

FACTORYTALK OPTIX

New, open, scalable visualization platform with options



v5.00 - December 25

æASEM•
A ROCKWELL AUTOMATION COMPANY

AGENDA



1

FactoryTalk
Optix Platform

2

Key Features

3

Business Model

FACTORYTALK OPTIX PLATFORM



THE FACTORYTALK OPTIX PLATFORM



FactoryTalk Optix for SCADA

- System configuration and monitoring
- Cloud-hosted deployment
- Remote manage and deployment



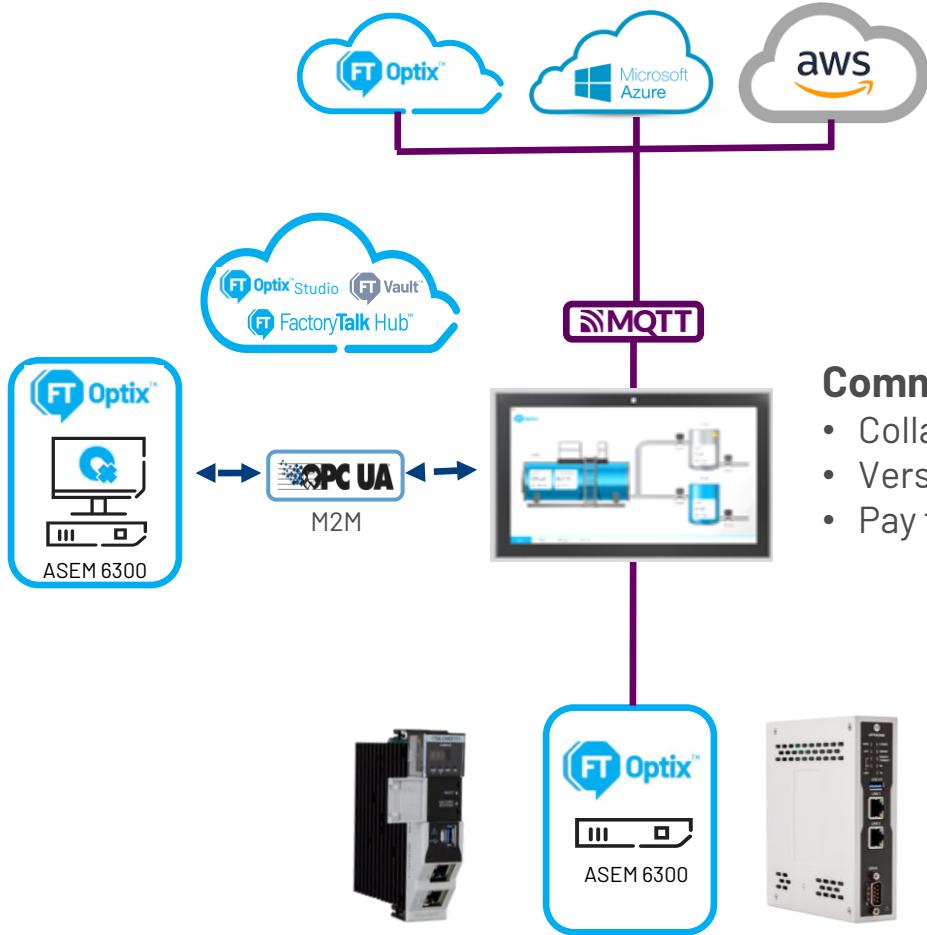
FactoryTalk Optix for HMI

- Responsive Graphics
- Embedded and Station deployment
- 3rd party Drivers
- MQTT & OPC UA



FactoryTalk Optix for Edge

- IOT connectivity
- Edge applications
- Run as a service
- Embedded runtime devices

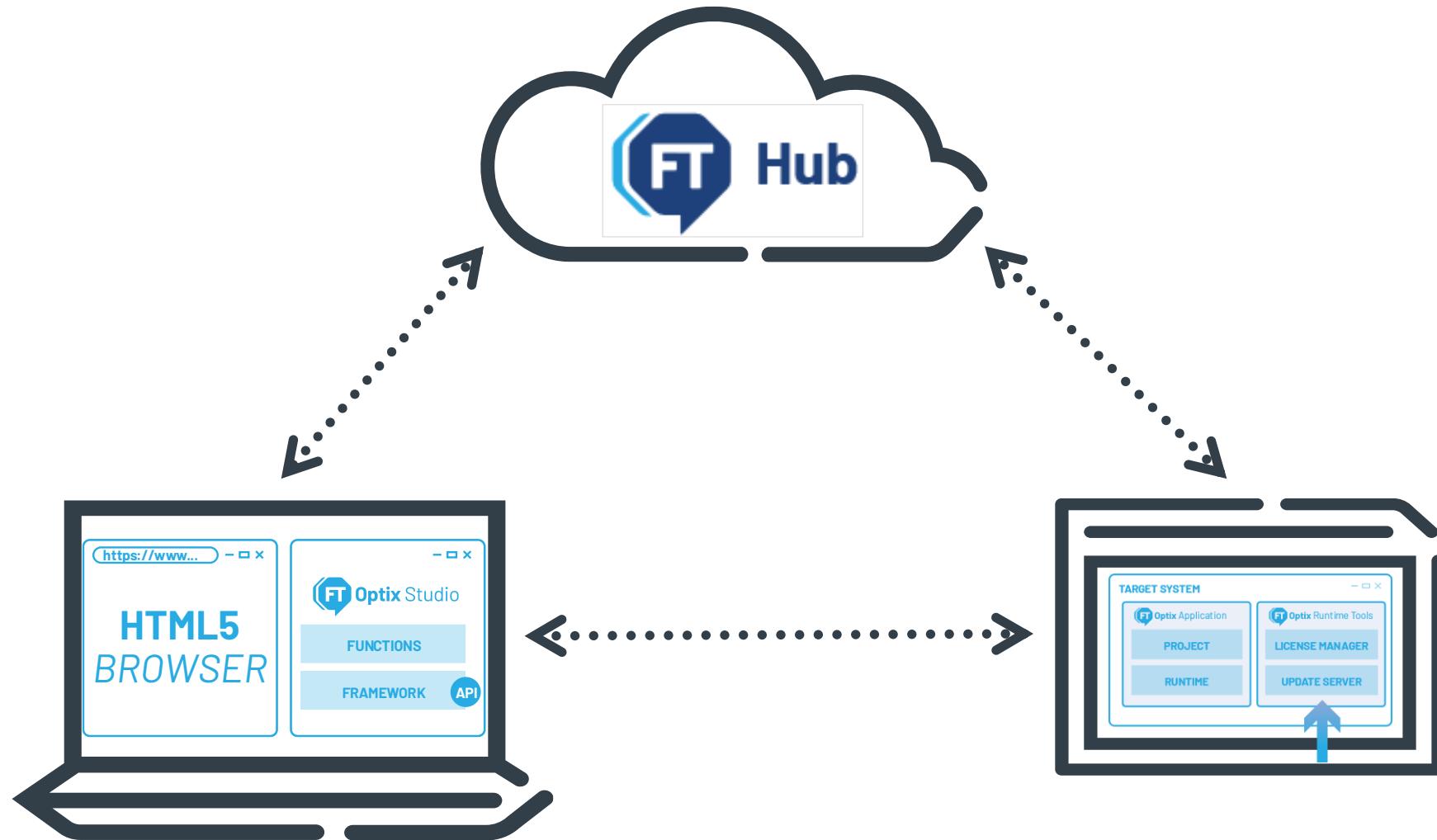


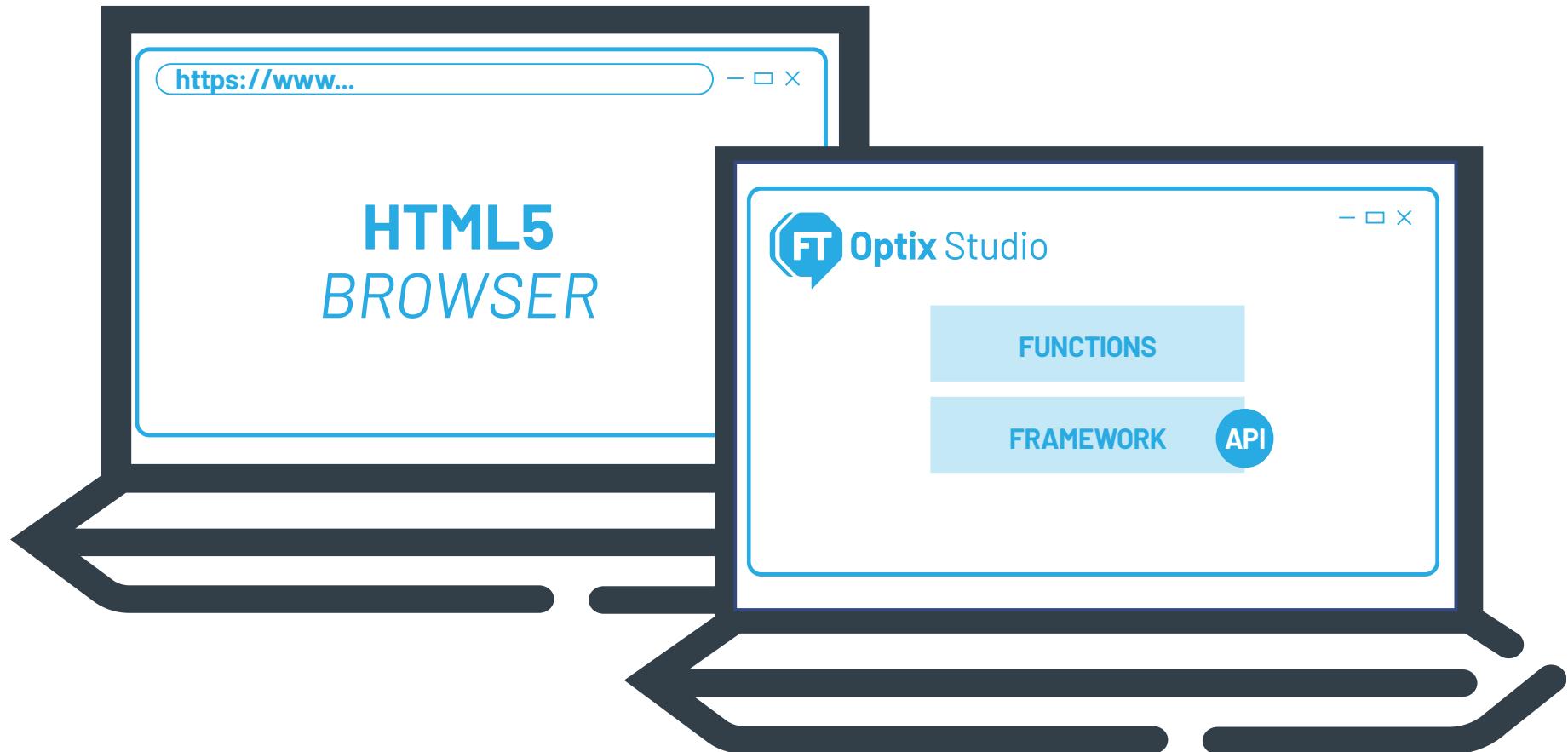
Common Platform

- Collaborative Workflows
- Version control
- Pay for only what you use



PLATFORM ARCHITECTURE







Cloud-native industrial automation design

- Modern software development
- Multi-user Collaboration
- Multi-controller Management



Open, scalable, flexible cloud-hosted HMI platform

- New visualization portfolio addition
- Web browser design, test, deploy
- Build once, deploy anywhere



Digital Engineering software in the cloud

- Arena®
- Studio 5000 Logix Designer®
- FactoryTalk® Logix Echo
- Emulate3D™



- Secure, cloud-native centralized storage
- Easily collaborate from a single source of truth



Remote Access™

- Secure connections to industrial equipment
- Rapidly respond to needs from anywhere



TARGET SYSTEM



Optix Application

PROJECT

RUNTIME



Optix Runtime Tools

LICENSE MANAGER

UPDATE SERVER



KEY FEATURES

KEY FEATURES - SUMMARY



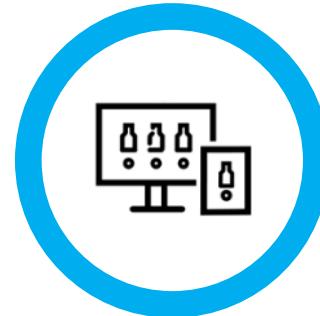
New, open, scalable visualization platform with **options**

DESIGN OPTIONS



Design and test your HMI projects in ways 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

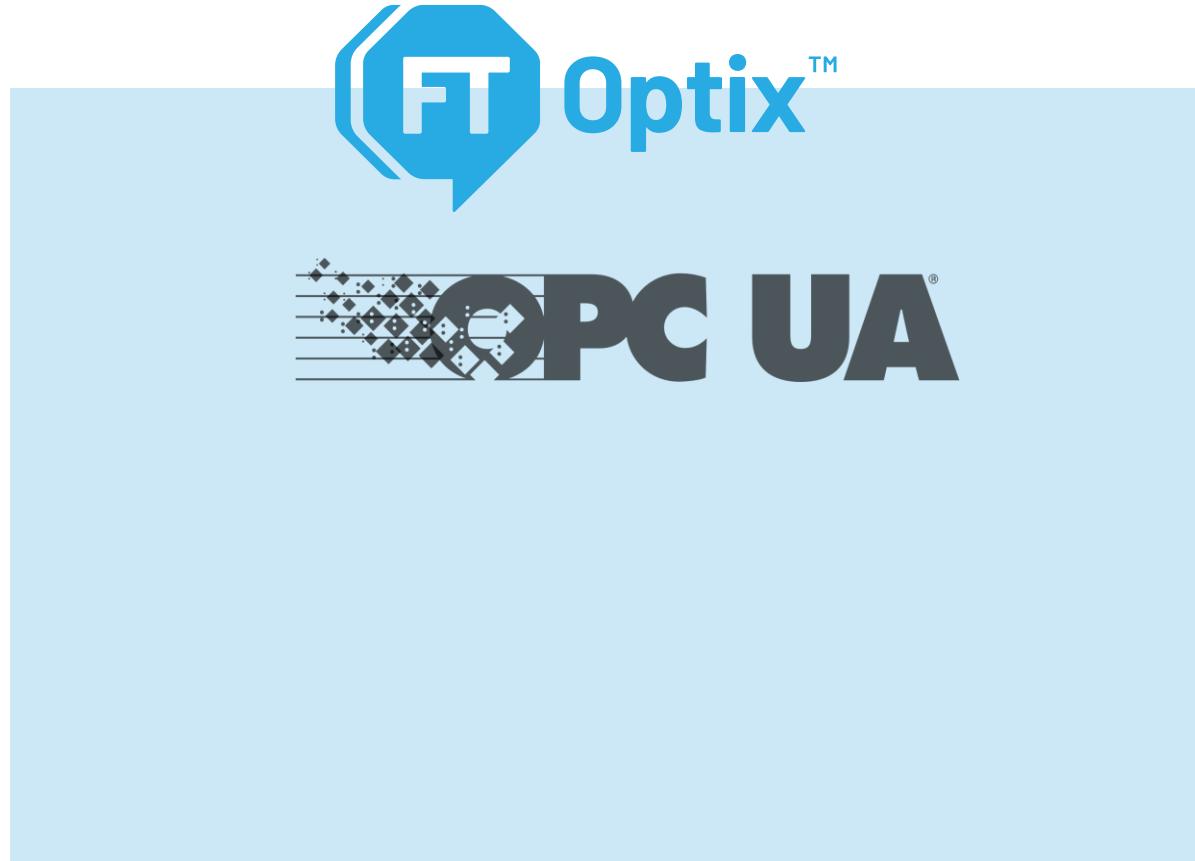
EXTENSIBLE OPTIONS



Built from the ground up with OPC UA and incredible extensibility



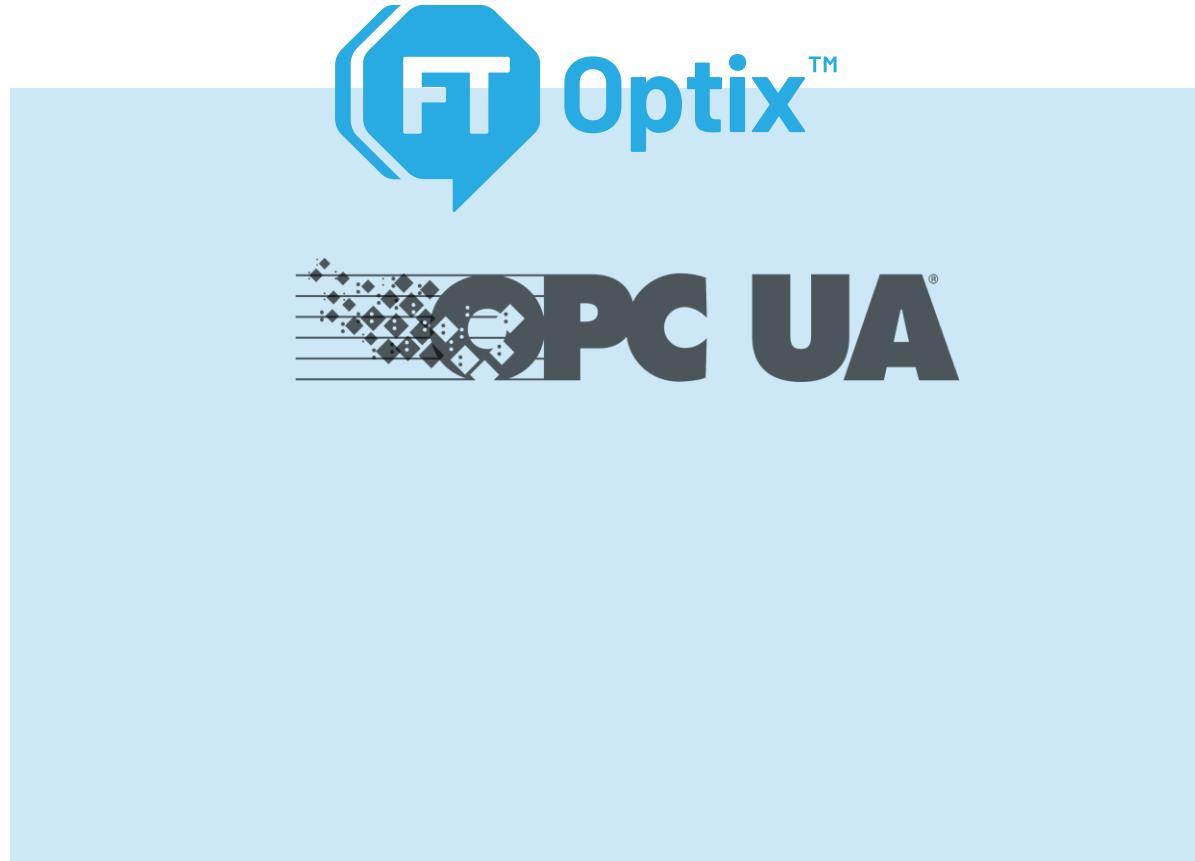
NATIVELY OPC UA



- **Natively based** on the OPC-UA standard
 - Data Access
 - Alarm and Conditions
 - Historical Access
- All **project's resources** can be exposed as **OPC UA objects** by the OPC UA Server



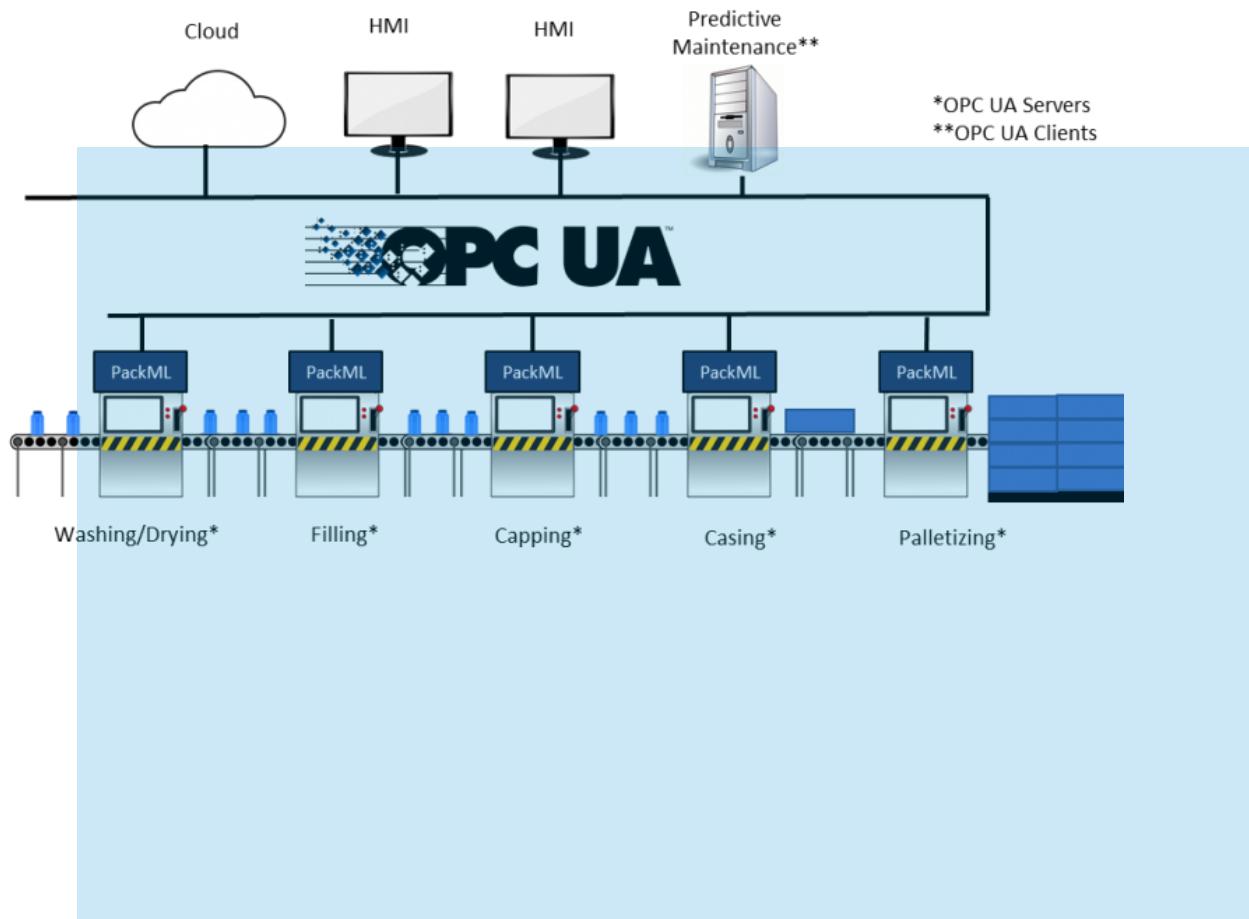
NATIVELY OPC UA



- FT Optix applications as **Client-Server** architectures
- Full support of **Companion Specifications**
 - MTP, PackML, Machinery...



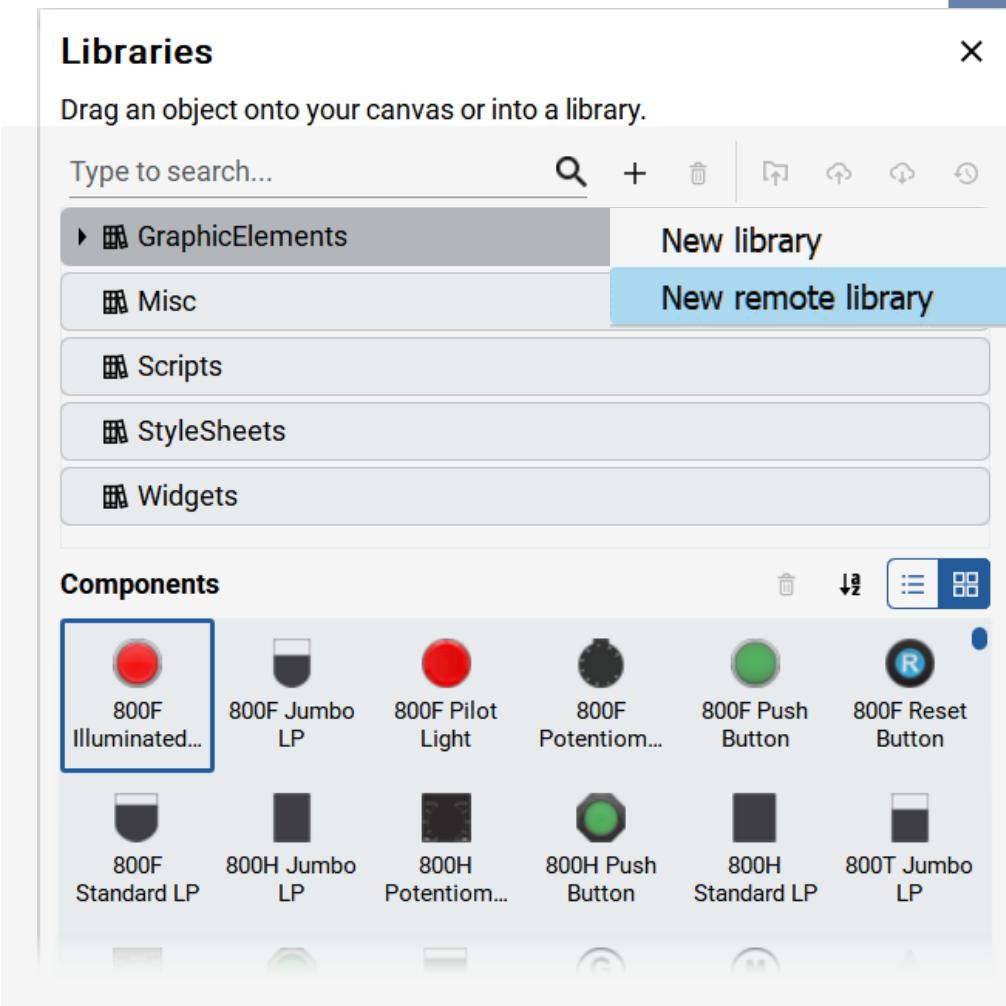
COMPANION SPECIFICATIONS



- The Companion Specifications are **information models** built by industry groups on the basis of the OPC UA Standard Model.
- They define:
 - Data types
 - Methods
 - State Machines
- for **industry-specific** applications and objects.

LIBRARIES

- Widgets, Scripts and **Graphic Elements**
- Search to quickly find and filter objects
- Custom libraries with Multi-user collaboration through Git integration





SCRIPTING

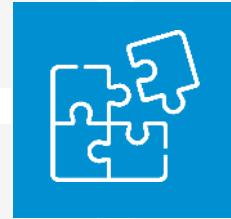
OPEN API

C# language

Edit and **debug** via Visual Studio
or Visual Studio Code

INTEGRATION

Integrate existing libraries
or **3rd party** code



CUSTOMIZATION

Create Runtime logic for
customized functionalities

Extend the source code
of native features

AUTOMATION

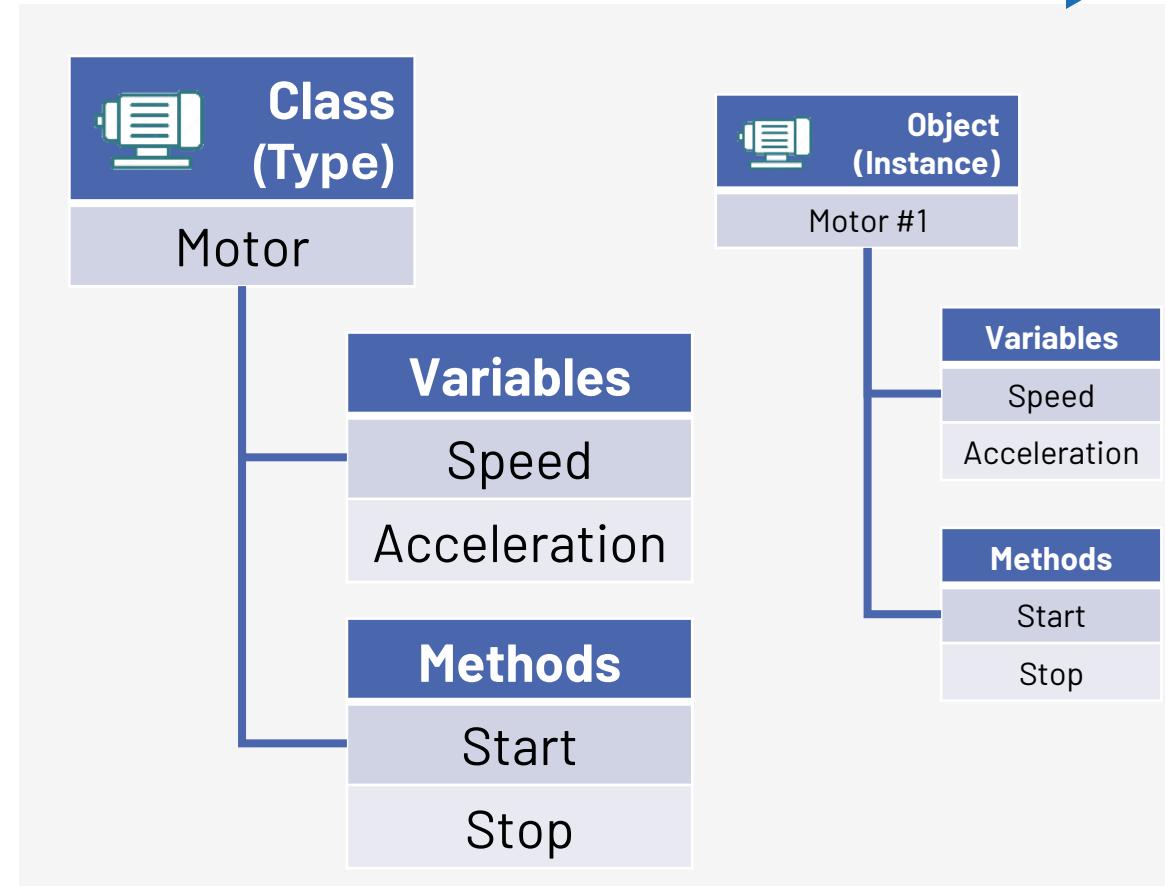
Automate tasks by executing
scripts at **Design time**

Generate parts of the project
at **Runtime**

OBJECT-ORIENTED PROGRAMMING



- Create **modular, reusable** components
 - Variables
 - Widget
 - **Core components**
(alarms, datalogger...)
- Project development become
 - more **efficient**
 - more **maintainable**



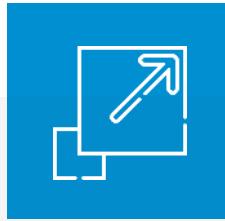


STUDIO WITH SOFTWARE-AS-A-SERVICE MODEL



COST SAVING

Use without spending time on installation, upgrade, maintenance



SCALABILITY

Subscription model allows to scale as needed



WHATEVER VERSION

Access to the latest version and to all previous ones



ANYWHERE ACCESS

Access from any PC with an internet connection



STUDIO WITH SOFTWARE-AS-A-SERVICE MODEL



Don't have Studio installed on your PC?

Design, test, and deploy your HMI projects directly from a web browser



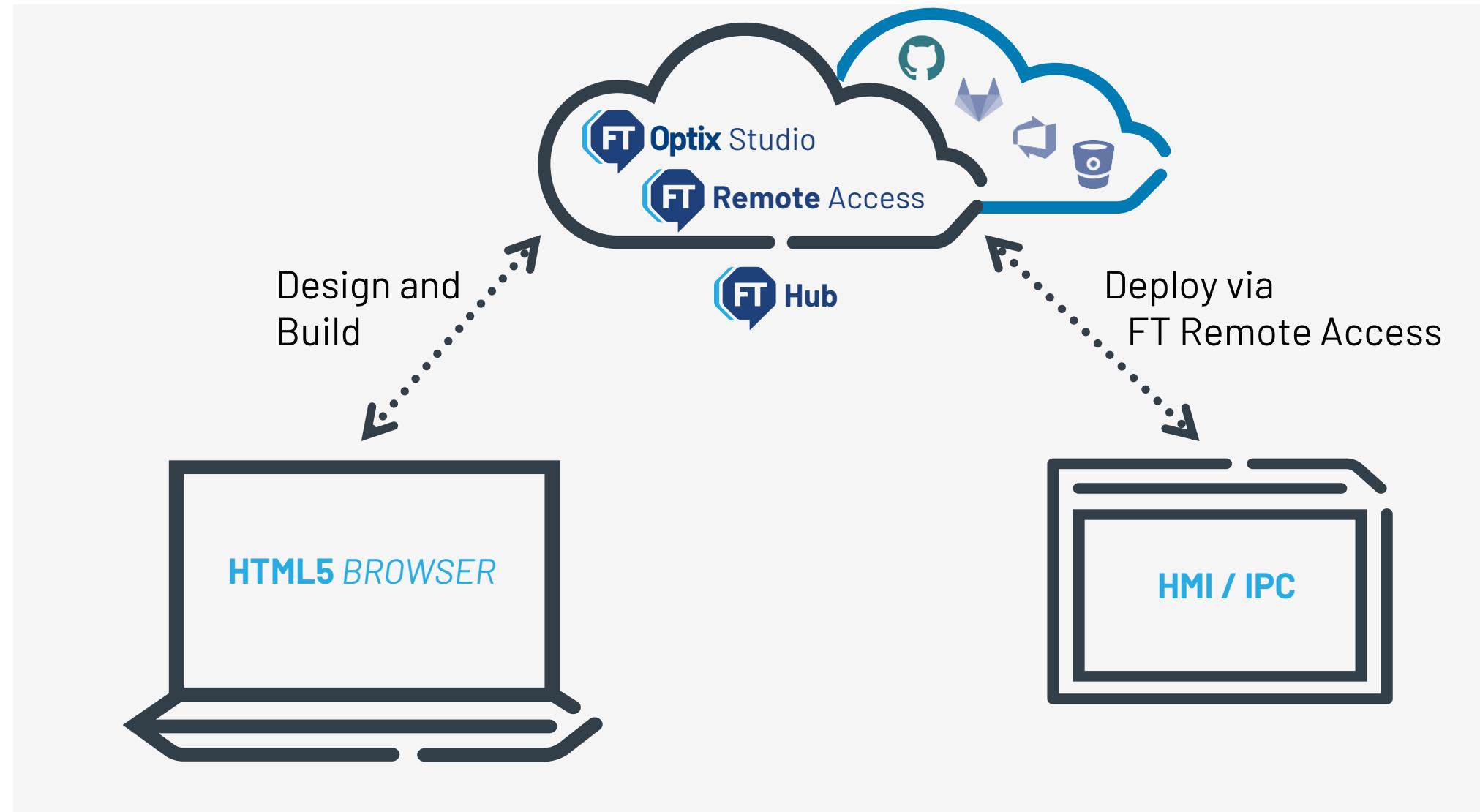
No internet connection?

Install or Use FactoryTalk Optix Studio locally on your laptop

SEAMLESSLY TRANSITIONS FROM WEB TO DESKTOP APP



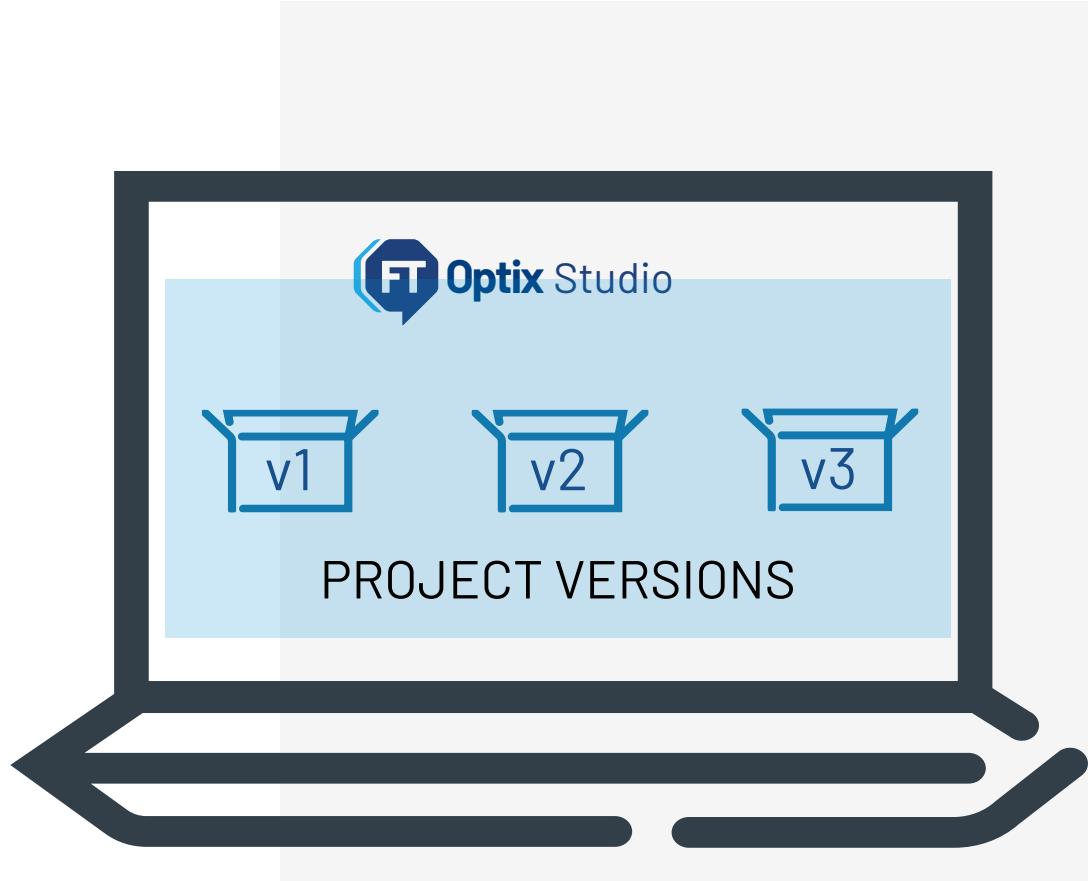
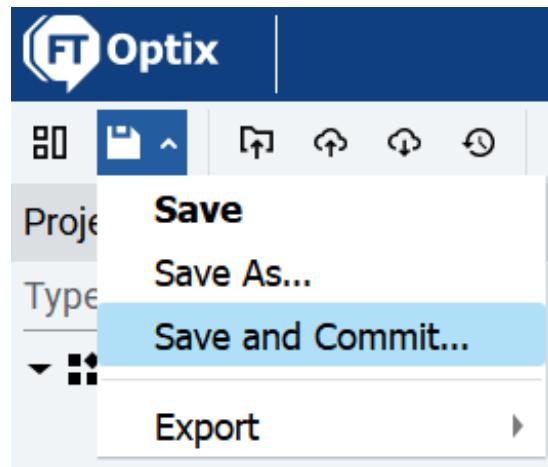
STUDIO WITH SOFTWARE-AS-A-SERVICE MODEL





VERSION CONTROL SYSTEM - LOCAL

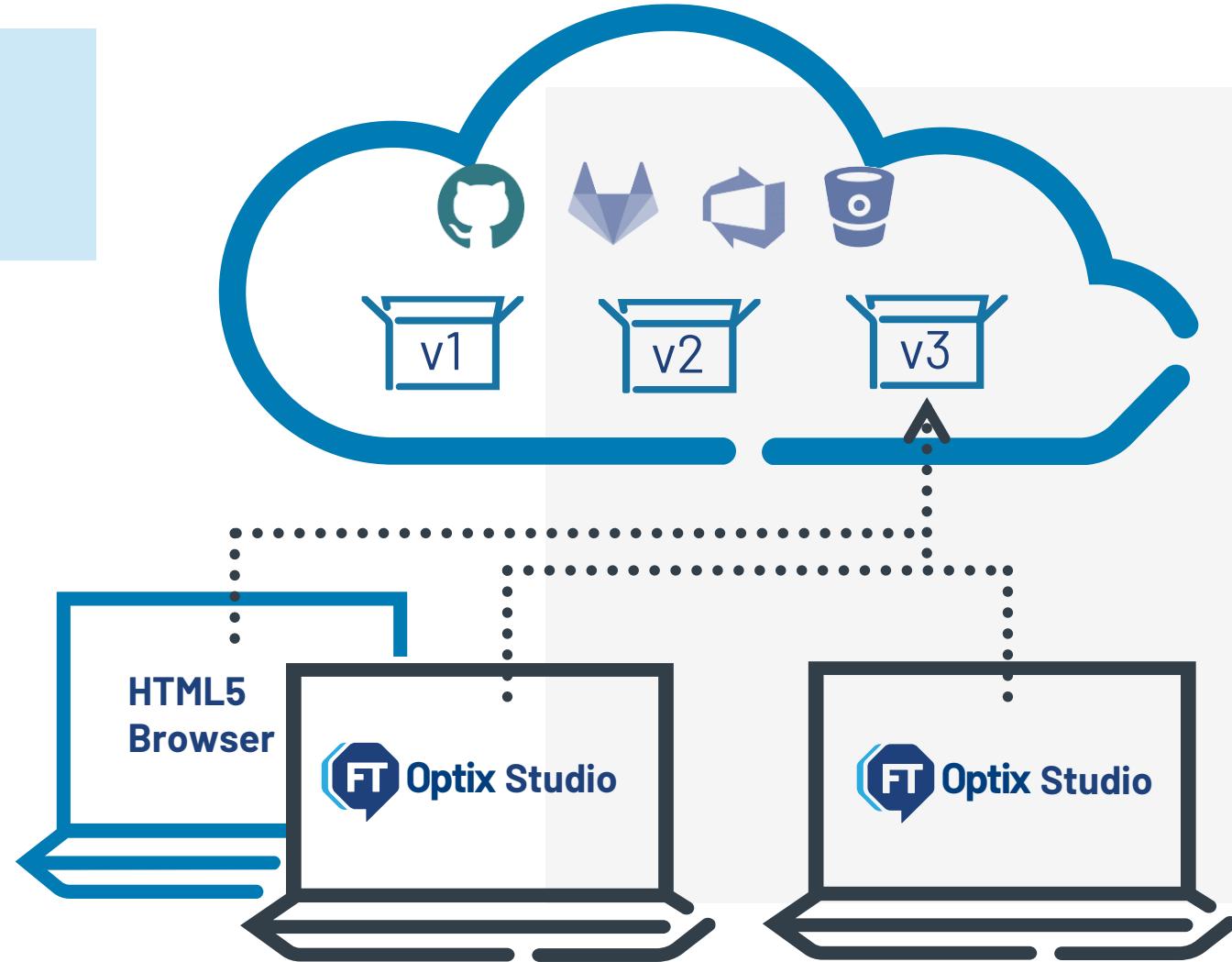
- The Optix project contains a local VCS database (Git)
- No more need of «Save as» or «Zip» files



VERSION CONTROL SYSTEM - REMOTE



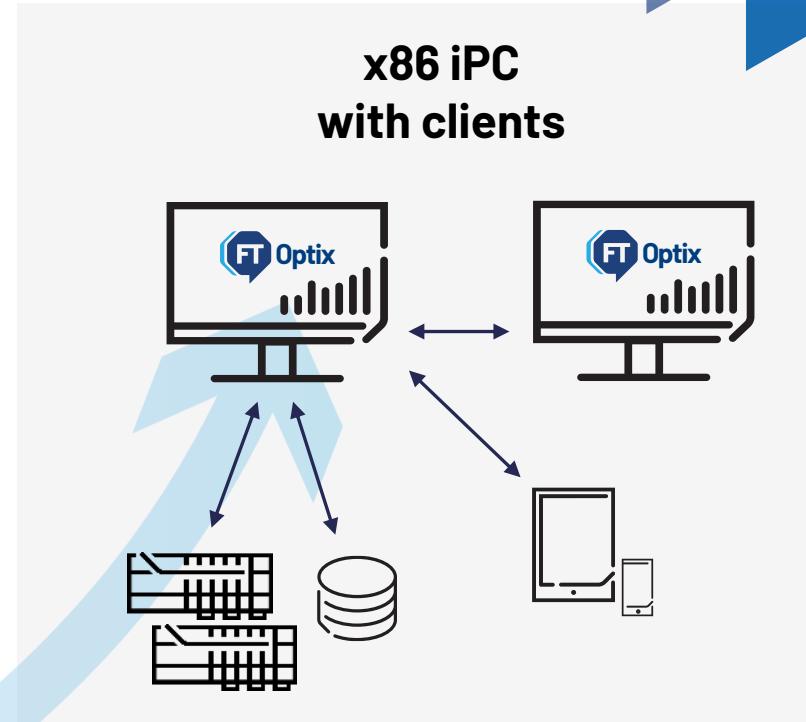
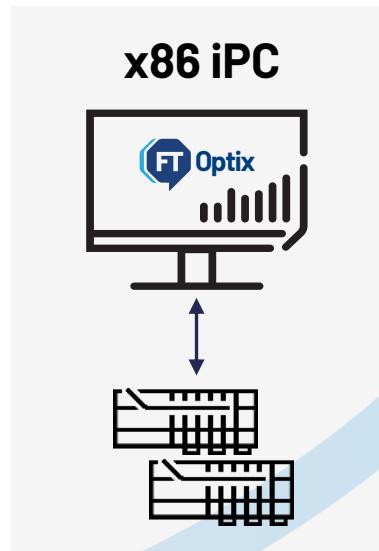
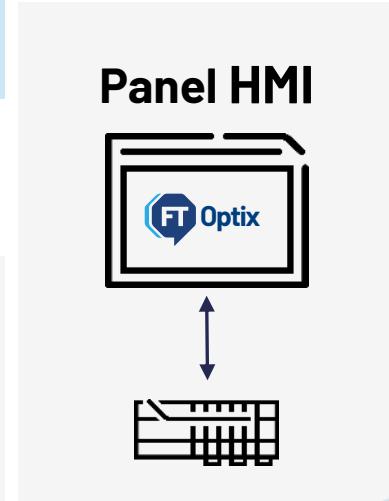
- Enable the Multi-user collaboration



CROSS-PLATFORM: SCALABLE ARCHITECTURES



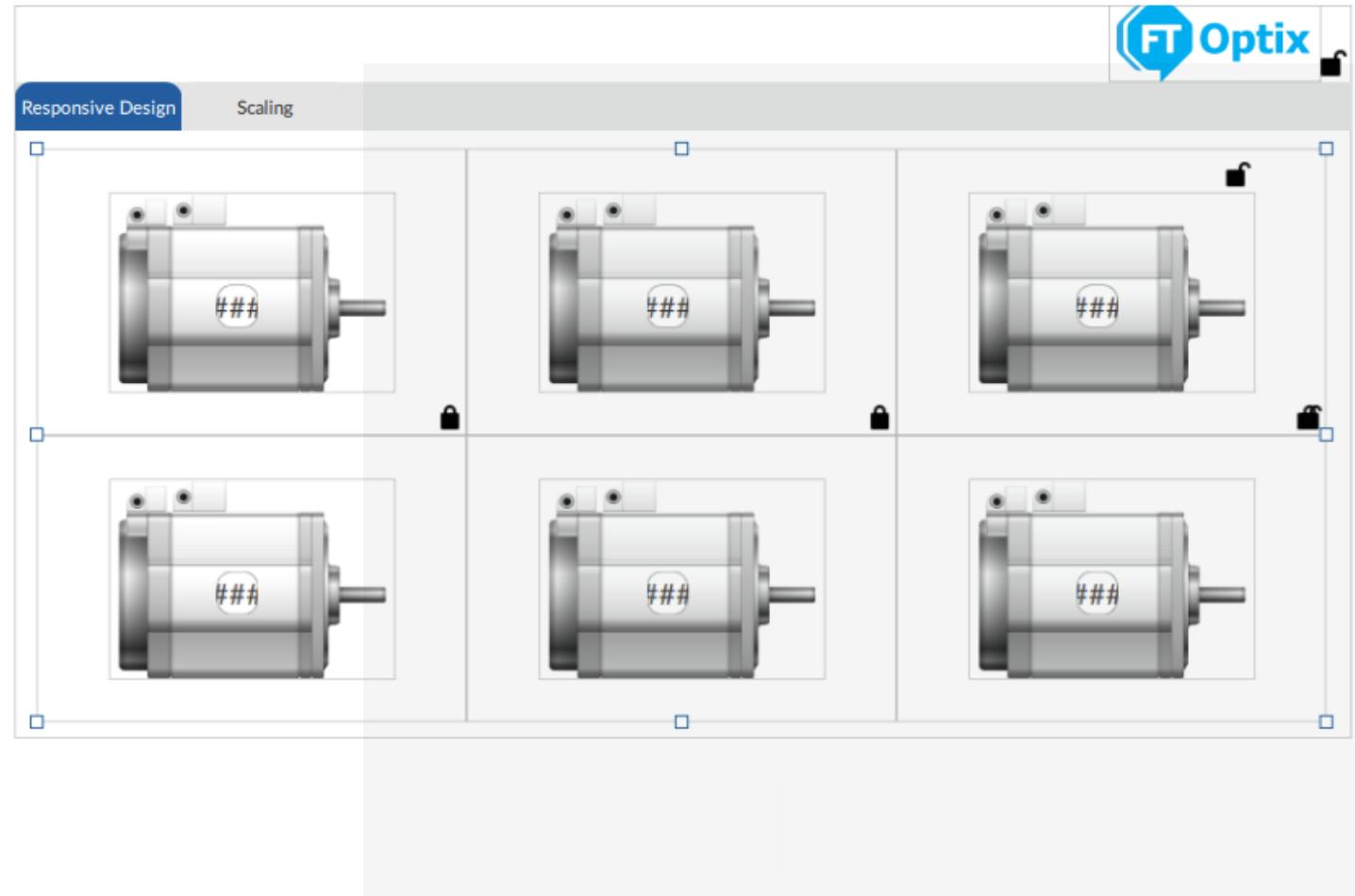
- Hardware Architectures
 - ARM
 - x86
- Operating Systems
 - Windows
 - Linux





UNIVERSAL UI

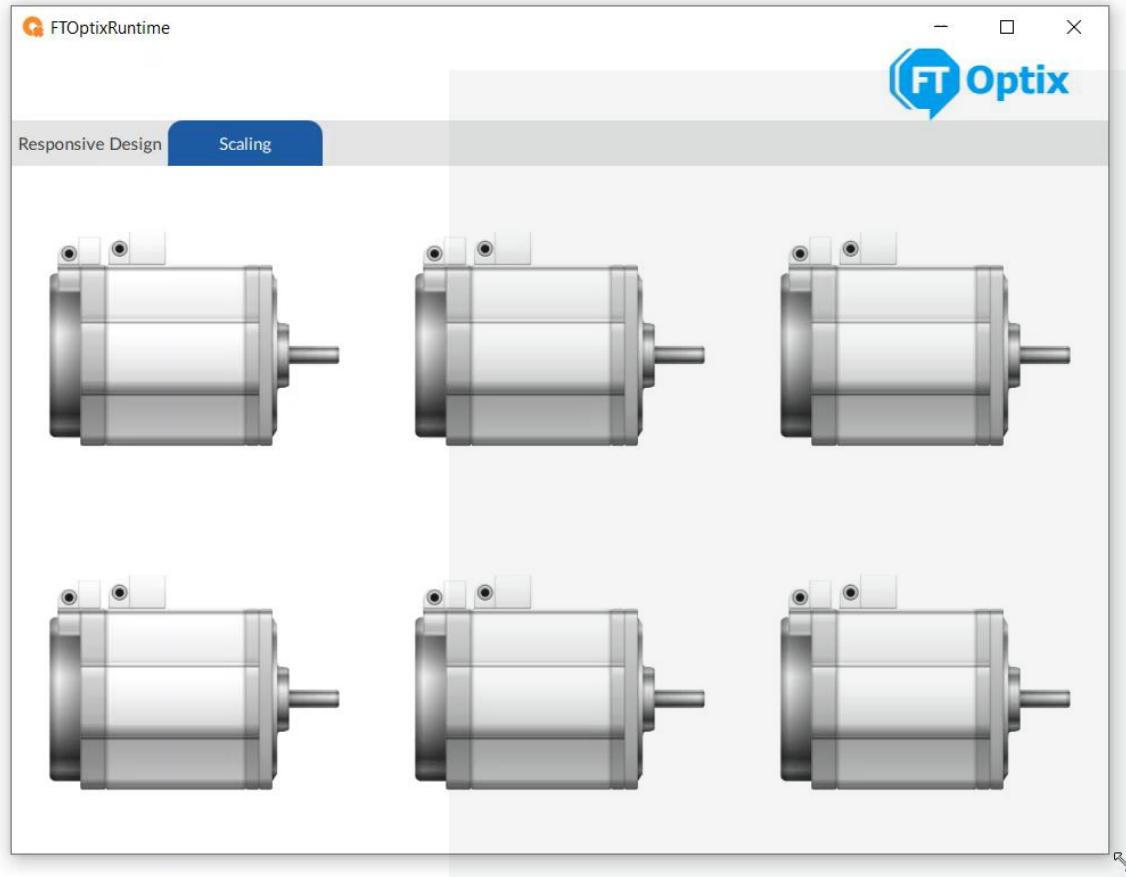
- **Responsive Design** aims to make pages render well on a variety of screen sizes
- 4:3 \leftrightarrow 16:9
- Ensure usability





UNIVERSAL UI

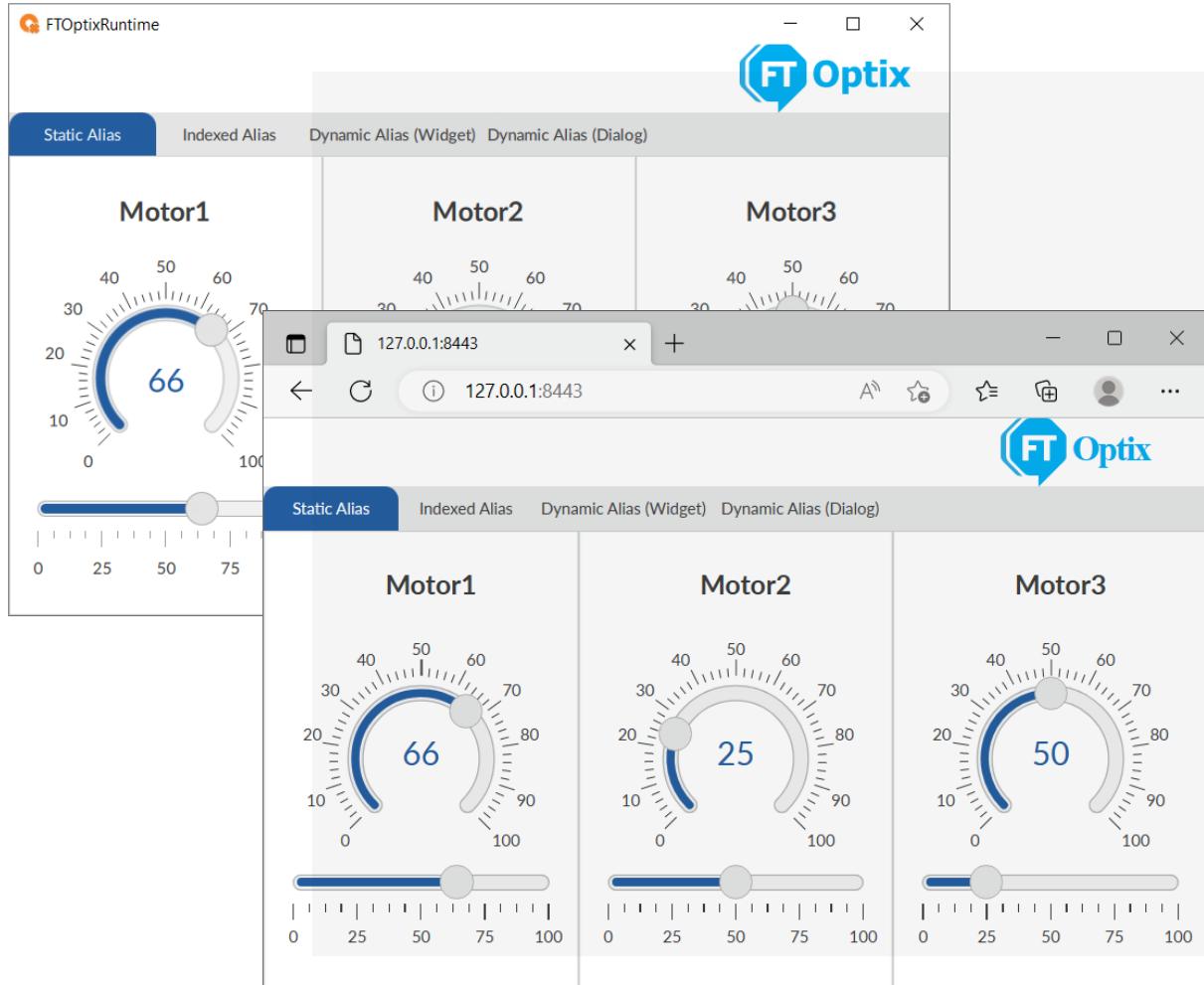
- **Scale Layout**
enhance the
Responsive Design
- can be used
to scale
the whole page





UNIVERSAL UI

- **Web UI** with the same user experience as Native UI
- Independent sessions
- No conversion tool
- No adjustment
- No compromise



BUSINESS MODEL



FACTORYTALK OPTIX STUDIO

STANDARD

- Install on your PC
- Design and Deploy application from your PC



FREE

PRO

STANDARD capabilities plus...

- Design application using **web-based** Studio
- Use the **Version Control System** for Project and Libraries using Remote repository as well as Local repository

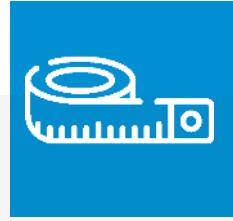
Annual subscription per User



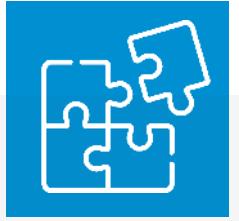
FACTORYTALK OPTIX RUNTIME - FEATURE TOKENS



INNOVATIVE
AND FLEXIBLE



TAILORED SIZE



LEVERAGES
MODULARITY



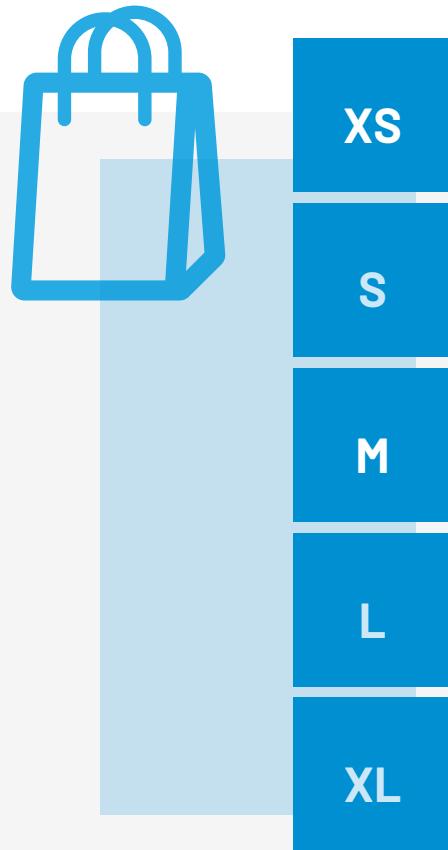
NO LIMITATIONS
ON EACH
FEATURE

FACTORYTALK OPTIX RUNTIME – FEATURE TOKENS



- Every **feature** used by the Runtime has a cost in **Tokens**
- License **size** defines the number of Tokens available

SIZE	RUNTIME FOR IPC
XS	5
S	8
M	11
L	15
XL	21





FACTORYTALK OPTIX RUNTIME - FEATURE TOKENS

FREE

Libraries

FREE

Multimedia
contents

FREE

Converters

FREE

Embedded
database

FREE

Local Users
and security *

FREE

International
settings

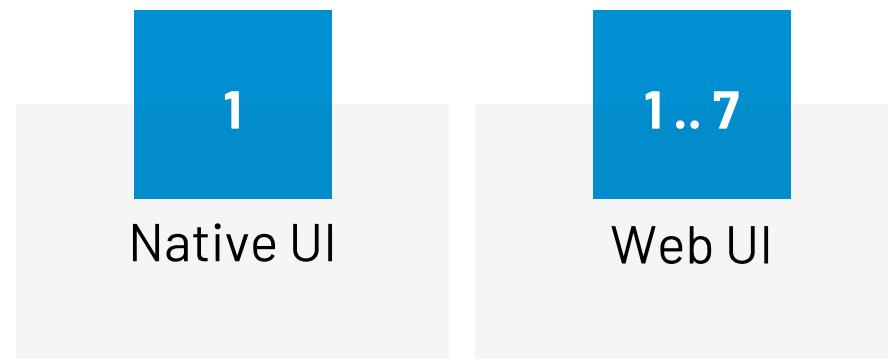
FREE

Scripting

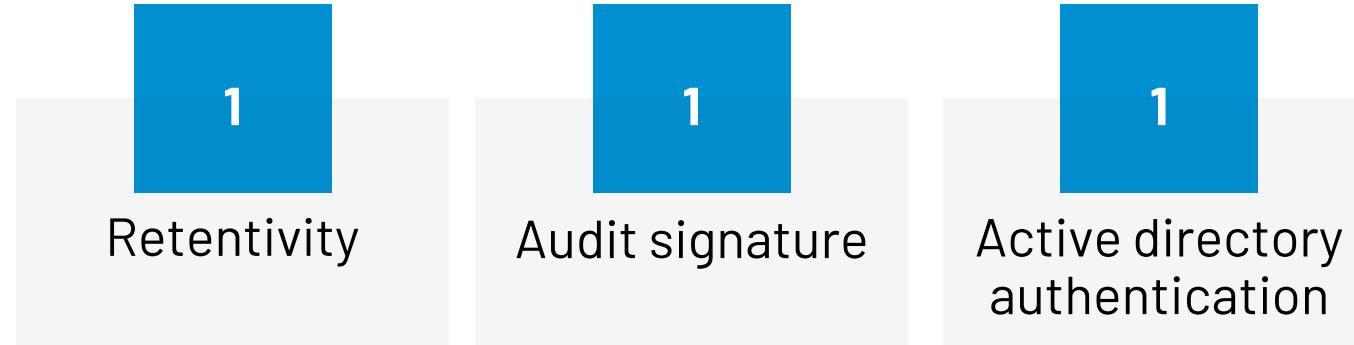
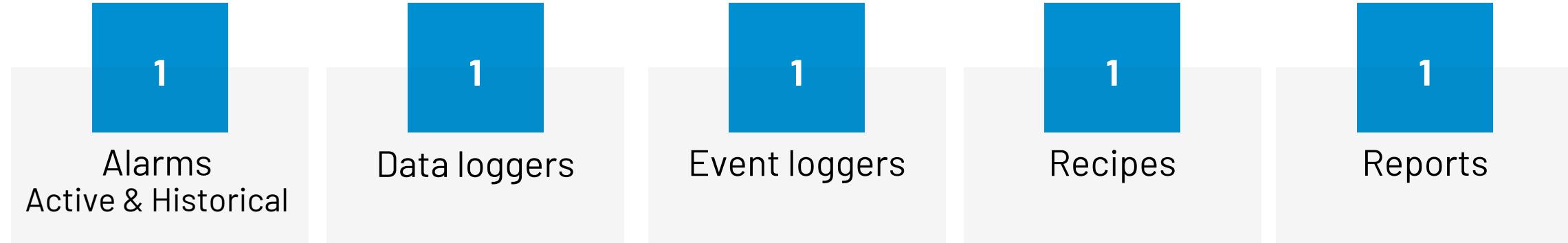
* with Runtime changes and retentivity



FACTORYTALK OPTIX RUNTIME - FEATURE TOKENS



CLIENTS	UP TO 1	UP TO 3	UP TO 5	UP TO 10	UP TO 20
Tokens	1	2	3	5	7





FACTORYTALK OPTIX RUNTIME - FEATURE TOKENS

1..3

ODBC database

DATABASES	UP TO 1	UP TO 3	UP TO 5
-----------	---------	---------	---------

Tokens	1	2	3
--------	---	---	---

1..7

OPC UA Server

CLIENTS	UP TO 1	UP TO 3	UP TO 5	UP TO 10	UP TO 20
---------	---------	---------	---------	----------	----------

Tokens	1	2	3	5	7
--------	---	---	---	---	---

1..2

OPC UA Client

1..2

Every Comm
Driver

STATION	SINGLE	MULTIPLE
---------	--------	----------

Tokens	1	2
--------	---	---

For **RA Ethernet/IP** driver the
1st Station is free
if Runtime is running on
ASEM 6300, ASEM Classic
or OptixPanel



FACTORYTALK OPTIX RUNTIME - FEATURE TOKENS EXAMPLE

SMALL HMI

Native UI	1
Web UI (up to 1 clients)	1
Alarms + Alarms History	1
Data logger	1
Recipes	1
1x Comm Driver (multiple stations)	2
TOTAL	7



MEDIUM HMI

Native UI	1
Web UI (up to 3 clients)	2
Alarms + Alarms History	1
Data logger	1
Retentivity	1
Recipes	1
OPC UA Server (1 client)	1
1x Comm Driver (multiple station)	2
TOTAL	10





GRAZIE



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