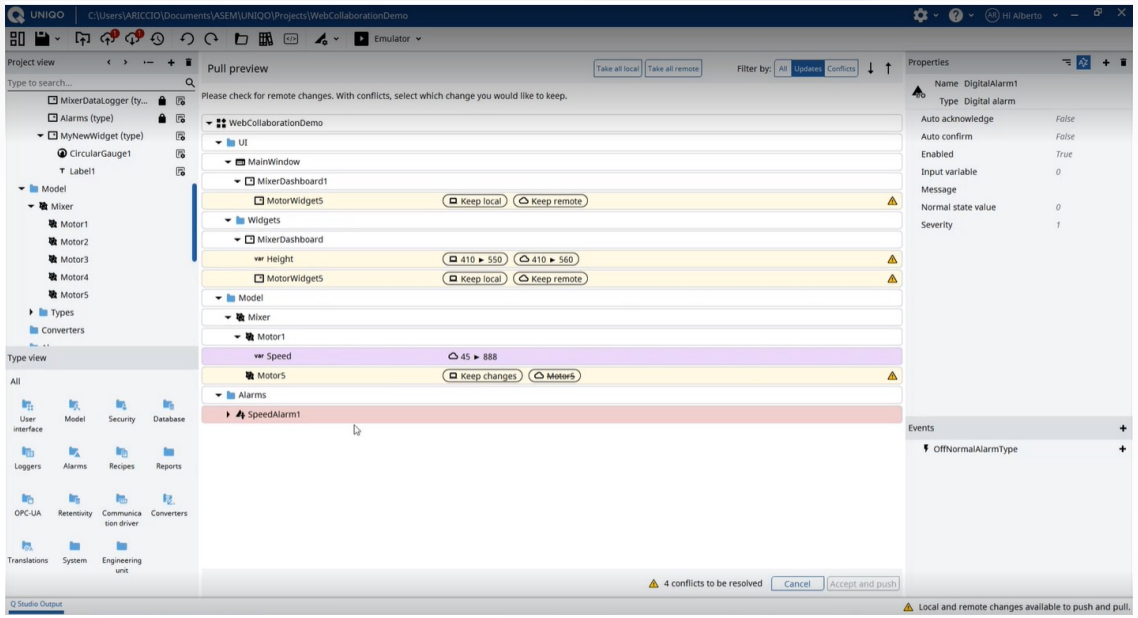
Multi-user collaboration and version control

FT Optix
Design options

- Multi-user collaborative workflows enabled by the cloud allow modifications from anywhere, anytime
- Version management tracks changes and keeps track of who did what and when
- Integrated cloud storage and version control

FT Vault™ GitHub



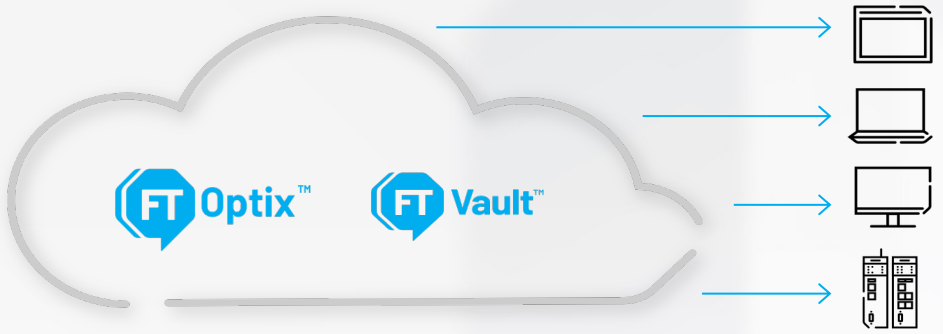


Create an application once...

FT Optix Deployment options

Deploy to any sized device

- Panel • Station • Distributed
- ARM and x86 architectures
- Linux and Windows operating system



Scalable deployments to target devices

- What gets configured is the only content that gets deployed
- Pay only for what is deployed

Choose the client type when you deploy

- Native FactoryTalk® Optix™ client
- Native HTML clients viewable from a web browser

Flexible Licensing Model

Enabling users to pay only for what they need with feature tokens

By application feature

Feature tokens are sold in feature packages: XS → XXL

Feature Menu	Feature - *Example*	Feature token cost
	Feature A	1
	Feature B	2
	Feature C	1
	Feature D	3
	. . .	
	Feature X	1

By feature package

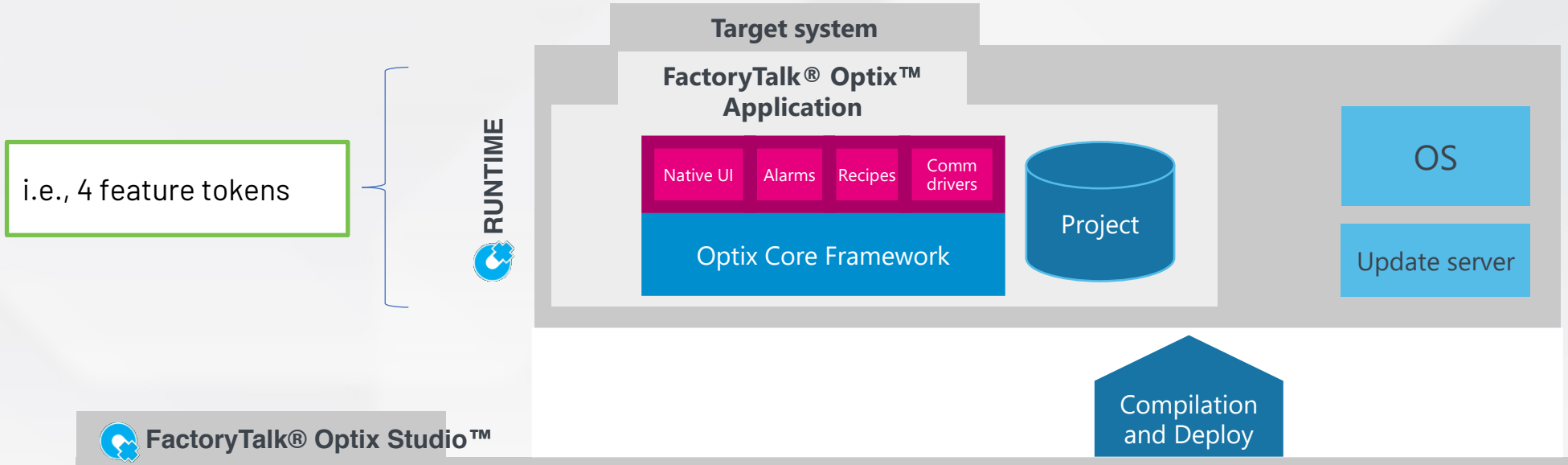
Feature packages can easily be upgraded

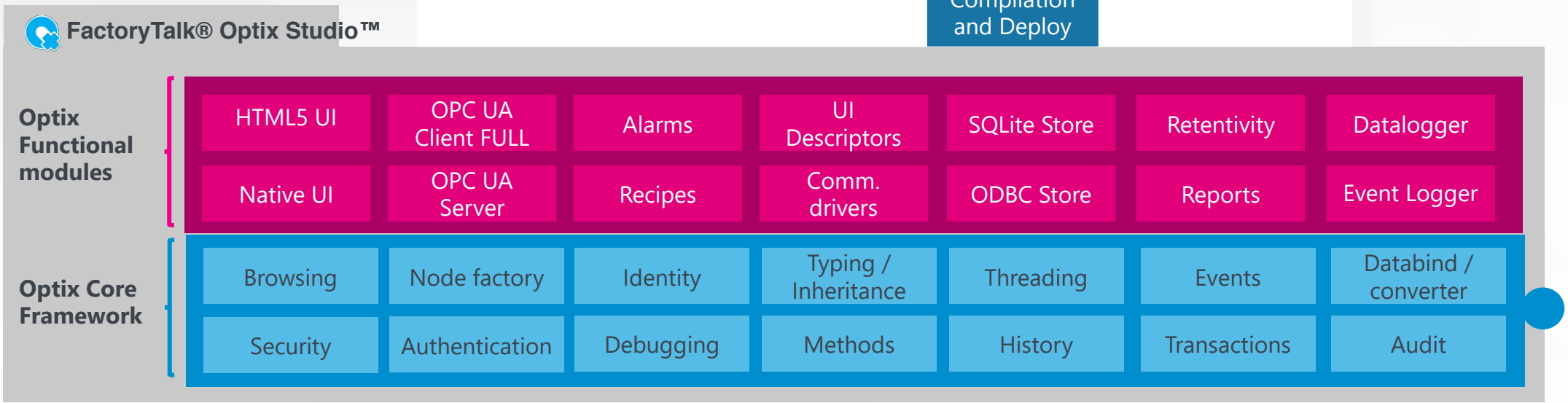
Feature packages	Feature tokens included
XS	5
S	8
M	11
L	15
XL	21
XXL	28

How do feature tokens work?

- Applications are created using FactoryTalk® Optix Studio™, where feature choices are made based on the functionality needed.
- FactoryTalk® Optix Studio™ verifies the features configured in the application and how many feature tokens are required for runtime.

Licensing Example



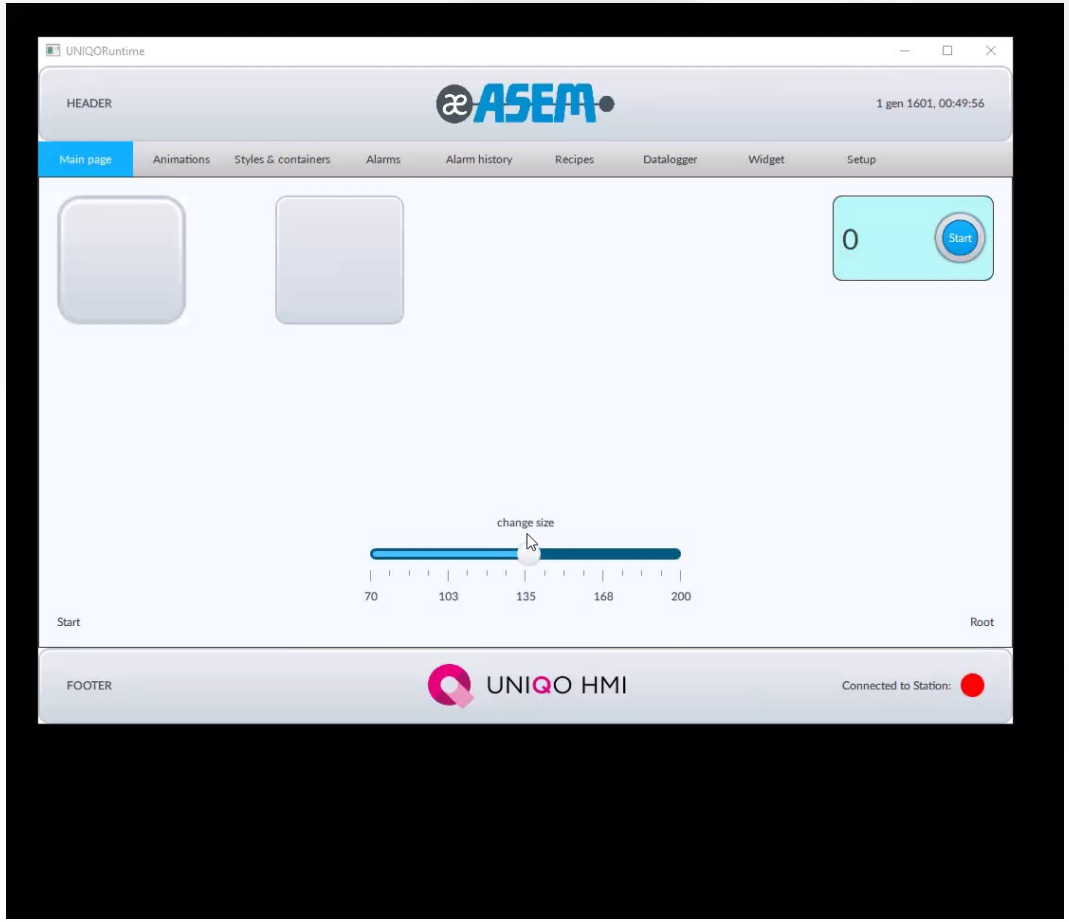


Responsive displays

FT Optix
Graphic options

Build a display once and view it on any piece of glass

- Relative positioning of the objects enables responsive interfaces adaptable to any form factor or display resolution.
- Automatically adaptable to various formats (wide/4:3) and resolutions (HD, Full HD)
- Identical native and HTML5 client rendering

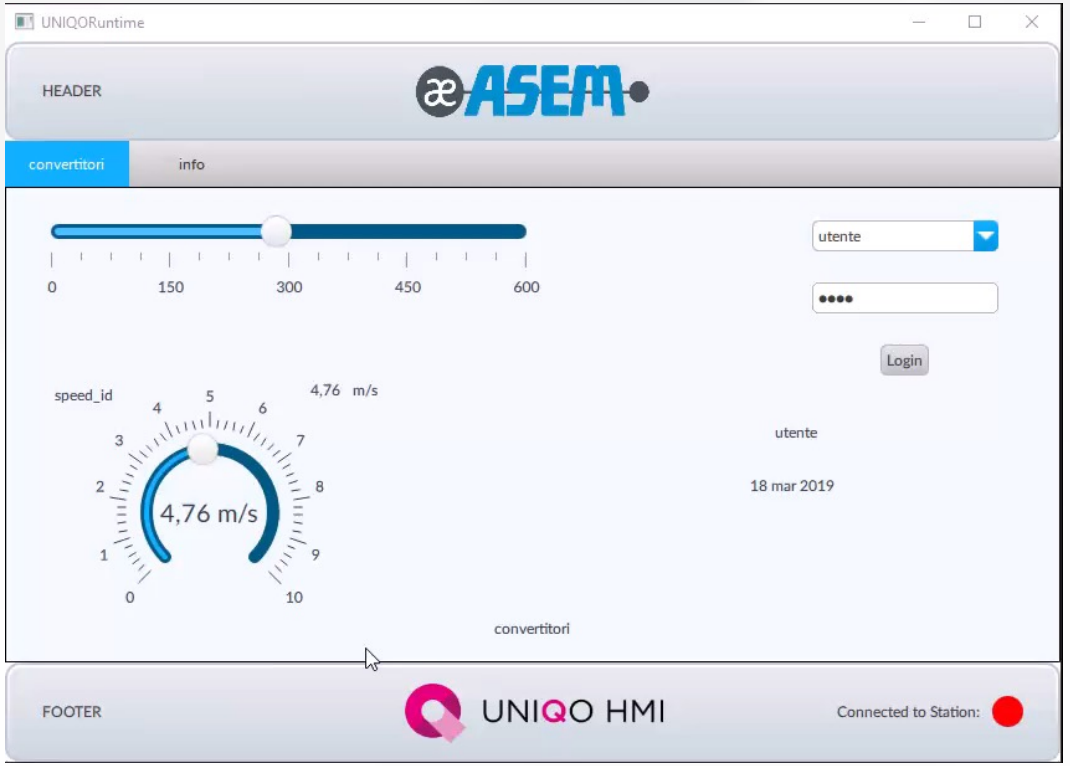


Multi-language and international settings

FT Optix
Graphic options

Preferences unique to each individual user

- Language selection
- International settings
- Measurement units
- Automatic unit conversions
- Date and time format

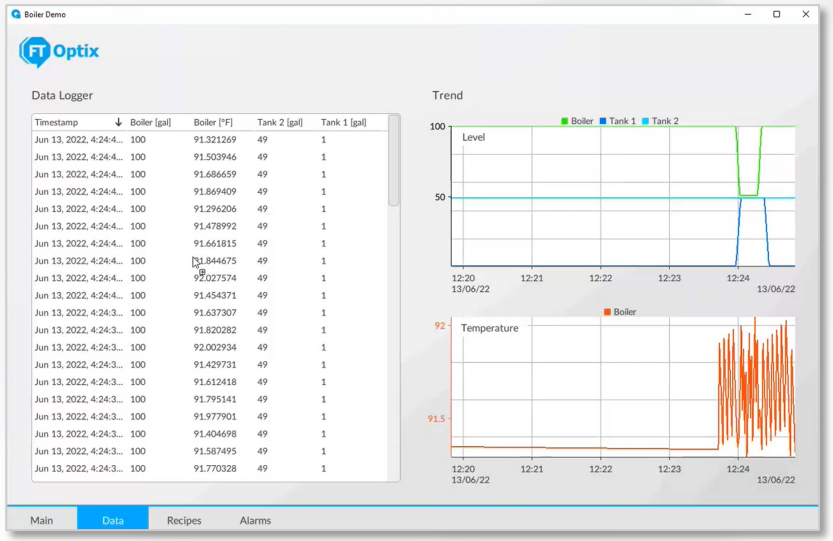


Logging, reporting and dashboarding

FT Optix
Extensible options

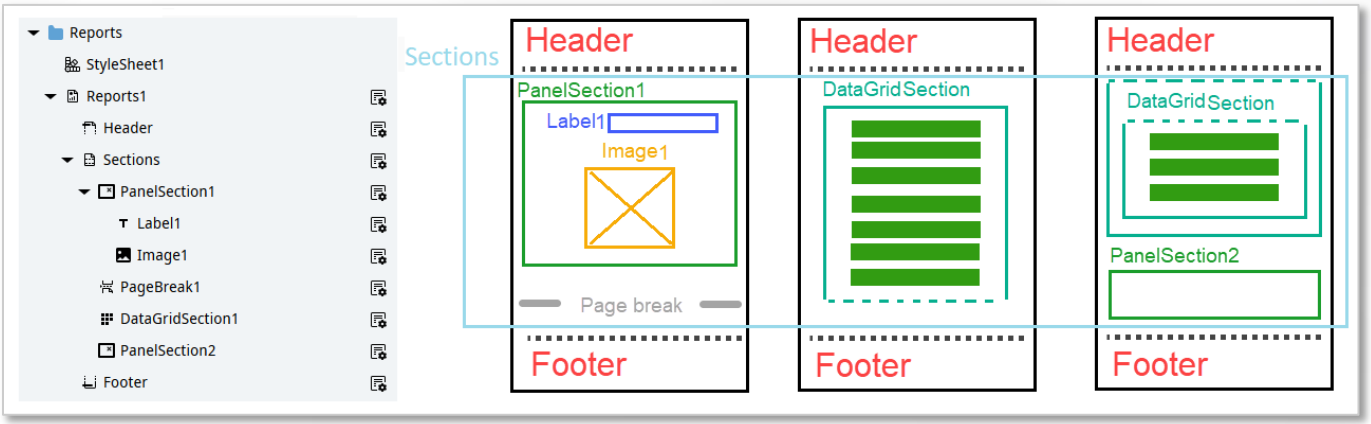
Simple database interface available for all components of the project

- Display historical or real-time data
  - Alarm history
  - Trending
  - Recipes
  - Data Grid
  - Text box control



Lightweight reports and dashboarding

- Customizable layouts containing text, tables, and static graphics.
- Live dashboards
- Automatically generated PDF reports

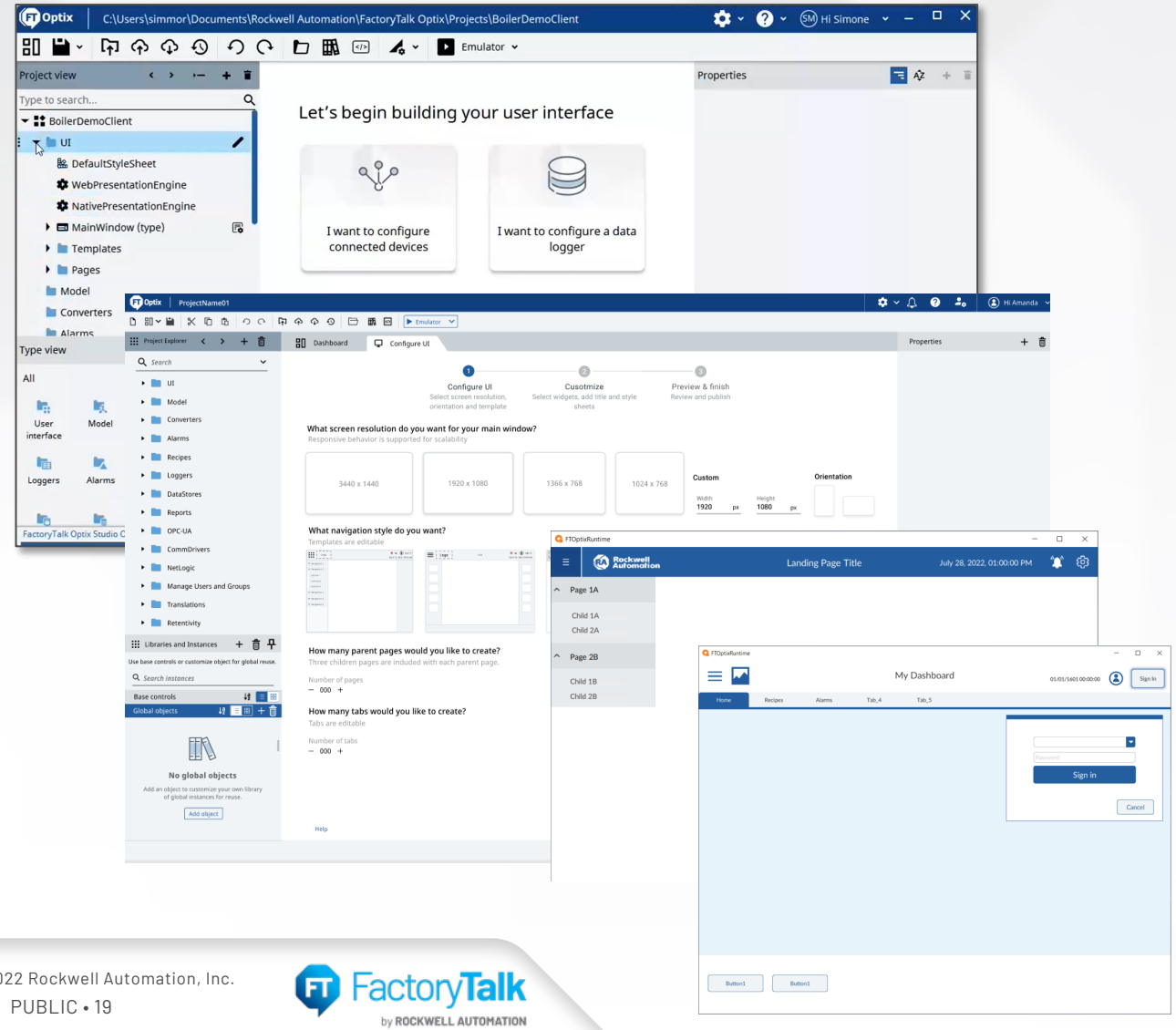


Design wizards and project templates

FT Optix
Graphic options

Easy workflows to help you design your applications

- Wizard-based workflows for screen layouts, communication drivers, data loggers, recipes and alarms
- SVGs and Advanced SVGs
- Dynamic link filters and deep cross-references to help you find anything no matter where it's referenced
- Start projects with modern templates, navigation, login, alarms and notifications
- Customize and reuse templates, accelerating your project delivery with consistency.

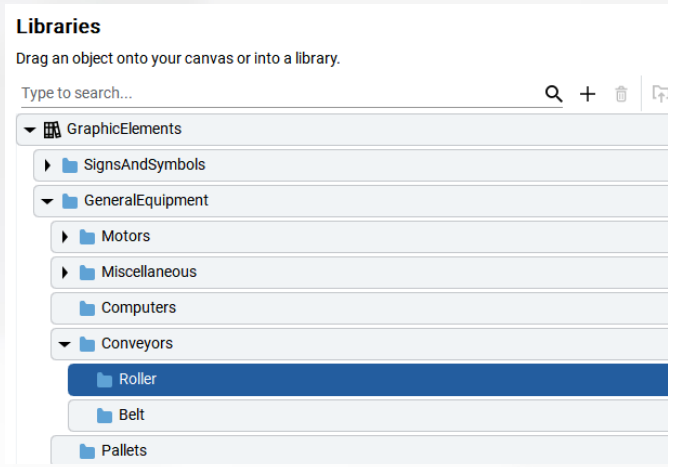


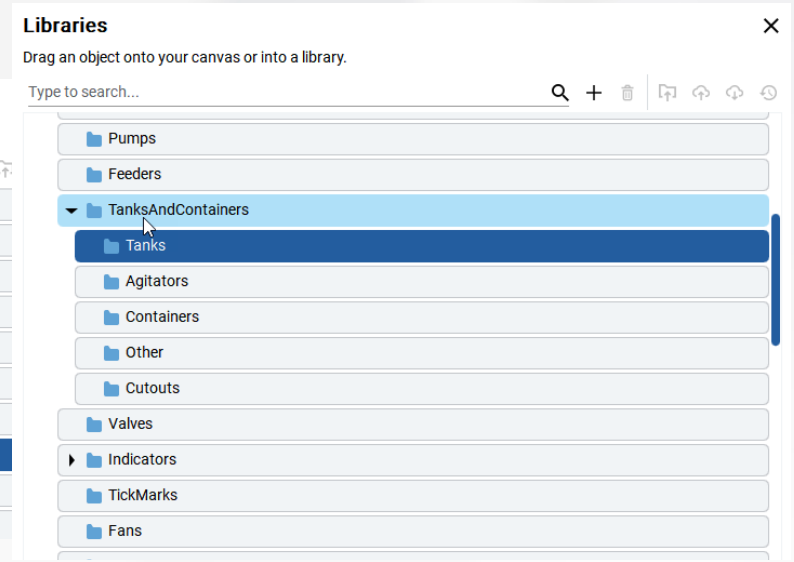
Libraries and library management

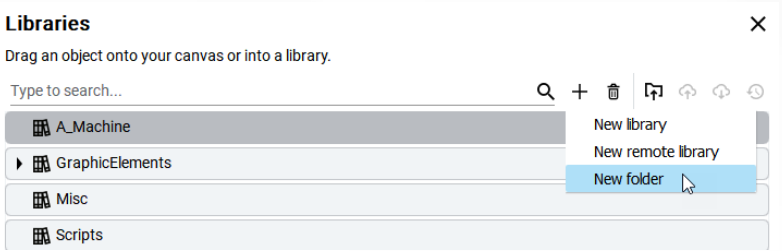
FT Optix
Extensible options

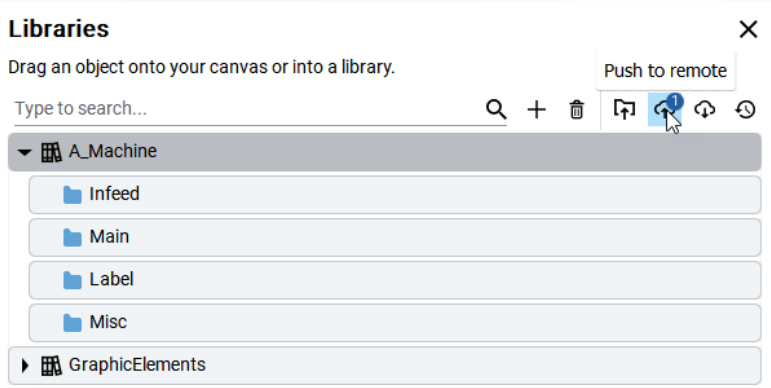
Extensibility, reuse and management made simple

- 1,000s of graphical objects
- Industry standard objects
- Search to quickly find and filter objects
- Logical folder organization
- Reuse made easy – drag n drop
- Rockwell Automation standard libraries
- User-defined libraries
  - Save single object or complete project
- Library Management Options
  - Save Local or Remote
  - Multi-user collaboration helps manage library standards with plant engineering, OEMs and Integrators
    - Commit, Push, Pull, History







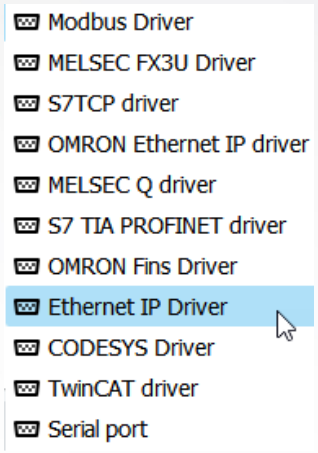


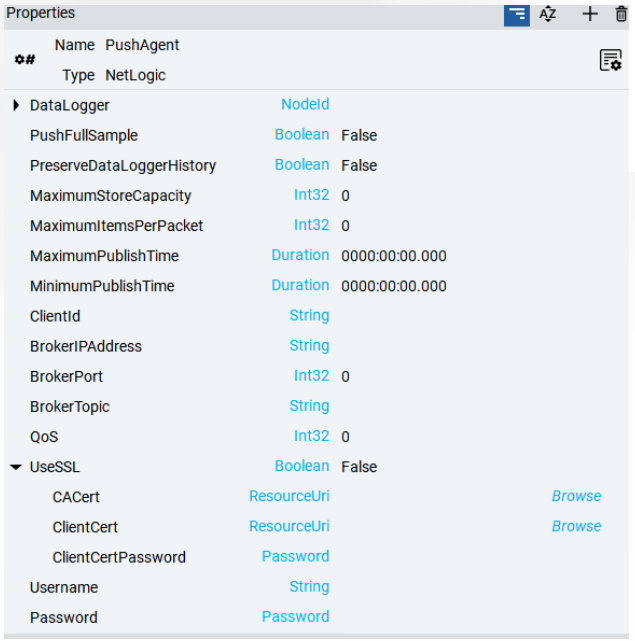
Flexible and secure connectivity

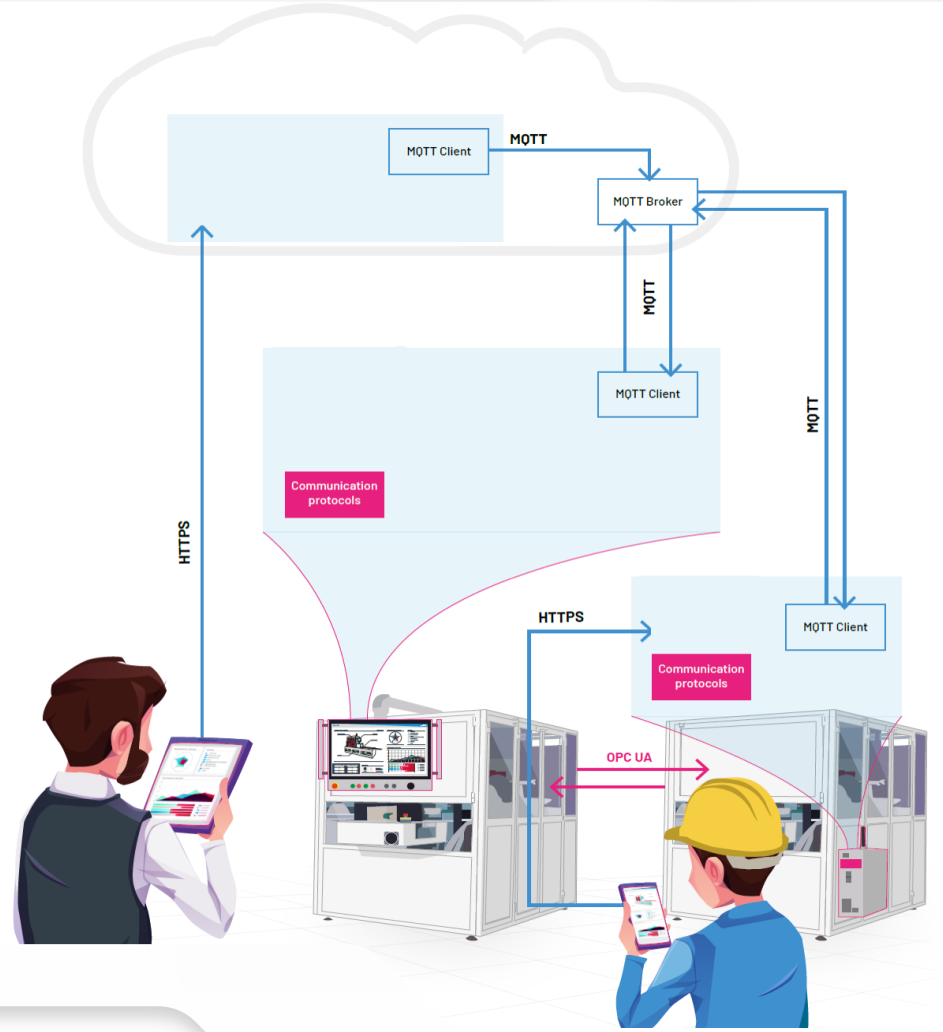
FT Optix
Extensible options

Built-in reliable connectivity – from the controller to the cloud

- Preferred Rockwell Automation® connectivity
- Native IOT connectivity (MQTT)
- Secure HTTPS protocols
- Native OPC/UA protocols
- Native 3rd party drivers included







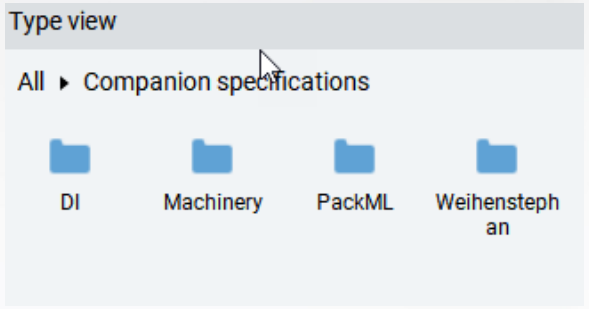
Industrial interoperability

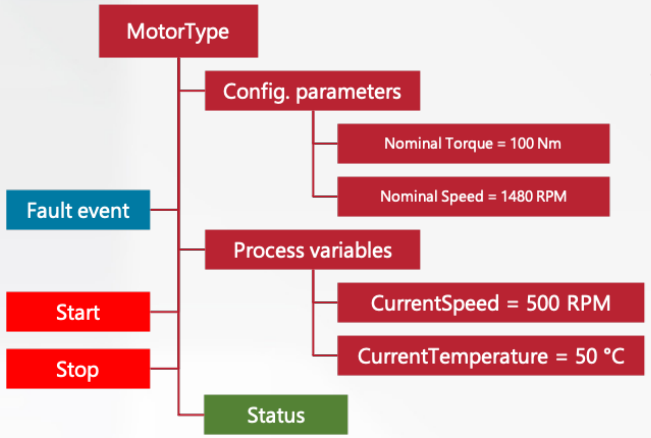
FT Optix
Extensible options

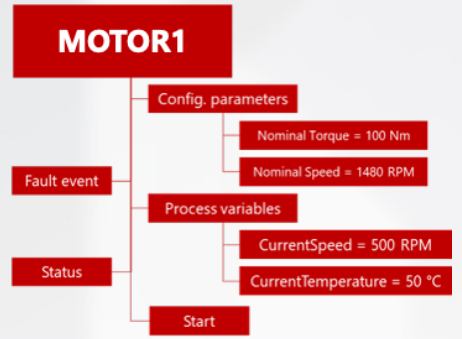
FactoryTalk® Optix™ has OPC/UA in its DNA

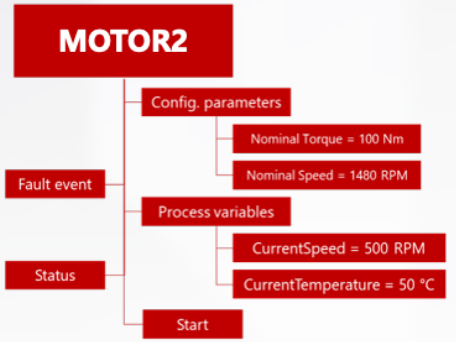
- True object-oriented design
- Machine-to-machine communications
- Full support of OPC/UA companion specs

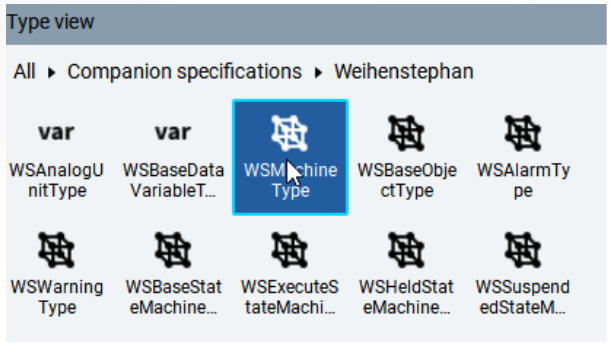
OPC UA

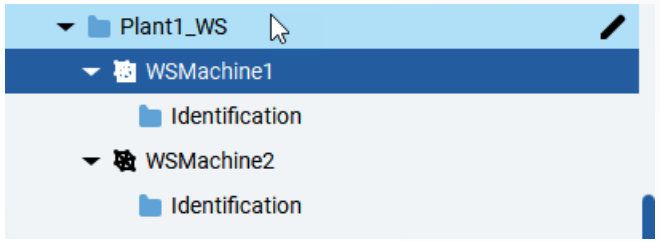










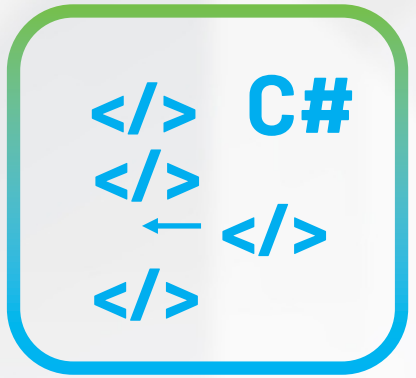


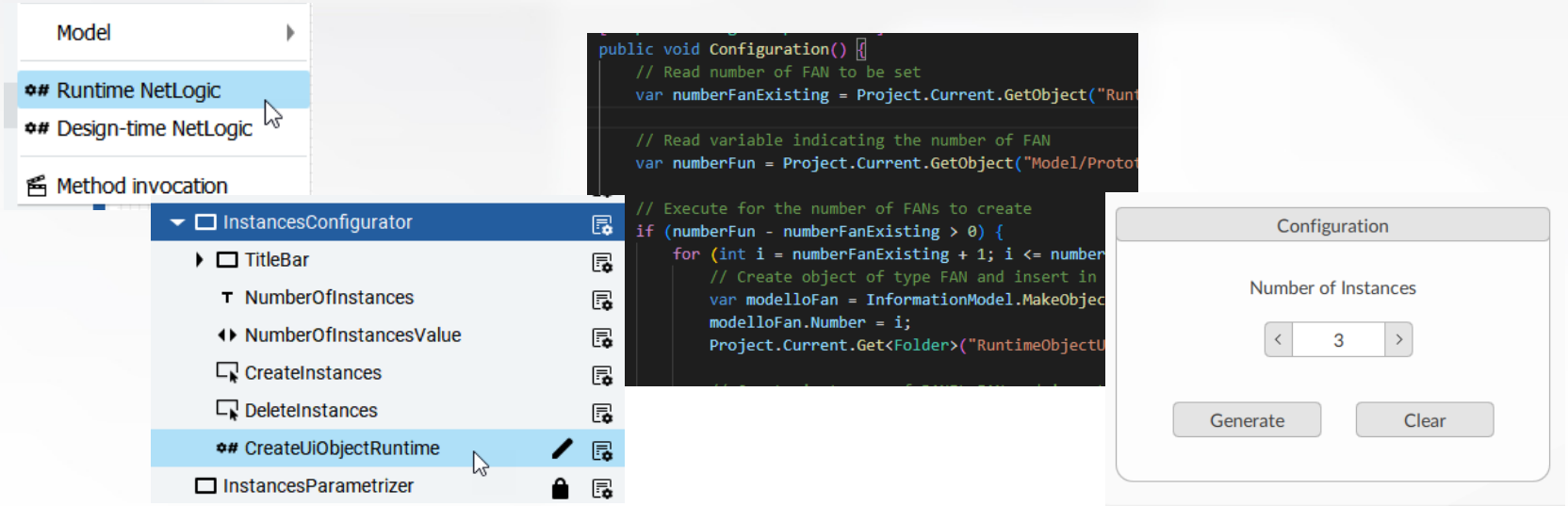
Open interfaces with scripting capabilities

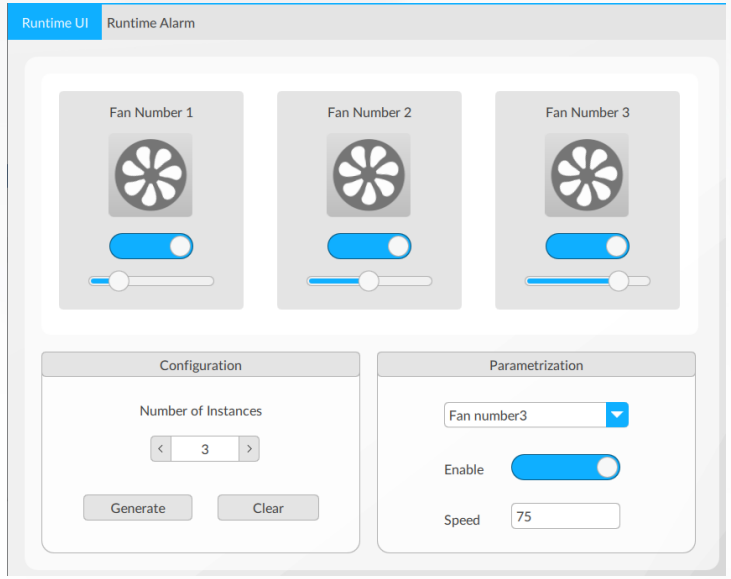
FT Optix
Extensible options

Unlimited customizations and automatic generation

- Open API available to all aspects of a project available by C# scripting
- Create application logic for customized functionality
- Automatically generate parts of the project at design time and runtime
- Customize the visual style of graphics instantly







FactoryTalk® Optix™

Feature Summary Overview

Design options

Design & test your HMI projects directly from a web browser

Collaborative workflows allow modifications from anywhere, anytime

Version management tracks changes keeps track of who did what and when

Build a project dynamically, by scripting, or even at runtime

Deployment options

Flexible host hardware

Panel • Station • Distributed

Pay only for what you use

Graphic options

Responsive graphics

Reporting, dashboarding

Style sheets

Multi-language

Extensible options

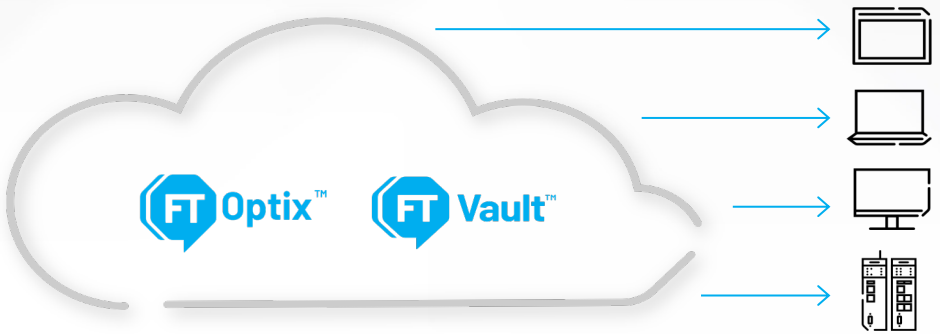
Library management

3rd party drivers

IOT native connectivity

Full support of OPC/UA companion specs

Open interface with C# scripting

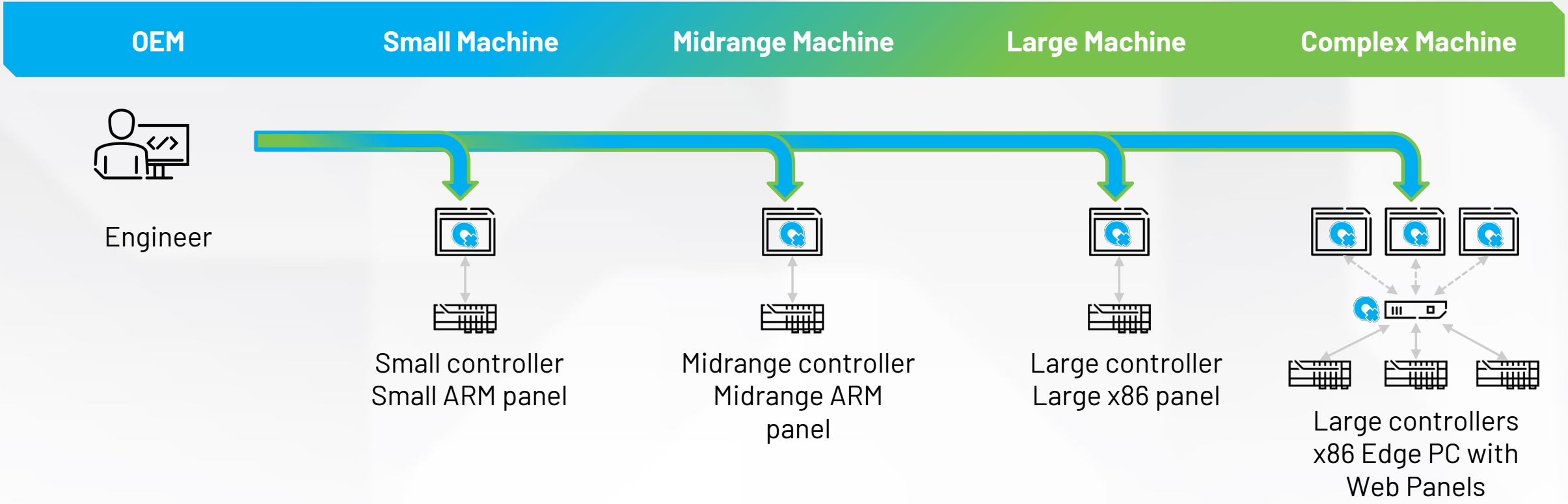


Deployment Options

FT Optix

FactoryTalk® Optix™ reference architecture - OEM

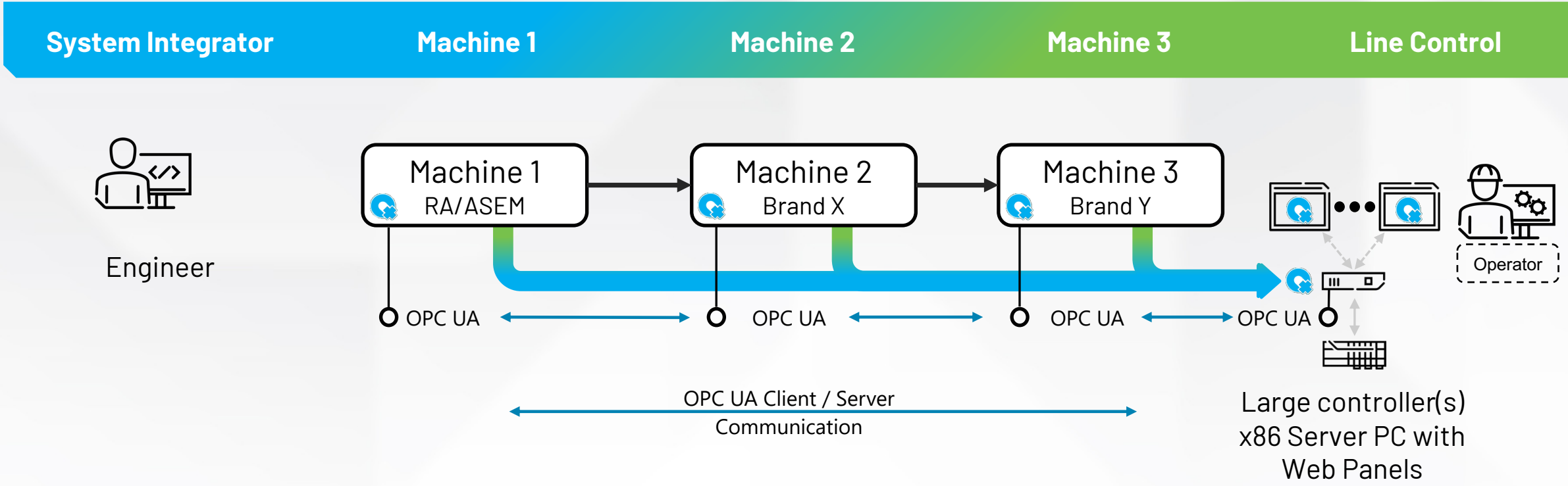
Same application can be deployed to any hardware



Same application can be deployed to any hardware

FactoryTalk® Optix™ reference architecture – System Integrator

Different applications can be aggregated



Different applications can be aggregated

Release Timeline

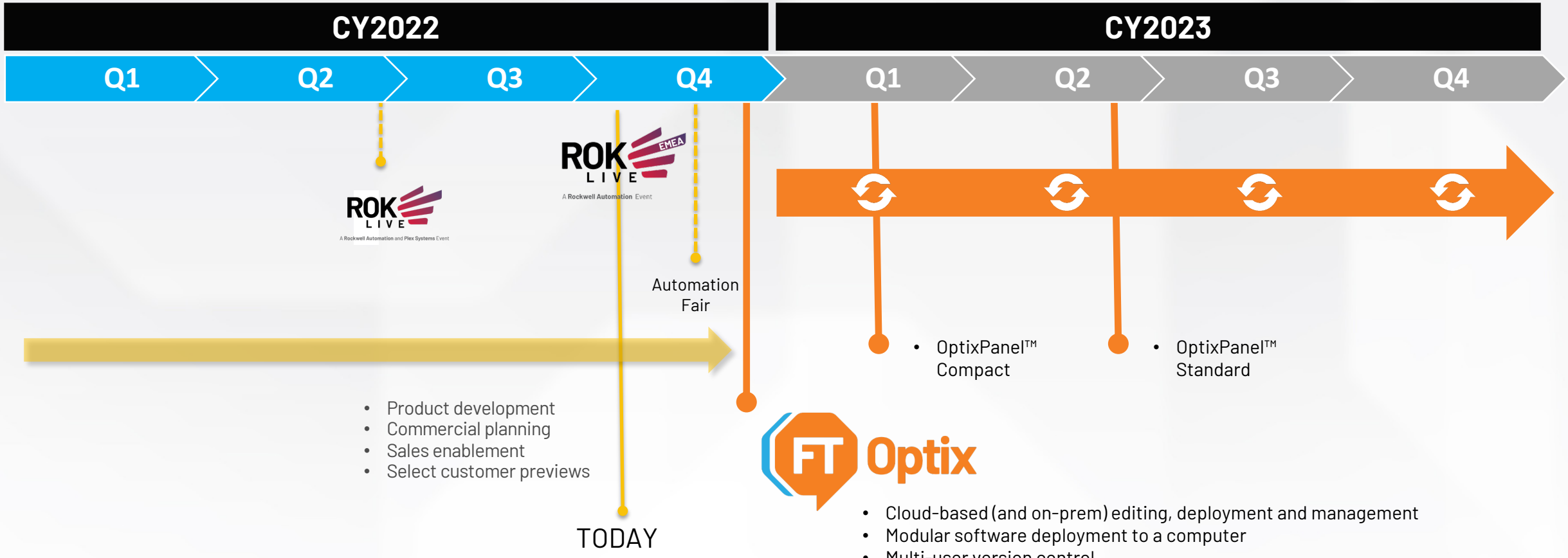
FT Optix

FactoryTalk® Optix™ timeline

Pre-release activities

Release planned, subject to change

Release highlights by calendar year



Visualization solutions with FactoryTalk® Optix™

	Modular HMI	Panel HMI	HMI SW Station
Key Value	Just enough software on small compute, not full featured HMI	Closed system Customer buys an HW panel with embedded SW	Full featured HMI on small footprint, small systems

Available in FY23	FT Optix Initial release	FT Optix	FT Optix Initial release

Embedded HMI terminal OptixPanel™ coming in 2023

What kind of HMI solution does a small/medium OEM need?

- Easily repeatable
- Cost-effective
- Minimal level of IT involvement
- Low-end IOT connectivity
- Simple machine monitoring

OptixPanel™

The embedded hardware solution optimized for FactoryTalk® Optix™

Compact

OEM focus – small machines, simple applications

- **Expected AFC: Q2, FY23**
- Specifications
  - ARM i.MX 8M Mini
  - Wide display sizes: 4.3″ and 7″
  - Resistive and PCAP touch

Standard

OEM focus – midrange machines and applications

- **Expected AFC: Q3, FY23**
- Specifications
  - ARM i.MX 8M Plus
  - Wide display sizes: 7″, 10.1″, 12.1″, 15.6″, 18.5″, 21.5″
  - 4:3 display sizes: 8.4″, 10.4″, 12.1″, 15″
  - Resistive and PCAP touch

Keep up with the latest news

FT Optix

FT Optix™

Introducing a new, **open**, and scalable visualization platform with **options**

Call to Action: Get involved and learn more

1. Visit our PRE-LAUNCH page to be among
   the first to learn more about features, availability, and pricing

2. Engage, the Rockwell Automation user community

   Join the **SaaS for Design Insights Community**
   to stay up-to-date, help us shape the future, and connect with other enthusiasts

http://factorytalkoptix.com

https://engage.rockwellautomation.com/communities/insights

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FactoryTalk by ROCKWELL AUTOMATION

Thank you!

FT Optix

Rockwell Automation

expanding **human possibility**®

Allen-Bradley by ROCKWELL AUTOMATION

LIFECYCLE IQ™ Services by ROCKWELL AUTOMATION

FactoryTalk by ROCKWELL AUTOMATION