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THINK neo.

Welcome to the Future of Process Automation

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Agenda Innovation Day SIMATIC PCS neo



Process Industries



08:00

- Breakfast and registration

08:30

- Welcome ←

08:40

- Why a new DCS?

09:00

- Introduction to PCS neo: System Access

09:40

- “Kahoot Break”

09:45

- Introduction to PCS neo: Usability:

10:15

- Coffee

10:45

- Introduction to PCS neo: Scalability

11:15

- Introduction to PCS neo: Collaboration

11:45

- “Kahoot Break”

11:50

- Introduction to PCS neo: Digitalization

12:00

- Introduction to PCS neo: IT-Security

12:10

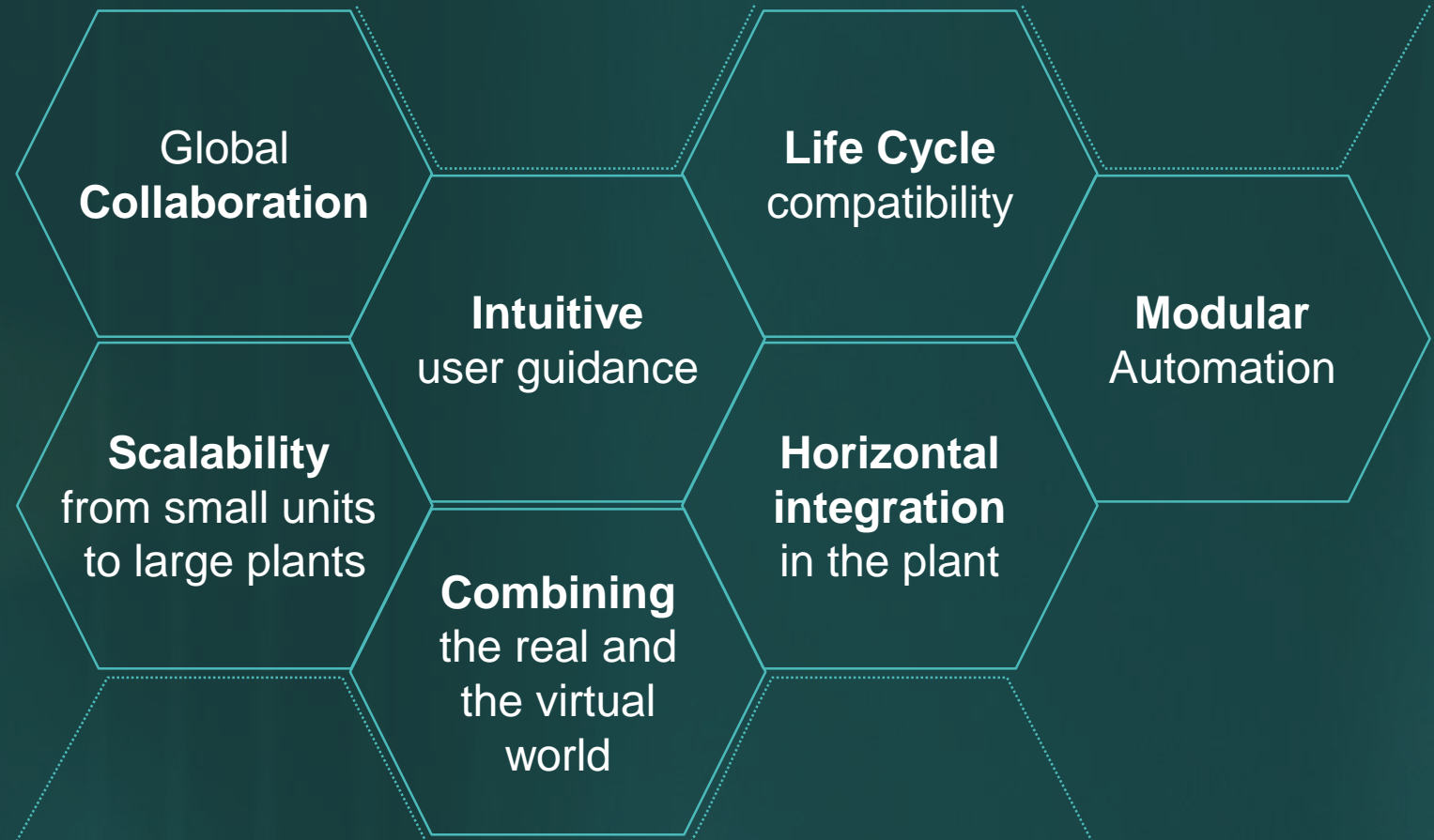
- Q&A (time buffer)

12:30

- Lunch and networking

Industry requirements for Distributed Control Systems in the context of digitalization

Process Industries



The journey begins with SIMATIC PCS 7



SIMATIC PCS 7

State-of-the-art Process Control System,
future-proof and fit for digitalization

- More than 20 years experience and understanding of customer needs
- Efficient Engineering with libraries and reuse of flexible controls
- Innovative I/O periphery and controller hardware with PROFINET communication

The journey begins with SIMATIC PCS 7



SIMATIC PCS 7 V9.0 opens up new opportunities with its new hardware platform based on PROFINET standard:

With SIMATIC PCS 7 V9 Siemens has recently introduced such an **innovative hardware** ...

... that we can build the most innovative system software on it.
The Process Control Innovation in 2019.

With PCS 7 V9.0 users are very well prepared for a Digital Future.

The Process Control Innovation that saves your Know-How and protects your invest!

Introducing a Process Control Innovation in a market struggling between innovation and continuation with 30+ years of plant lifecycle!

Riding the wave of innovation in Process Automation



SIMATIC PCS 7 Version 8.x
System Software Innovation

2011-2016

SIMATIC PCS 7 Version 9.0
Hardware Innovations

2017

SIMATIC PCS neo
New System Software

2019

Software Evolution: Application Architecture
Control Module Types, Advanced Process Library, ...

Saves
your
know-
how!

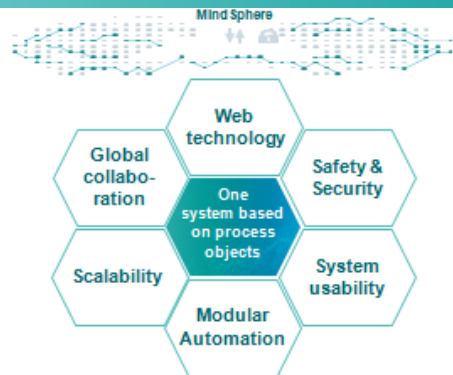
Hardware Evolution

PROFINET for Process Industry, SIMATIC ET 200SP HA, SIMATIC CFU, ..

Protects
your HW
invest!

What is “Process Control Innovation” Simplified Schema

New System Software



... using the same
application architecture
as SIMATIC PCS 7 ...

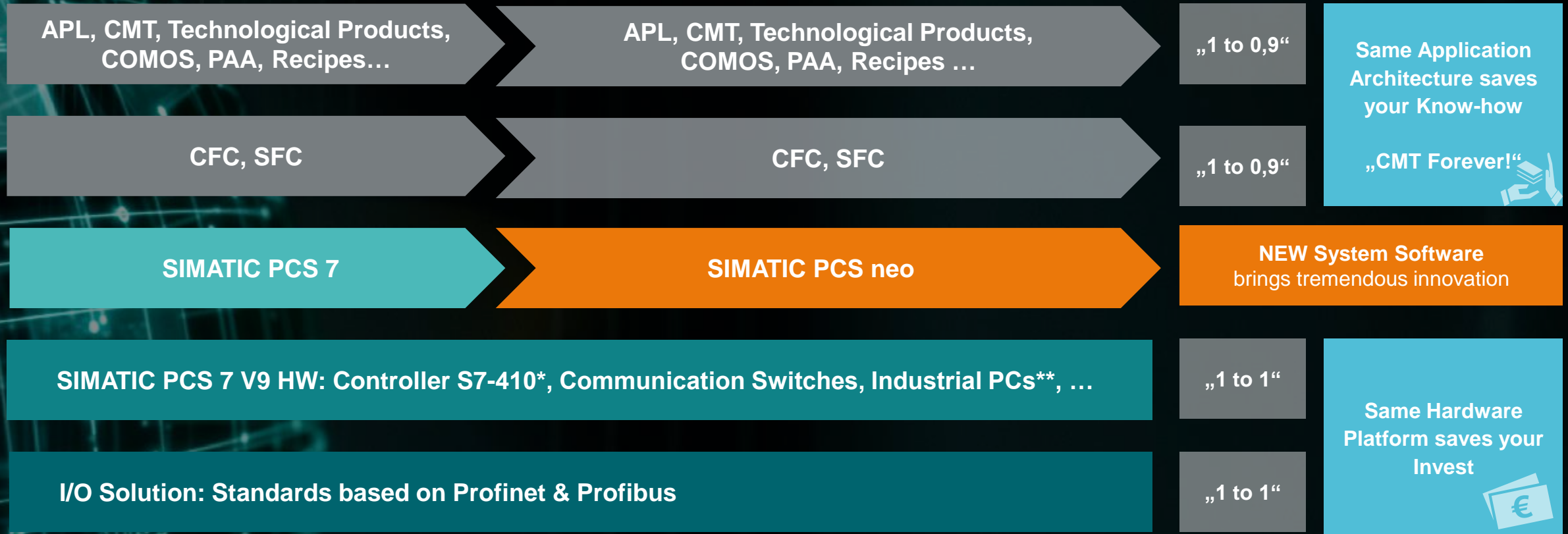


Hardware SIMATIC PCS 7 V9.0



Invest protection and Know-How through Evolution Approach!

Lowest Effort conversion from SIMATIC PCS 7 to SIMATIC PCS neo



*After firmware update, ** PC: IPCs of current version or SIVAS can be used further

Enter a new world of process control technology



Based on
the
hardware
known from
**SIMATIC
PCS 7**

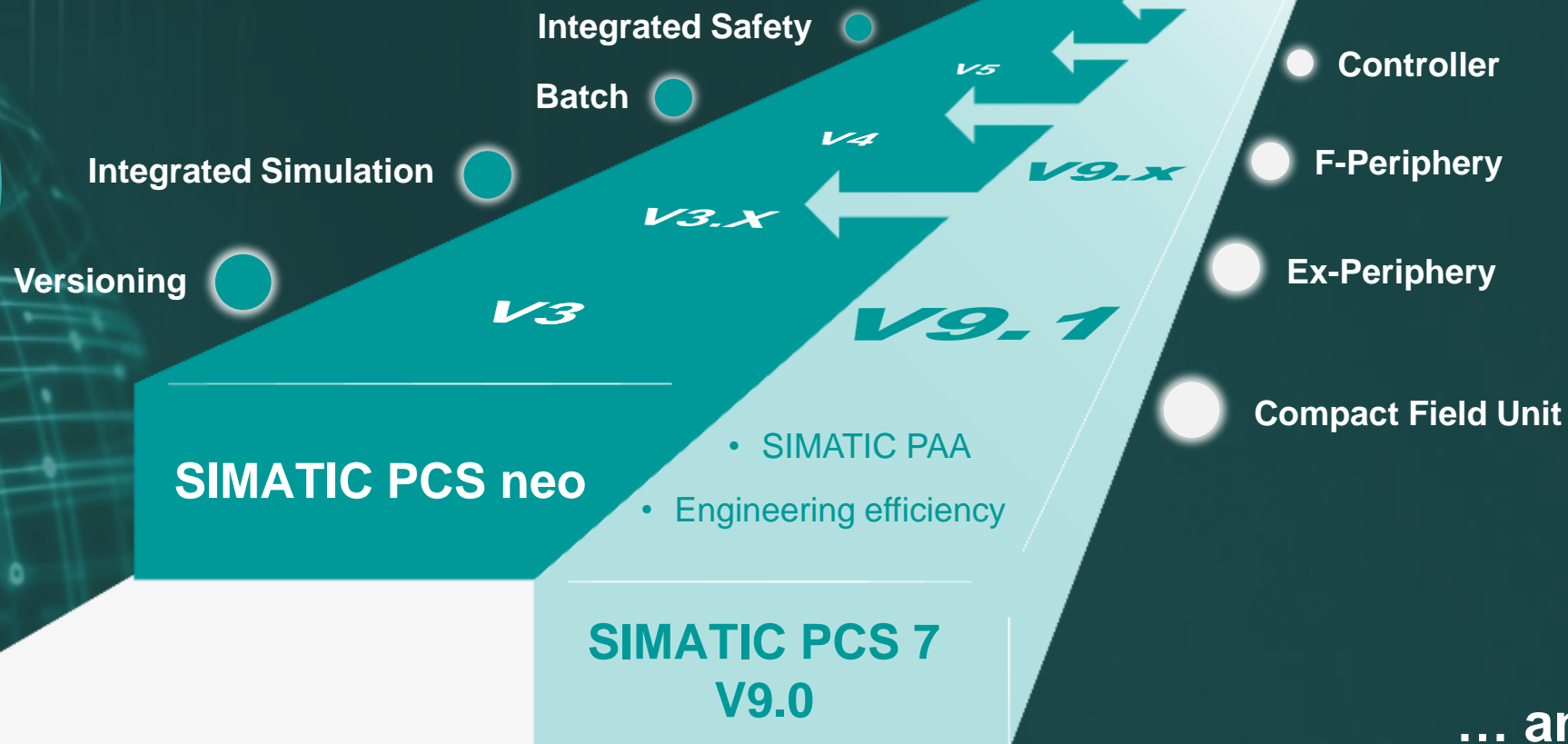
- **Web-based multi-user engineering**
for more than 30 engineers, who can work without
any installation globally at the same
- **Intuitive user interface**
for any user group and each application
- **Object-oriented data management**
for highly efficient workflows and maximum
reusability in a clear software structure
- **Open and flexible architecture**
for modular automation and highest scalability



The common hardware basis
for future innovation...



Customers
can define
the time to
switch.



ONE HARDWARE PLATFORM

... and maximum
investment protection!

SIMATIC PCS neo - introducing with a clear market focus

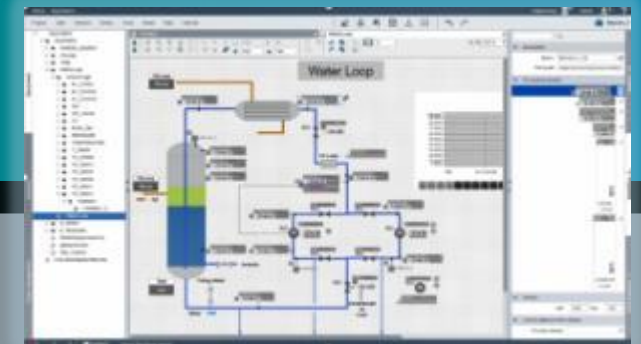


SIMATIC PCS 7

- Widest range of applications for all process industries
- Continuous processes, as well as batch and regulated industries
- Greenfield and brownfield

SIMATIC PCS neo

- Chemical, water and plant infrastructure
- Continuous processes, from process modules to world-scale plants
- Greenfield



Software Evolution

Control Module Types, Advanced Process Library, ...

Hardware Evolution

PROFINET for Process Industries, SIMATIC ET 200SP HA, SIMATIC CFU, ...

There are four possible situations for your Plant ... in the starting phase ...



Greenfield and brownfield projects

Evaluation of User Requirements

Greenfield Projects with
requirements covered by
Process Control Innovation



Projects with requirements not
yet covered by Process Control
Innovation



Select SIMATIC PCS 7 V9

Keep
„Ready for future switch“
criteria –



Evolution of SIMATIC PCS 7 systems

There is no need to switch now

**Plant with
SIMATIC PCS7 V9**



Operate SIMATIC PCS 7 V9

You can already adapt to
„Ready for future switch“
criteria.



**Plant with SIMATIC PCS 7
older than V9**



Operate SIMATIC PCS 7

If you want to modernize now,
go to SIMATIC PCS 7 V9.0



SIMATIC PCS 7 V9



You define when you switch! ... with the lowest effort conversion/ evolution

SIMATIC PCS neo

The innovation that saves your Knowledge & Applications



- » S7-410 / Current Network Components
- » Current supported periphery (e.g. ET 200M, ET 200SP HA, CFU, ...)
- » PCS 7 standard SW (CFC, SFC, F-Systems, Batch/Recipes, ...)
- » Advanced Process Library
- » CMT/ Engineering Types
- » Technology products (Industry Library, Logic Matrix, APG, ...)
- » Compendium conform engineering
- » Plant Automation Accelerator (PAA)/ COMOS

Ready!

SIMATIC PCS 7 applications will easily be transferred to SIMATIC PCS neo*



You can easily switch at a point of time which you can define using **Transfer Tools** (DCS based, COMOS based) and easy **interfacing options!** ("Seamless evolution")

* HMI / OS-Graphics need to be transferred to HTML 5

Evolution & Migration

Evolution

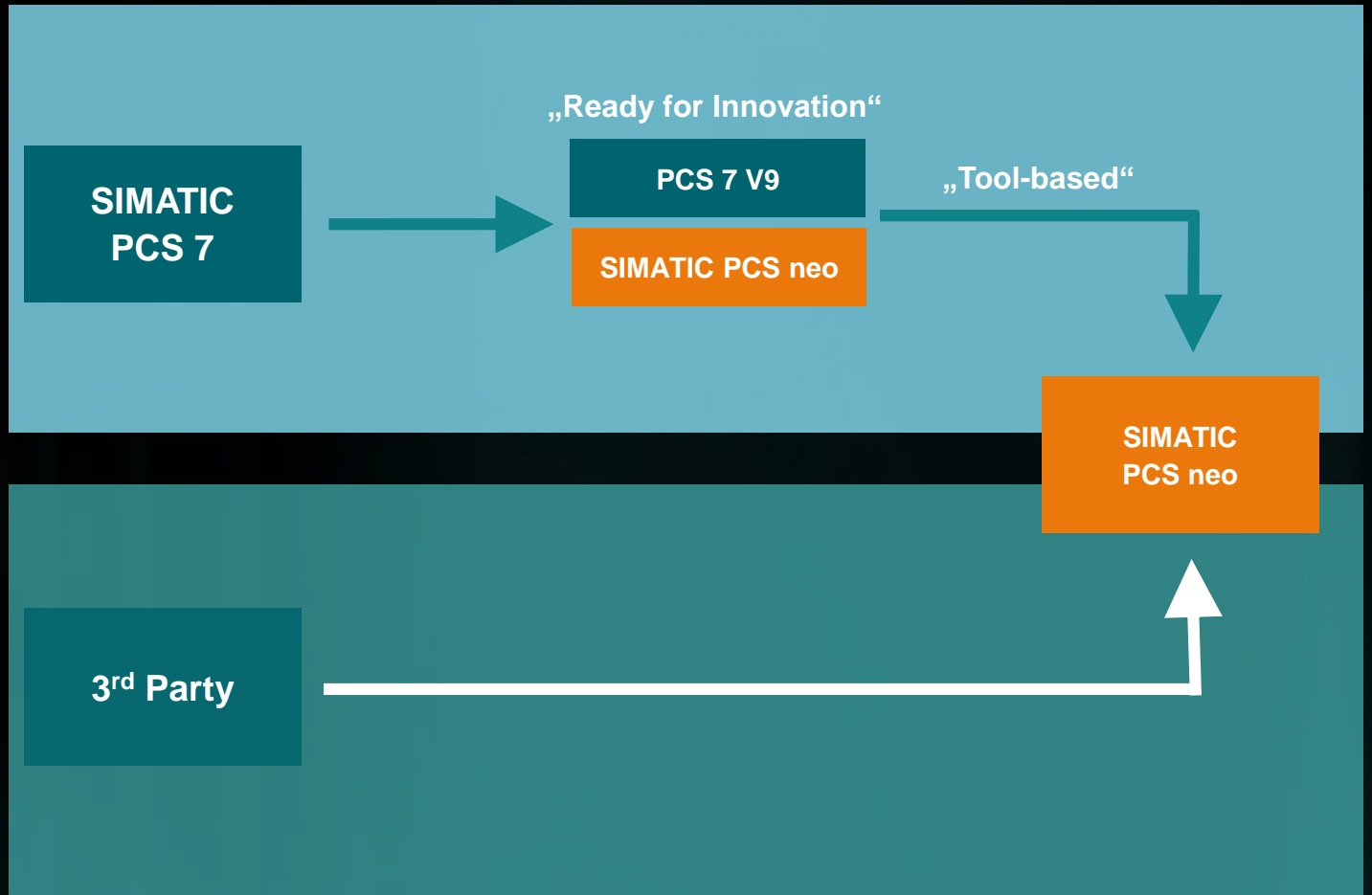
... from System A
to System A' ...

... is an upgrade supported
mainly by the system
based on a same HW and
Application Structure.
**Goal is protecting the
installed base of PCS 7
as potential customers
for SIMATIC PCS neo**

Migration

... from system A
to system B ...

... is moving from another
system supported by
Siemens services and
products.



Benefits of using Control Module Types

CMT – The Concept

- Standardized engineering concept : Summarizes similar function blocks in one Type Object.
- CMT concept provides a type instance concept what will reduce the engineering time of the new plant
- Very easy maintenance with „Bulk Changes“ - change the CMT for a group of pumps – and it gets valid immediately valid for all pump instances

CMT – The Benefits

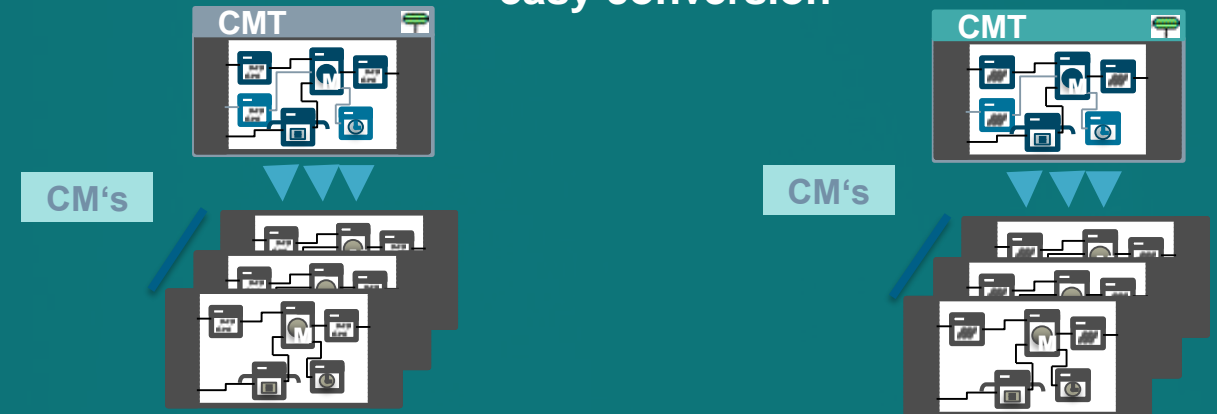
- + Fast and comprehensive bulk engineering
- + Forward engineering and reverse documentation of changes on the instance
- + Enables easy interaction with COMOS/PAA and SIMIT
- + Meets International Standards and requirements from NAMUR and ZVEI

SIMATIC PCS 7

SIMATIC PCS neo

„CMT forever“

System independent
engineering types for
easy conversion



Highest efficiency for engineering, maintenance & modernization

reThink Process Automation Business



Lifecycle orientation

Integrated Portfolio of Software, Hardware and Services to support customers over the whole lifecycle of their plant with high-valuable packages.



Individualization

Offer several Business models so that customers can choose what fits best to their individual needs.

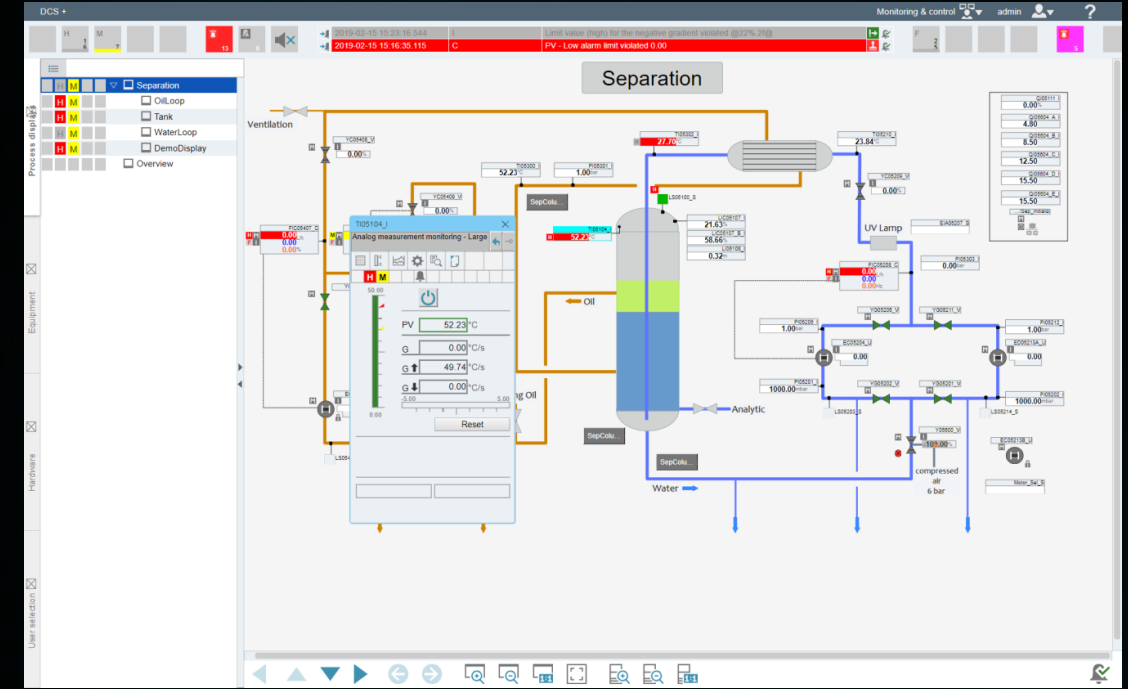
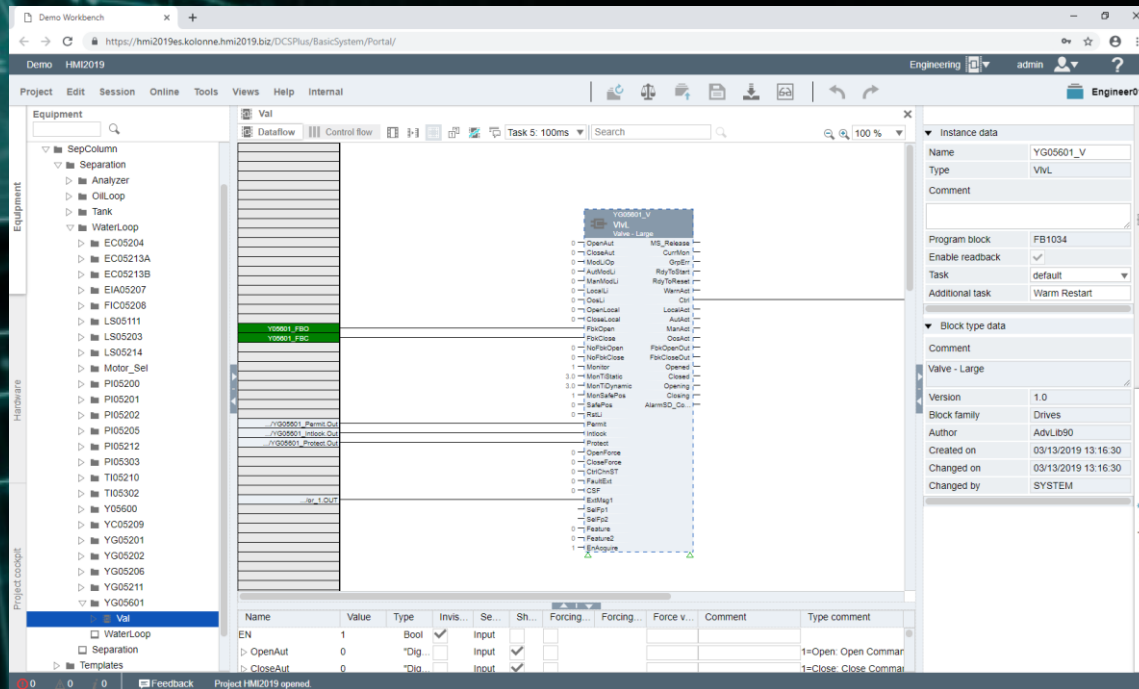
Digitalization

Use state-of-the-art seamless technologies in Marketing, Sales, Service and Licensing to individually serve each customer best.

Adapt the opportunities of Digitalization in modern Software Business to the Process Automation market and increase individual customer orientation.

Take a closer look ... From Engineering to Monitoring & Control

SIEMENS
Ingenuity for life



reThink Process Automation



reThink System Access

Imagine your experts have immediate access to your engineering projects and operation processes from anywhere using only a secure web connection.



reThink Scalability

Whether you supply small units or managing an entire production site – imagine a system that can be seamlessly upgraded and expanded during operation.

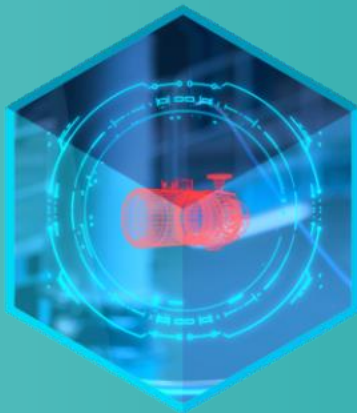


reThink Digitalization

Envision a system that enables plant design and engineering, simulation and automation seamlessly.

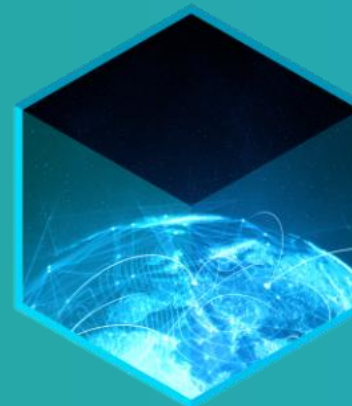
rethink Usability

Interaction with the system will take place clearly and easily via a highly intuitive user interface – so you can focus on what really matters in your business.



reThink Collaboration

Think to count relying on a system that enables a secure connection of all users and external suppliers at the same time.



reThink Cyber Security

“Security in Depth” because security is top priority. Plant security, Network Security, Web Security, System Integrity, TÜV Certification 62443, IACS Security Standards, Charter of Trust



Starting to “reThink” Process Automation to accelerate the digital transformation

SIEMENS
Ingenuity for life

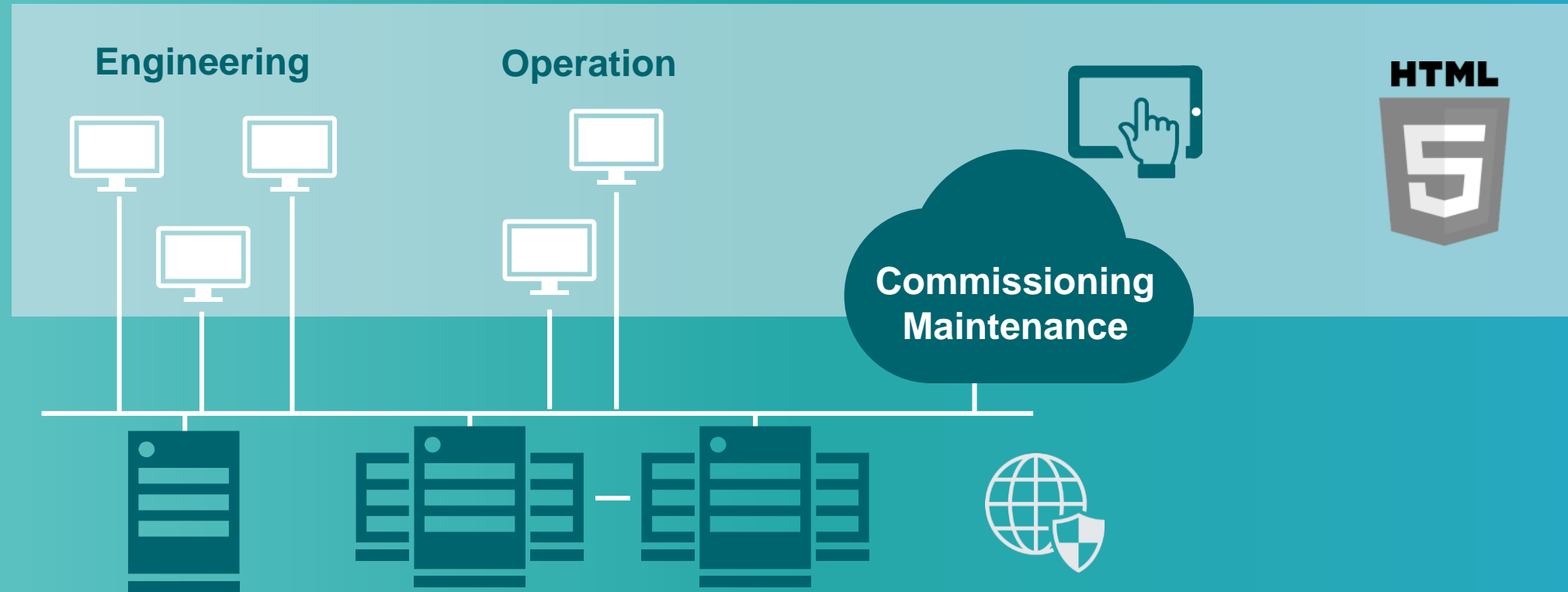


**reThink
System Access**



reThink Digitalization

suitable for any device from desktop to mobile



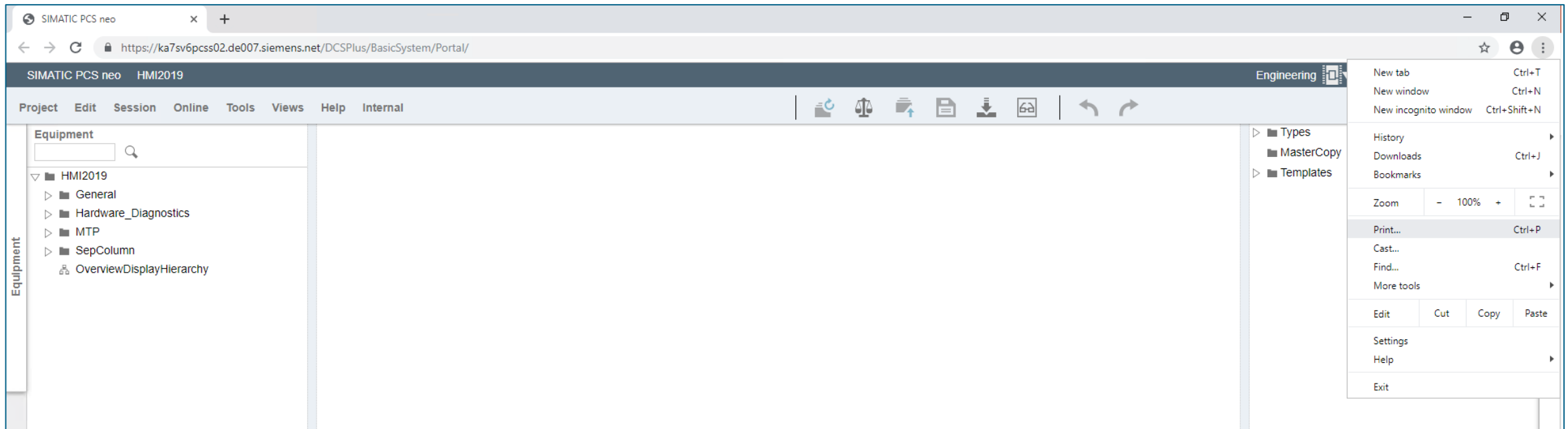
HTML 5 based full web-approach: System runs in Browser without software installation!

Live demo System Access

Zero Installation Client

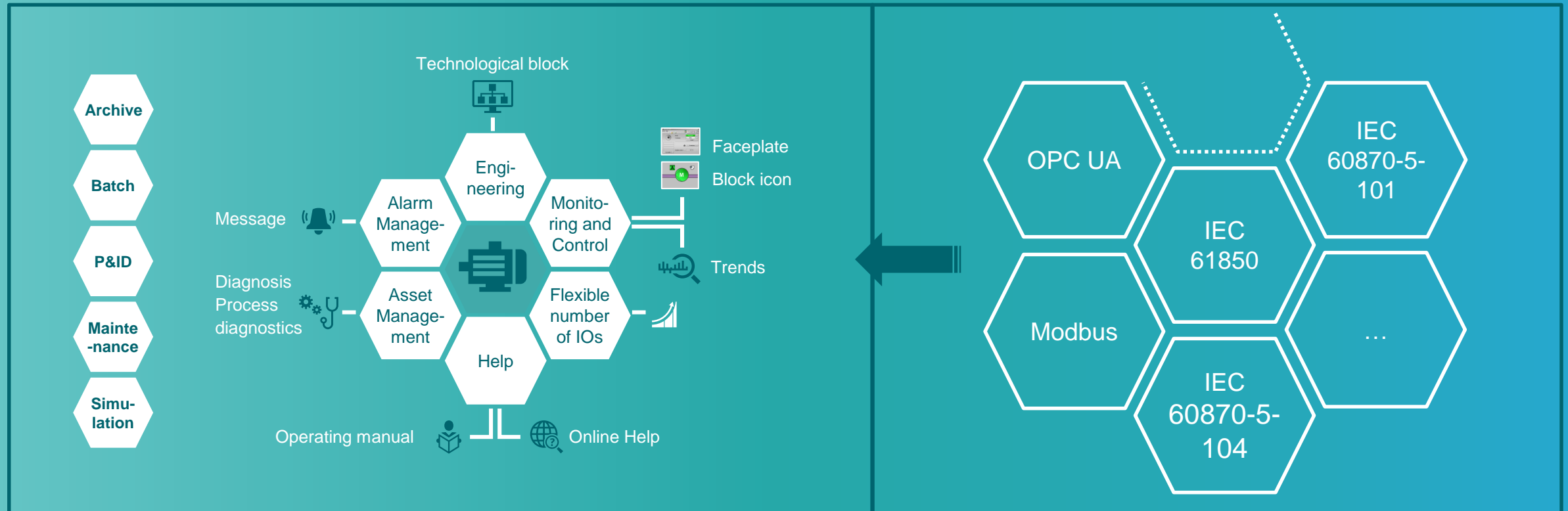


Engineering, operation and maintenance –anywhere and device-independent –without installation.



System Access: Openness

Object-oriented system platform for communication



Imagine situation ...

Imagine a plant problem in Asia, a local solution attempt fails and the only process specialist who could help is several thousand miles away. Only he/she could give some advice, because he/she has some experience in this matter.



What is the benefit

- Reduce infrastructure investment with Zero-Installation Client.
- Take plant operation and maintenance to any end device or location.
- Easy access control with centralized user management.



Know-How and Experience
loss due to demographic
change: Worldwide network
of in-house specialists

reThink

With SIMATIC PCS neo the specialist from overseas can be authorized on the local system with a secure connection in a web browser without any pre-installations ...

- immediately
- without losing cost intensive time
- without any travelling costs/time

Share your best specialist knowledge worldwide!

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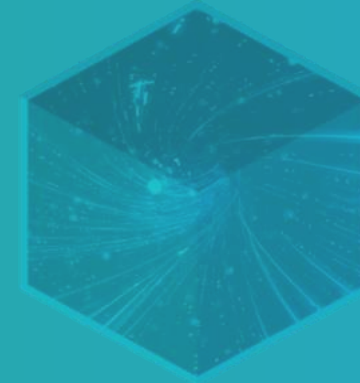
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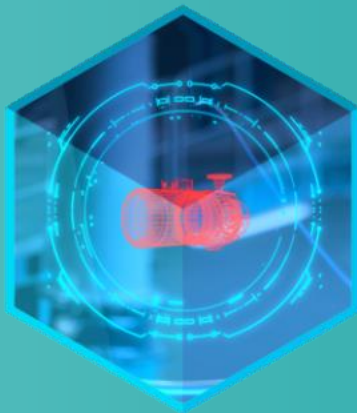
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Starting to “reThink” Process Automation to accelerate the digital transformation

SIEMENS
Ingenuity for life

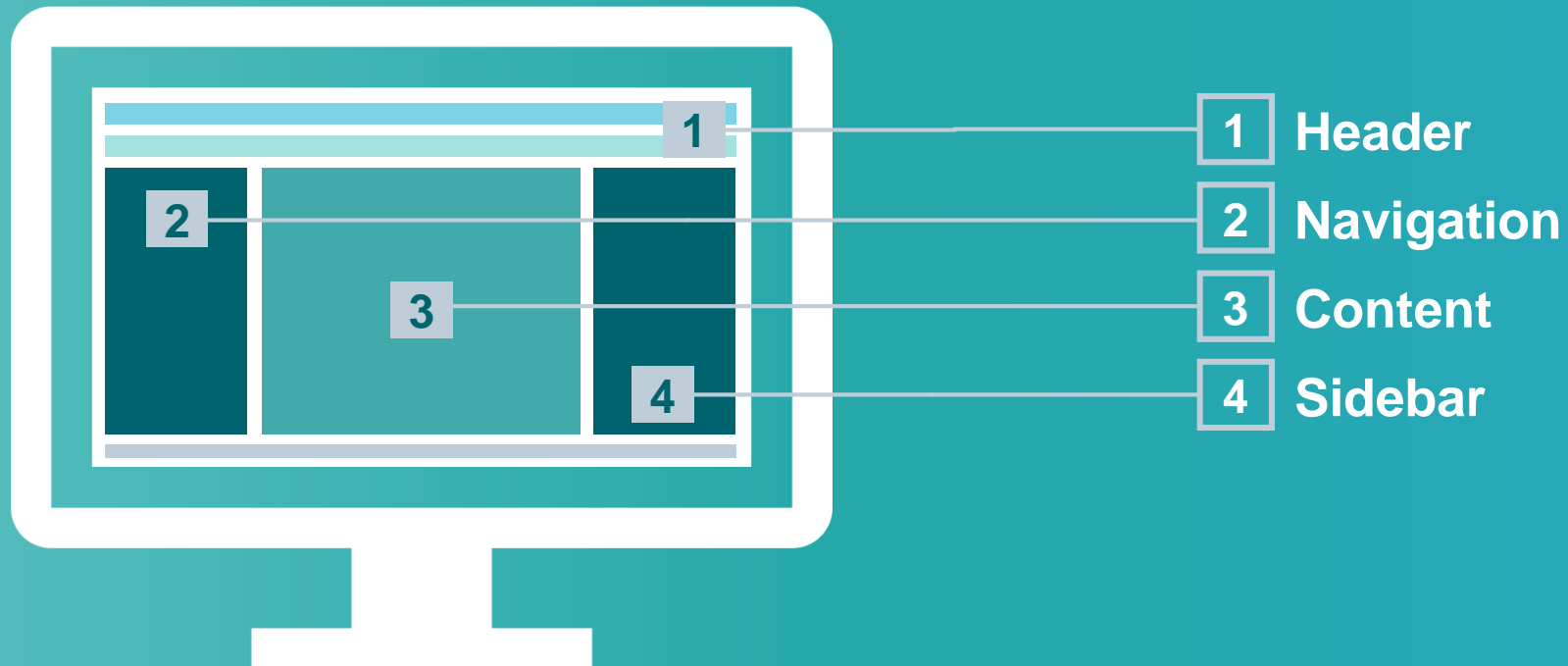


**reThink
Usability**



reThink Usability

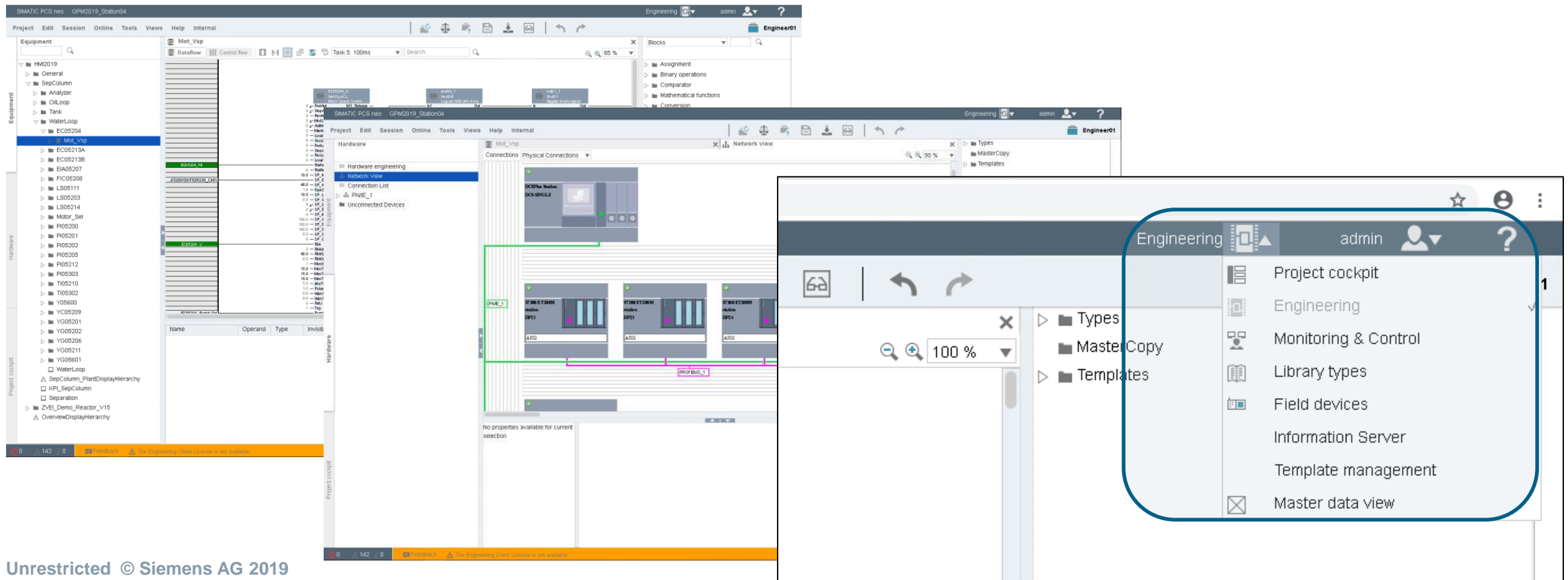
The new Workbench Concept



Live demo Usability Workbench Concept



Faster navigation with a single and easy User Interface.
Complete tasks quickly with intuitive workflows.

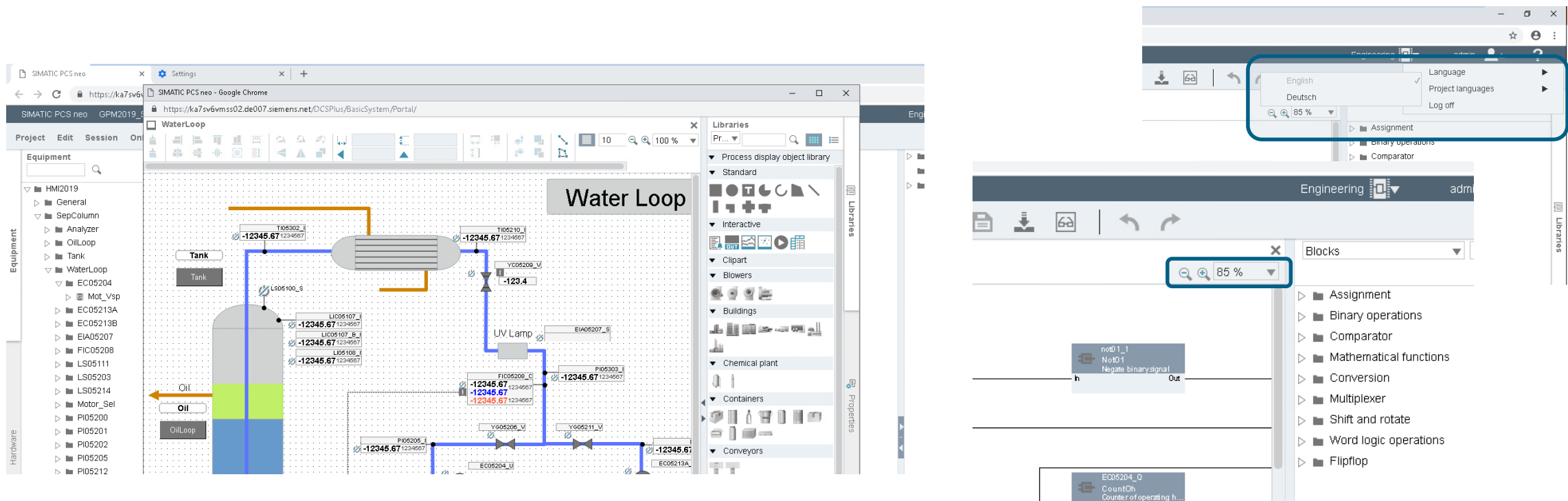


Live demo Usability

HTML5 User Interface –Engineering View



Web application brings state of the art HTML5 features.
Maximize efficiency by adapting the screen layout to match your preferences.



Live demo Usability

Closer look at M&C (Monitoring & Control)



Web application brings state of the art HTML5 features. Maximize efficiency by adapting the screen layout to match your preferences.

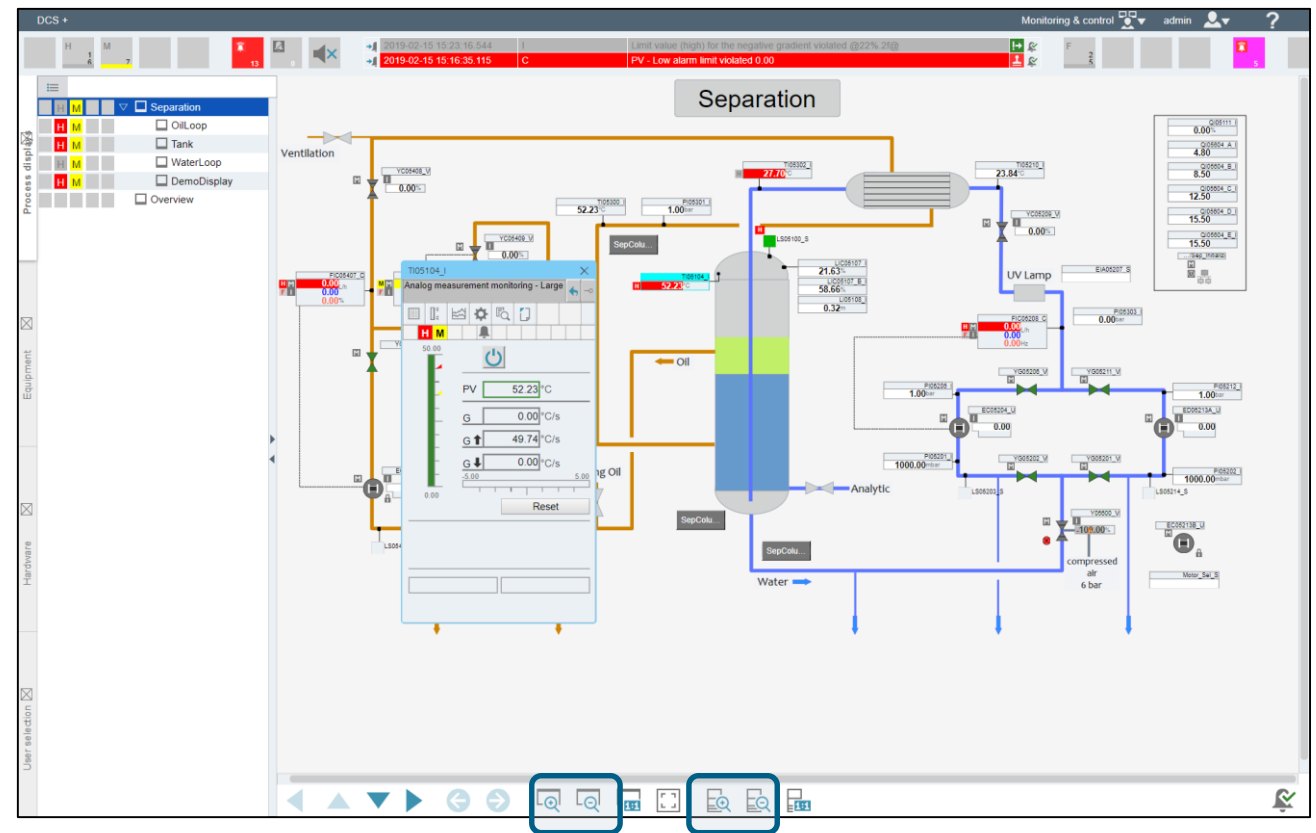
A comprehensive selection of ready-to-go, flexible tools and algorithms for a wide range of process tasks

Ease-of-use

Ergonomic symbols and task-oriented faceplates

Uniform representation of state information

Unified operation modes
(auto, on, manual, local, out-of-service)



Live demo Usability

Central Project Settings

Easily manage project-wide global settings in one central location

The screenshot shows the Siemens Project cockpit interface. The 'Project cockpit' window is open, displaying the 'Access rights' configuration. The left pane shows a tree view of project components, including 'Equipment' and 'Hardware'. The 'Equipment' section is expanded, showing a hierarchy of components: 'HMI2019', 'General', 'SepColumn', 'Analyzer', and several 'QI05604' sub-components. A red arrow points to the 'Analyzer' component. The right pane shows a table of users and roles, with columns for 'Project area', 'User', and 'Role'. The table lists several users and their roles, including 'Project Administrator', 'Engineer', 'Guest Operator', and 'Operator'.

Project area	User	Role
/HMI2019	admin	Project Administrator
/HMI2019	KOLONNEEngineer	Engineer
/HMI2019	KOLONNEGuest Operator	Guest Operator
/HMI2019	KOLONNEHMI2019_Standdienst	Project Administrator
/HMI2019/SepColumn/Analyzer	KOLONNEOperator	Operator

Live demo Usability

CFC Search Function



Use CFC search function to quickly find and edit parameters, hidden or unhidden

The screenshot shows the Siemens STEP 7 LAD editor interface. The search bar at the top right contains the text "FbkFwd". The search results list "FbkFwd" and "EDC_FbkFwd". The "FbkFwd" parameter is highlighted in the search results table at the bottom.

Name	Operand	Type	Invisible	Section	Forcing enabled	Forcing active	Force value	For test	Comment	Type comment
▽ FbkFwd	0	"DigVal"	✓	Input				✓		1=Run,0=Stop: Feedback of
Value	0	Bool	✓	Input				✓		Value
InternalUseBit1	0	Bool	✓	Input				✓		ByPass

Live demo Usability

Spreadsheet Engineering

Spreadsheet or Excel engineering for experienced users to quickly perform mass data engineering

Spreadsheet Engineering

Start Object: Drag Start Object here Select

Start OS Object: Drag Start Object here

Start AS Object: Drag Start Object here

Lock	Path	Name	Assigned
	/HMI2019/SepColumn/Tank/P...	AMon	AS02
	/HMI2019/SepColumn/Tank/L...	DMon	AS02
	/HMI2019/SepColumn/Tank/L...	AMon	AS02

Connect to DCS+

Server Name: ka7sv6pcss02.de007.siemens.net

Server Port: 443

Use https: ☒

User Name: admin

Password: *****

Connect Cancel

Spreadsheet Engineering

Start Object: Drag Start Object here Select

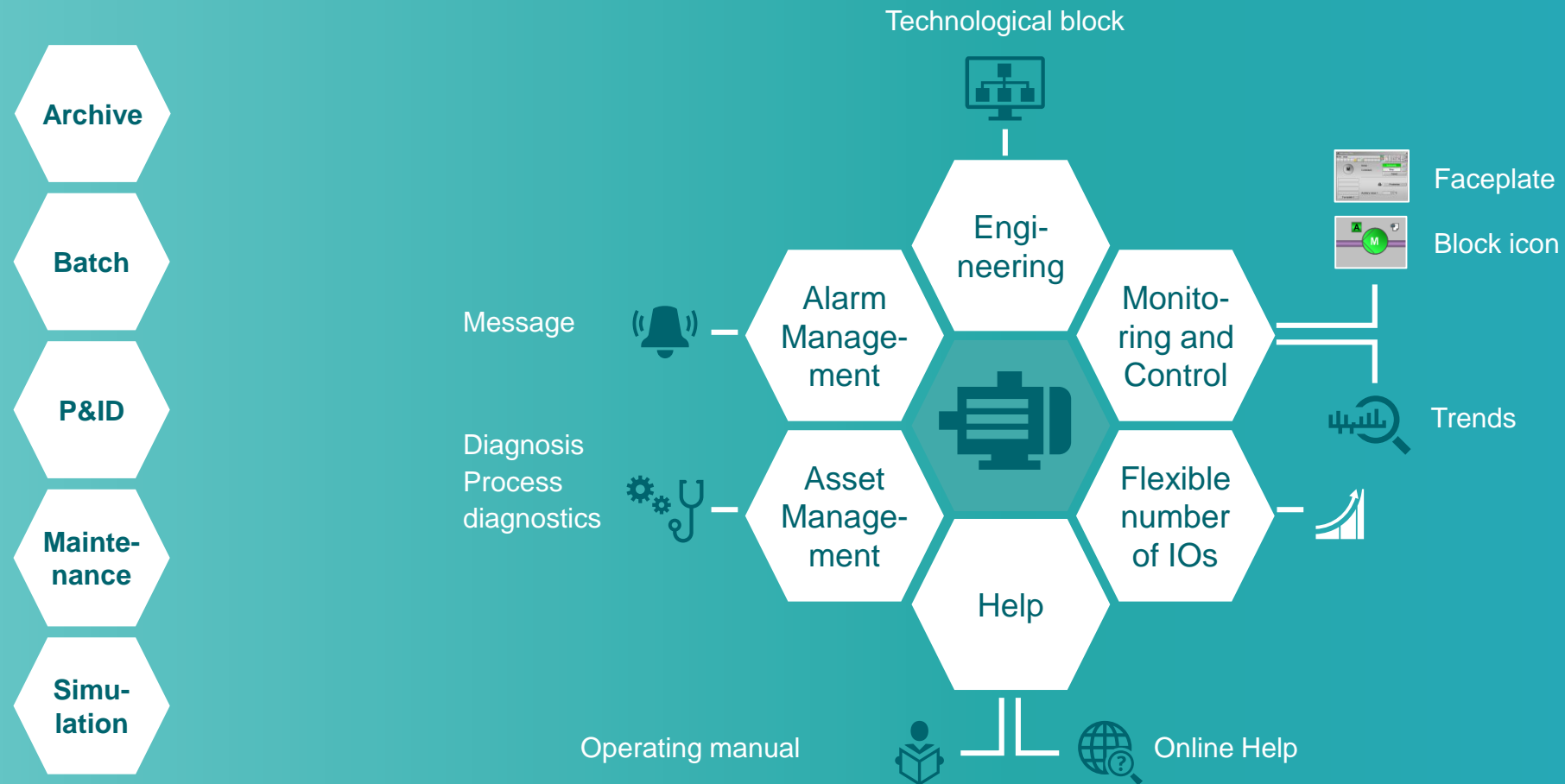
Start OS Object: Drag Start Object here

Start AS Object: Drag Start Object here

Lock	Path	Name	Assigned
	/HMI2019/SepColumn/Tank/P...	AMon_Excel	AS02
	/HMI2019/SepColumn/Tank/L...	DMon	AS02
	/HMI2019/SepColumn/Tank/L...	AMon	AS02

reThink Usability

One object-oriented system platform

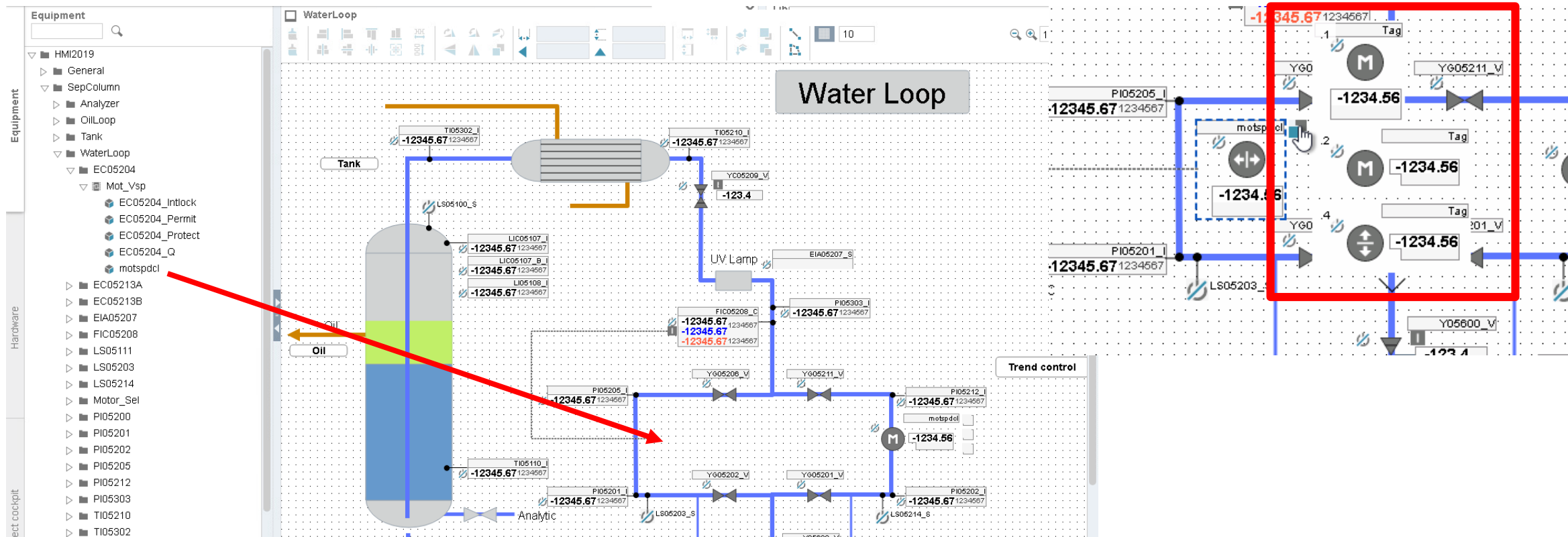


Live demo Usability

Object Oriented Engineering –Process Objects



Safe time during engineering –no compiles needed during engineering with a single database using process objects



Live demo Usability

Object Oriented Engineering –Process Objects

Convenient organization –quick access to all of the Process Object parameters and settings

The screenshot displays the SIMATIC PCS rec software interface for project GFM2019_Station01. The left sidebar shows a hierarchical tree under 'Equipment'. The tree structure is as follows:

- HM2L19
 - General
 - SepColumn
 - Analyzer
 - CilLoop
 - Tank
 - WaterLoop
 - EC05204
 - Mot_Vsp
 - EC05204_Intack
 - EC05204_Perrill
 - EC05204_Protect
 - EC05204_Q
 - EC05204_U**
 - EC05213A

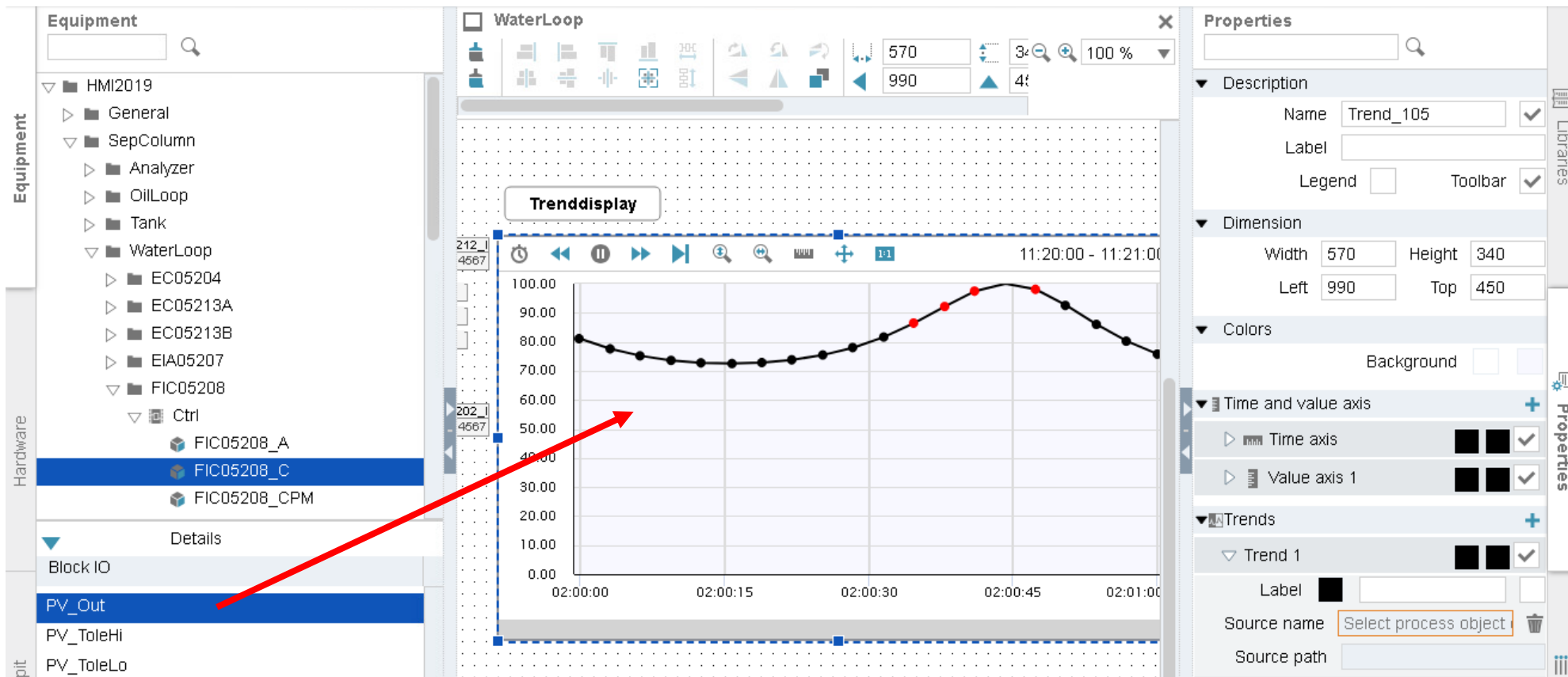
The main window displays the 'General' tab for the selected object 'EC05204_U'. The 'General information' section contains the following fields:

Field	Value
Path name:	EC05204_U
Flat name:	EC05204_U
Display name:	
Comment:	
Type:	Mot3pdC_
Version:	V 3.0 C

Live demo Usability

Object Oriented Engineering –Process Object Elements

Monitoring relevant process object elements available at one central place

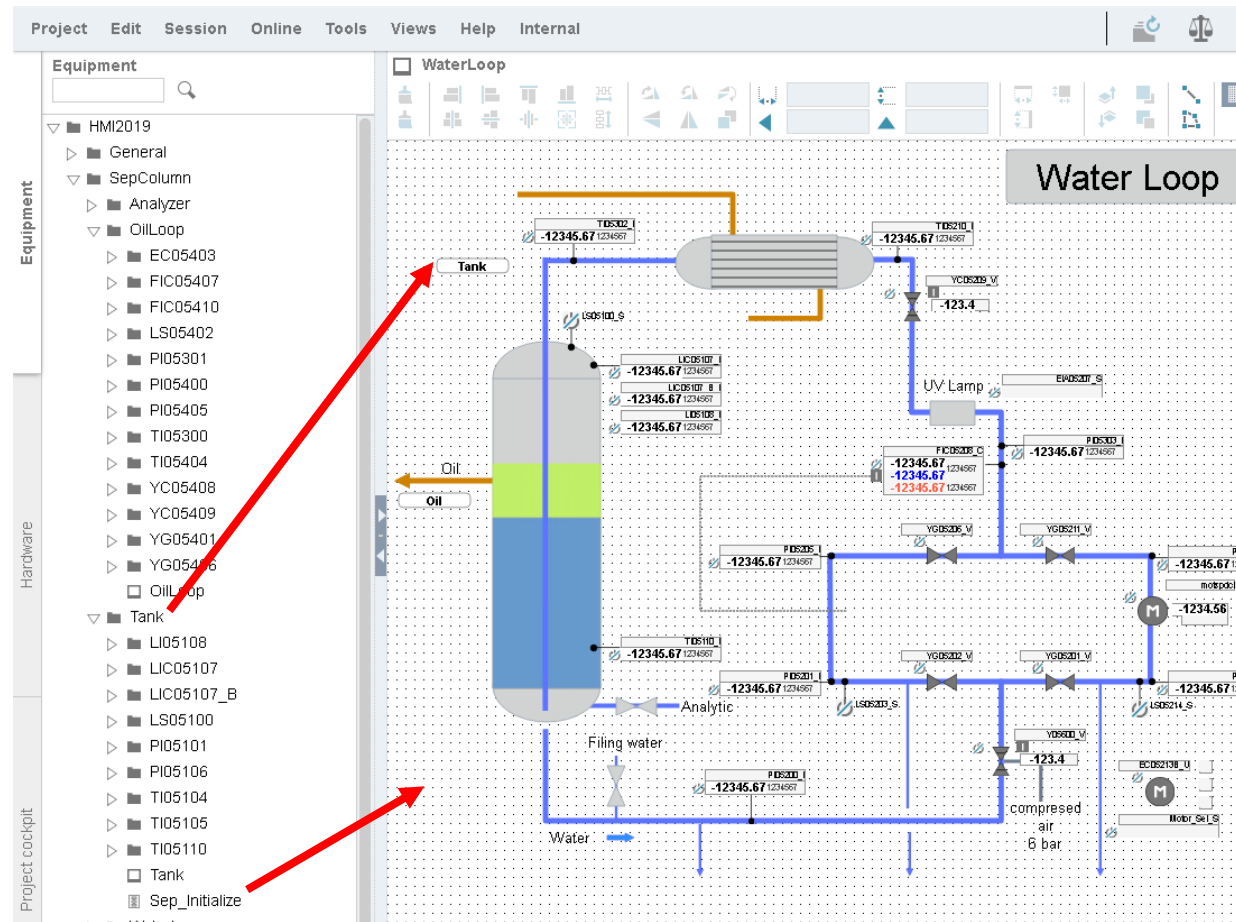


Live demo Usability

Object Oriented Engineering – EQH Objects in Display Engineering



Centralized and object-oriented data base for all technological components –add objects to display quickly and easily



Live demo Usability

Object Oriented Engineering – System Alarms



Relevant information at the right place –empower operations by bringing the most relevant information in an organized way

The screenshot displays the SIMATIC PCS neo software interface. At the top, the title bar shows 'SIMATIC PCS neo', the date and time '05/29/2019, 2:43:14 PM', and the status 'Unlicensed'. Below the title bar, there are several status indicators and a list of active alarms. The main window is divided into three sections: a left sidebar for navigation, a top section for 'Diagnosis Alarms', and a large table for alarm details.

Diagnosis Alarms Table:

Prio	State	Time Stamp	Tagname	Type	Message	P-Value	Area
F	14	2019-05-29 16:37:42.573	T105302_I	PV	Low alarm limit violated 27.50		
F	14	2019-05-28 12:48:03.573	T105210_I	PV	Low alarm limit violated 32.50		
F	14	2019-05-29 15:40:03.896			Error: Hardware component removed or missing IO device_1 / AI 16x1		DiagnosticsAlarmVOAS12/PROFINET IO-Systemet200spha_12VAI 1
F	14	2019-05-29 11:01:20.486	KA7SV6PCSS02: @1%#@		Host1 (KA7SV6PCSS02): @4%#3T@		System/HMI/DriverCommunication/OpcUa
F	14	2019-05-28 12:48:16.391			No OS Base License for (KA7SV6PCSS02)		System/Licensing
F	14	2019-05-28 12:48:16.390			No or Not enough OS RT PO License for (KA7SV6PCSS02). Needed:@		System/Licensing
F	14	2019-05-28 12:48:02.945			DcsPlusChyScriptMgr is not running		System/HMI/ManagerConnection
F	14	2019-05-28 12:48:02.181	KA7SV6PCSS02: @1%#@		Host1 (KA7SV6PCSS02): @4%#3T@		System/HMI/DriverCommunication/EDC
F	14	2019-05-28 12:48:02.167	KA7SV6PCSS02: @1%#@		Host1 (KA7SV6PCSS02): @4%#3T@		System/HMI/DriverCommunication/EDC

Live demo Usability

Object Oriented Engineering – Process Alarms

Save clicks and time –filter for alarms and jump directly to faceplates from EQH

The screenshot displays the Siemens EQH (Engineering Workbench) interface. On the left, a tree view shows the project structure under 'HMI2019', including 'SepColumn', 'Analyzer', 'KPI_SepColumn', 'OilLoop', and 'EC05403'. The 'OilLoop' folder is selected. The main area shows a table of process alarms. A red bar at the top indicates active alarms. A black arrow points from the 'EC05403_U' faceplate in the tree to a detailed faceplate view on the right.

Prio	State	Time Stamp	Tagname	Type	Message	P-Value	Area
M	[Icon]	2019-05-17 07:04:34.971	TI05404_I	HH	PV - High warning limit violated 47.00	50.00	/HMI2019/SepColumn/OilLoop/TI05404/TI05404_I
H	[Icon]	2019-05-17 07:04:34.970	TI05300_I	HHH	PV - High alarm limit violated 52.00	52.23	/HMI2019/SepColumn/OilLoop/TI05300/TI05300_I
M	[Icon]	2019-05-17 07:04:34.970	TI05300_I	HH	PV - High warning limit violated 50.00	52.23	/HMI2019/SepColumn/OilLoop/TI05300/TI05300_I
M	[Icon]	2019-05-17 07:04:34.966	FIC05407_C	L	Rbk - Low warning limit violated 0.00	0.00	/HMI2019/SepColumn/OilLoop/FIC05407/FIC05407_C
M	[Icon]	2019-05-17 07:04:34.963	FIC05410_C	L	Rbk - Low warning limit violated 0.00	0.00	/HMI2019/SepColumn/OilLoop/FIC05410/FIC05410_C

The faceplate view on the right shows 'EC05403_U' with a 'Motor Drehzahlsteuerung - Large' section. It includes a 'Rücksetzen' button and a 'Verriegelung' (Lock) button. The 'SP' (Setpoint) is 9.00 and 'Rbk' (Reset) is 0.00.

Live demo Usability

Object Oriented Engineering –EQH Objects in Display Engineering

PO search –see all PO operating states in tabular view

The screenshot displays the SIMATIC PCS rec web interface. At the top, the browser address bar shows the URL: <https://ka7sv6vms02.de007.siemens.net/DCSPlus/BasicSystem/Portal/>. The header bar includes the text "SIMATIC PCS rec", the date and time "06/05/2019, 10:12:16 AM", the status "Unlicensed", and the user "admin".

Below the header, there are two rows of status messages:

- 2019-06-05 04:16:770 TD3302_1 PV - Low alarm limit violated 40.00
- 2019-06-05 04:16:770 TD3302_1 PV - Low warning limit violated 42.00

The main content area is divided into two sections. On the left, under "Process displays", there is a list of objects: MTP_Overview, ModelMovie, KPI_SepColumn, and Separation. On the right, under "Process Object Type", there is a search bar and a list of object types: Operating mode, Setpoint, Signal status, Tracking_Forcing_Bypass, Interlock, and Memo. A red box highlights the "Signal status" icon.

Below the "Process Object Type" section, there is a "Result List" table. The table has the following columns: Path, Type, Name, Operating mode, Setpoint, Signal status, Tracking_Fcr..., and Interlock. The table contains two rows of data:

Path	Type	Name	Operating mode	Setpoint	Signal status	Tracking_Fcr...	Interlock
IMI2019/SepColumn/CilLoop/CC3...	MotSpdCL	EC05400_U					
IMI2019/SepColumn/WaterLoop/...	MotL	EC05213B_L					

Imagine situation ...

A new international engineering project, with a mixed team of experienced and new staff.
How can the new staff easily and quickly get familiar with the new DCS System?



What is the benefit

- New users become familiar with the system faster than ever before.
- Experienced users take advantage of the reduced workflows and complexity



- Project engineering staff
- Operators

reThink

The intuitive and effective system usability enables new engineers and operators to become familiar with the system as quickly as never before.

With our new unique object oriented concept!

The plant operator has just **one system** for all tasks!

... in two clicks to any information!

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- Coffee ←

10:45

- Introduction to PCS neo: Scalability

11:15

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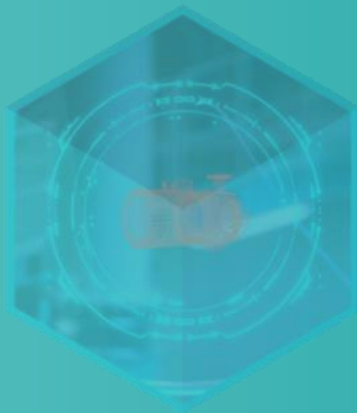
- Lunch and networking

Starting to “reThink” Process Automation to accelerate the digital transformation

SIEMENS
Ingenuity for life

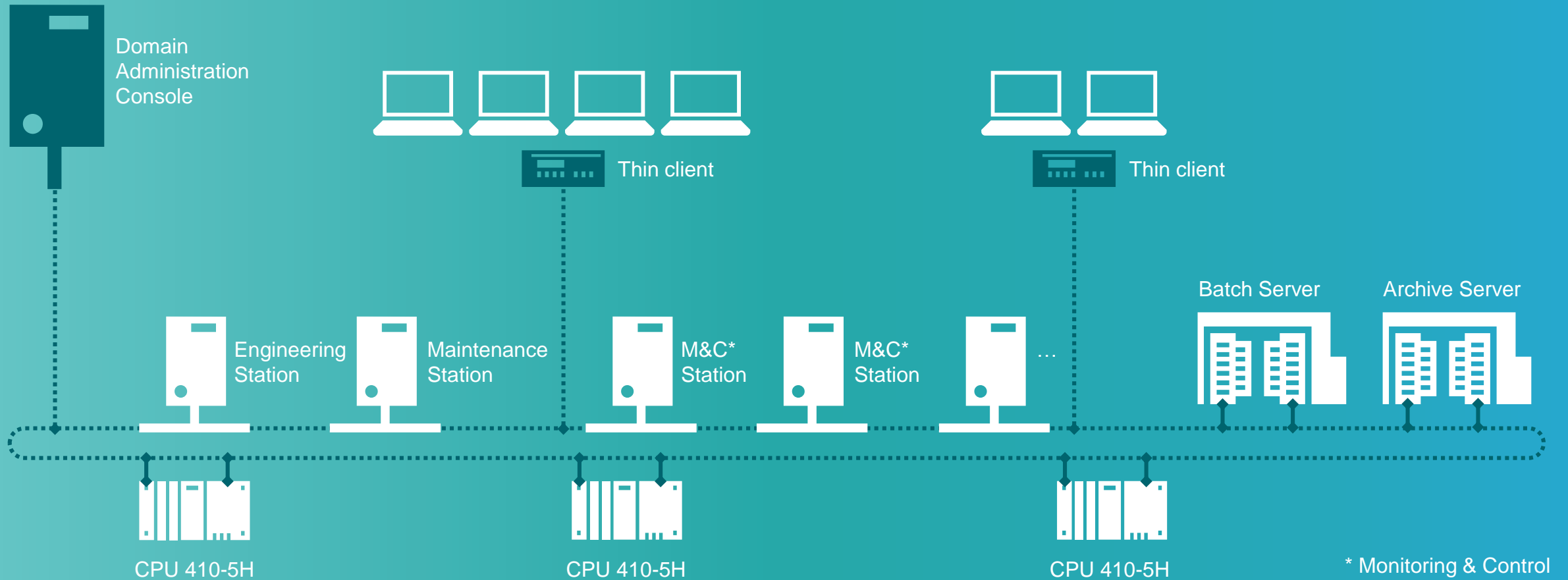


reThink
Scalability



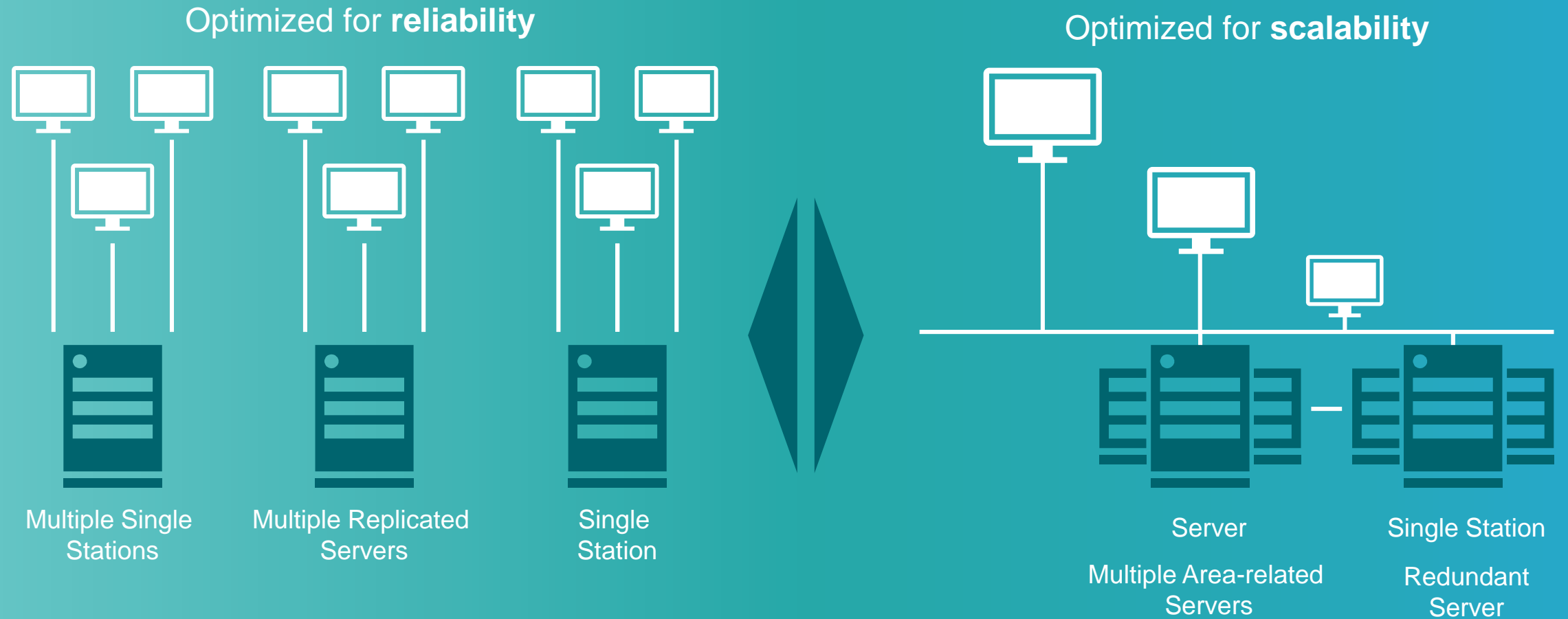
reThink Scalability –

Highly flexible plant architecture – one Example of many possible



reThink Scalability –

High flexibility to scale up the plant



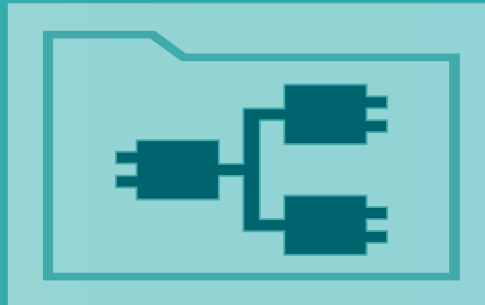
reThink Scalability

Global standardization from single Process Object to Unit

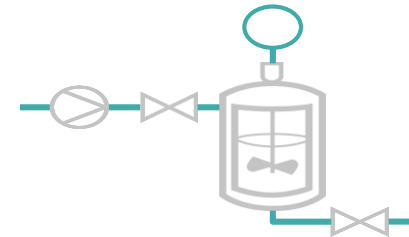
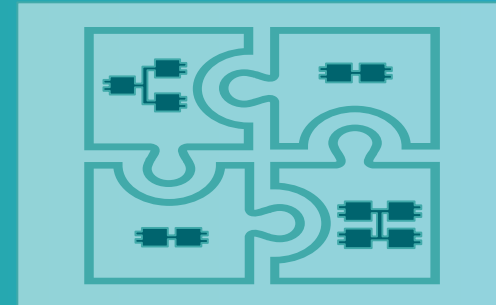
Process Object and
Control Module Template



Equipment Module
Template



Partial automation solution
based on templates

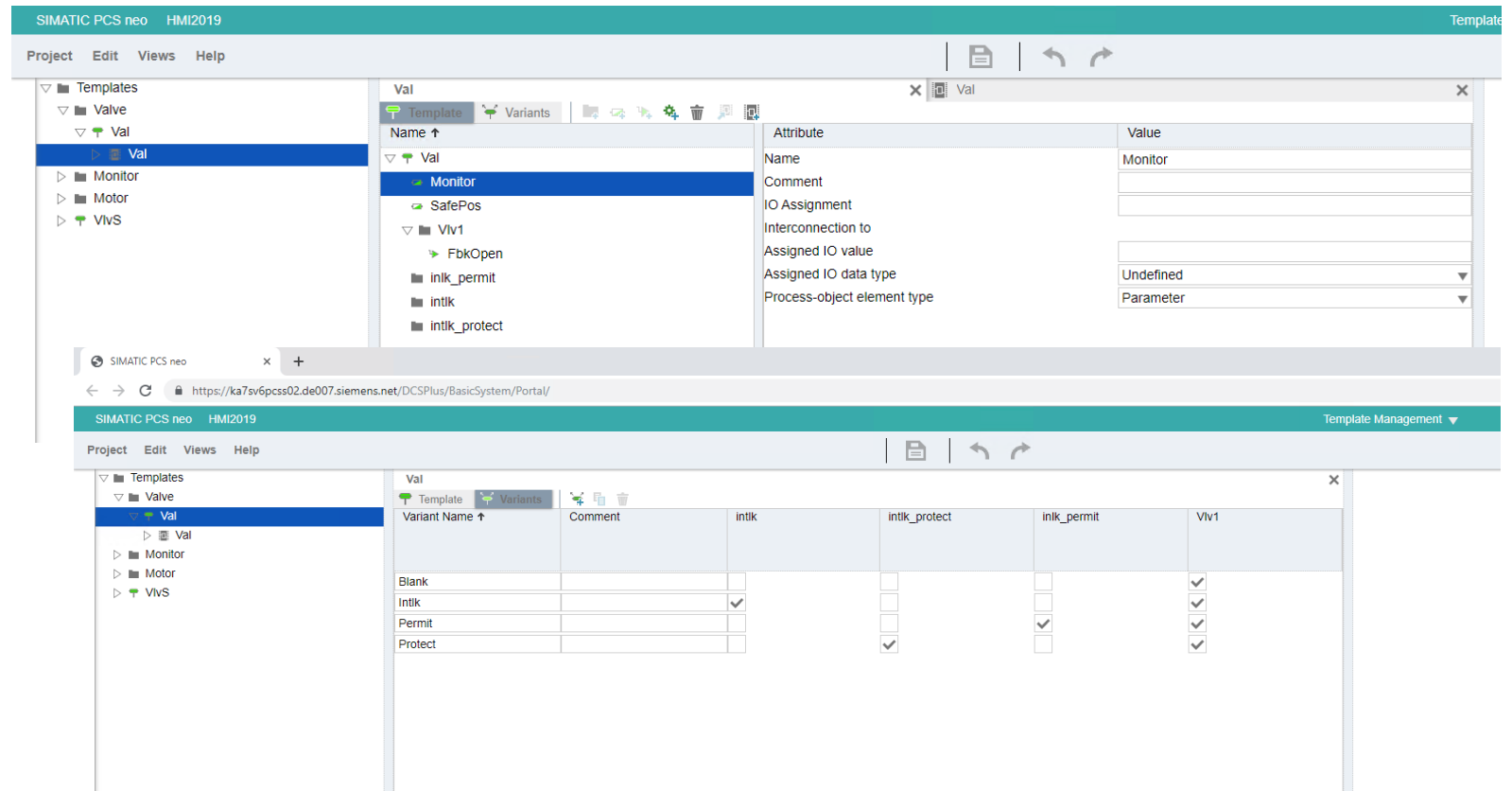
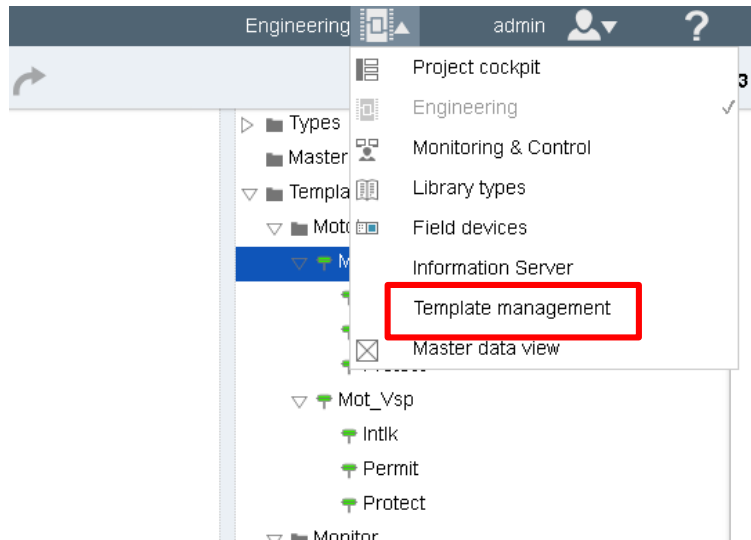


Live demo Scalability

Centralized Template Management



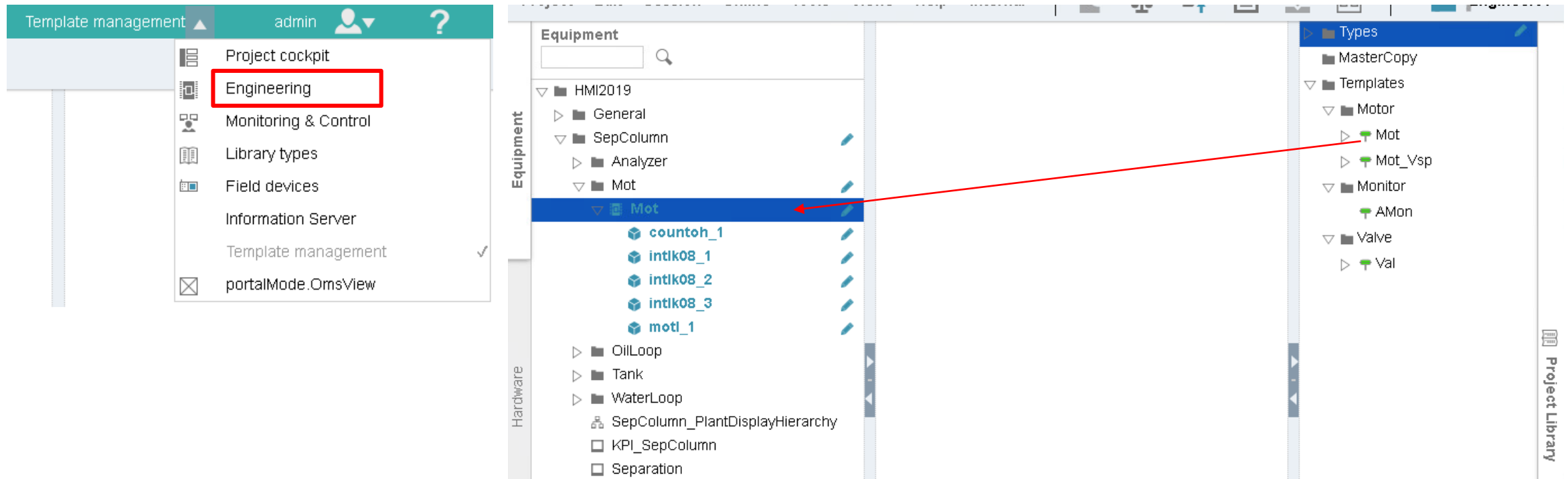
Speed up engineering with preconfigured and standardized templates



Live demo Scalability

Instantiate Template

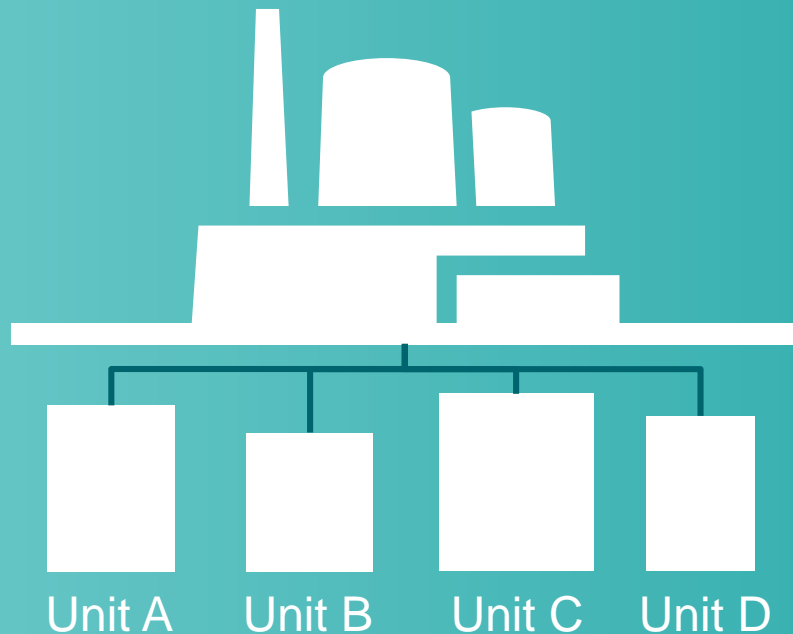
Speed up engineering with preconfigured and standardized templates



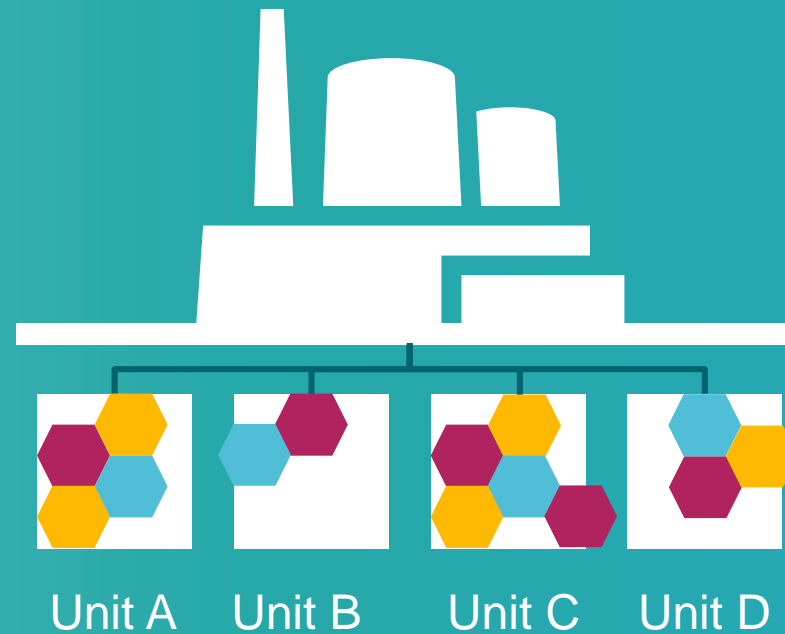
reThink Syllability: Modular Automation

A major lever to boost engineering efficiency

From modularization of a plant ...



... to modular production

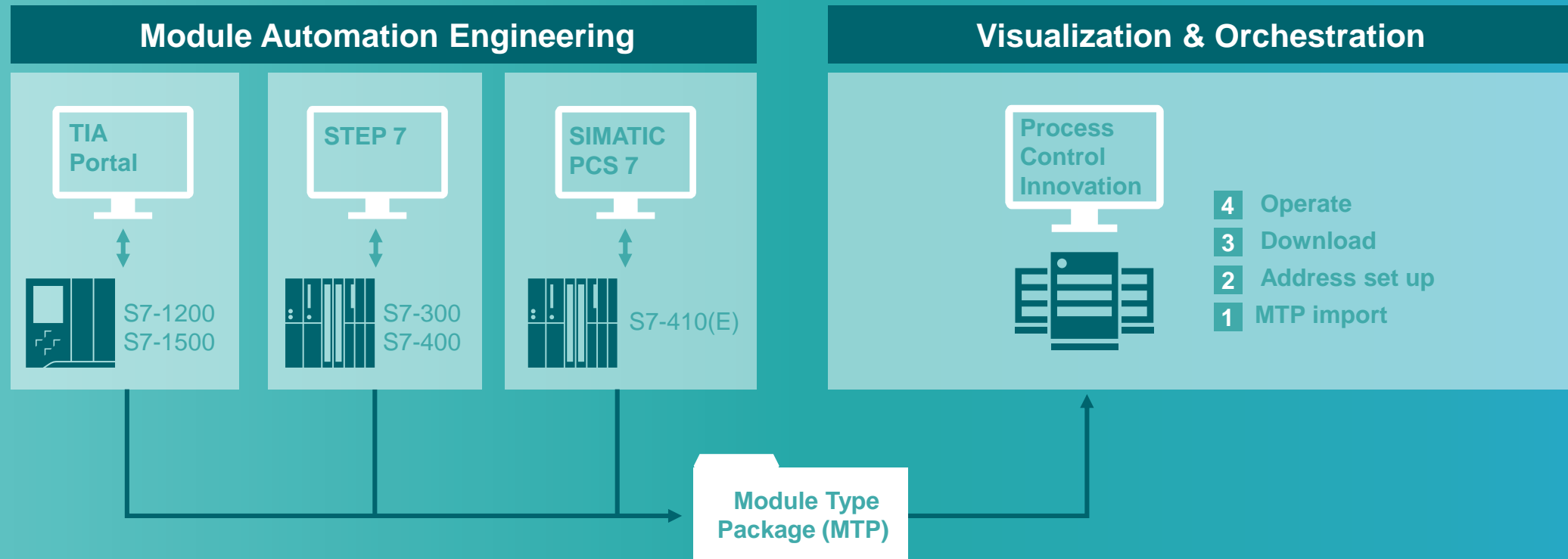


What is the benefit

- Better interoperability with easy and flexible integration of manufacturer independent process modules.
- Plug-and-Produce on the technological level.
- Supervisory control of large hierarchical systems, with the comfort of an integrated Process Control approach.

reThink Scalability: Modular Automation

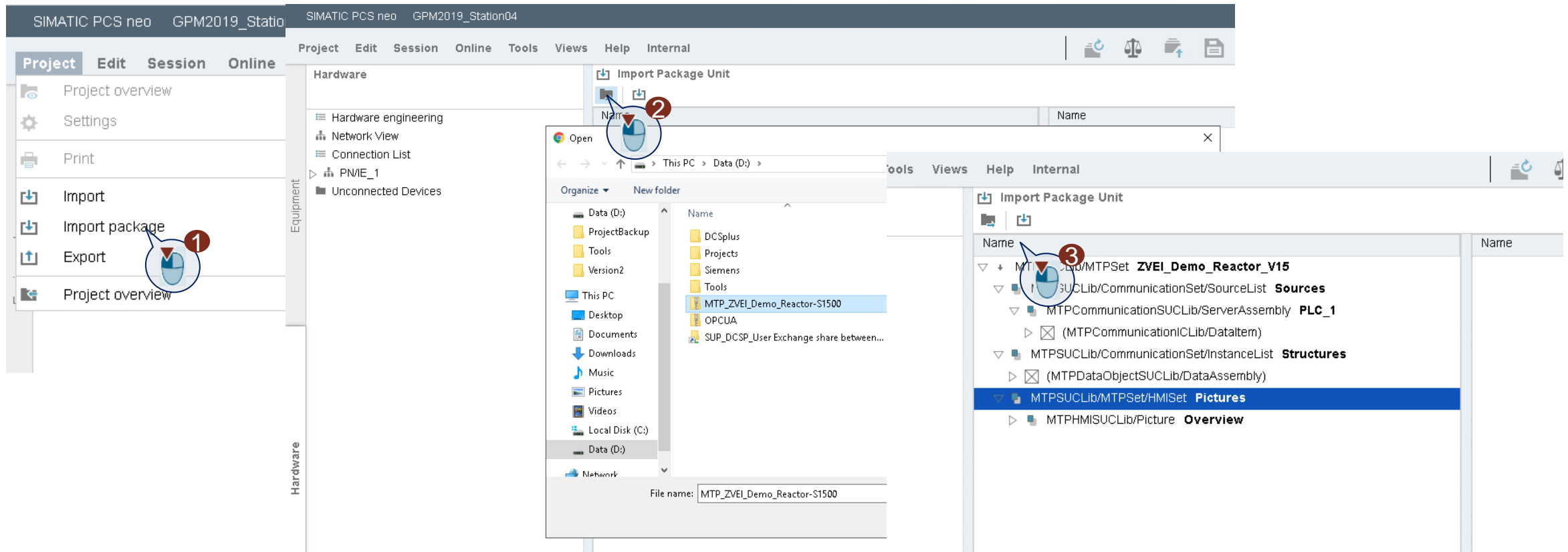
Integration based on open standards: Module Type Packages



Live demo Scalability

Import Modular Type Package

Fast and easy integration of manufacturer independent modular type packages



Imagine situation ...

A pharmaceutical start-up that automates its production for the first time.
They need easy entry and no limitations for the future.



What is the benefit

- Easily adapt to changing plant requirements, with the freely scalable system.
- Take advantage of all of the process control capabilities, regardless of plant size or application complexity, with a reduced system overhead. – Benefit from DCS functionalities in applications done with SCADA so far.
- Save time and costs, with re-use of pre-tested engineering templates over different projects.
- Provide the flexibility to bind to different plant configurations with hardware neutral templates.



Head of Process Automation
in a Pharmaceutical Plant

reThink

The SIMATIC PCS neo system enables:

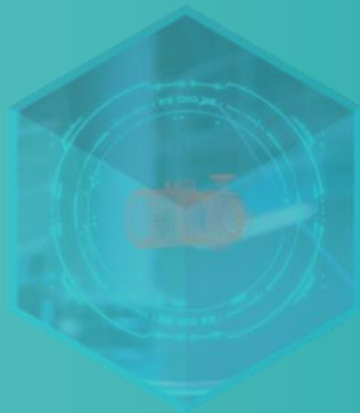
- to extend from small and parallel to very big in the future
- re-usability of pre-tested engineering standards (e.g. a package unit that has been integrated in a smaller application).

It starts with small scale by the use of process objects and can be extended to equipment modules up to units and using templates

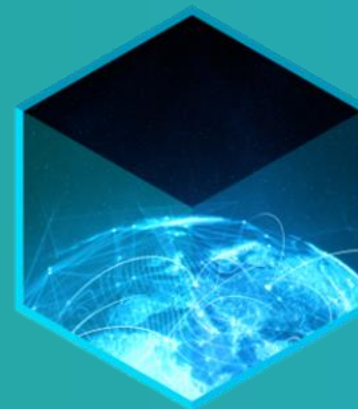
The system can easily be adapted to changing plant sizes.

Starting to “reThink” Process Automation to accelerate the digital transformation

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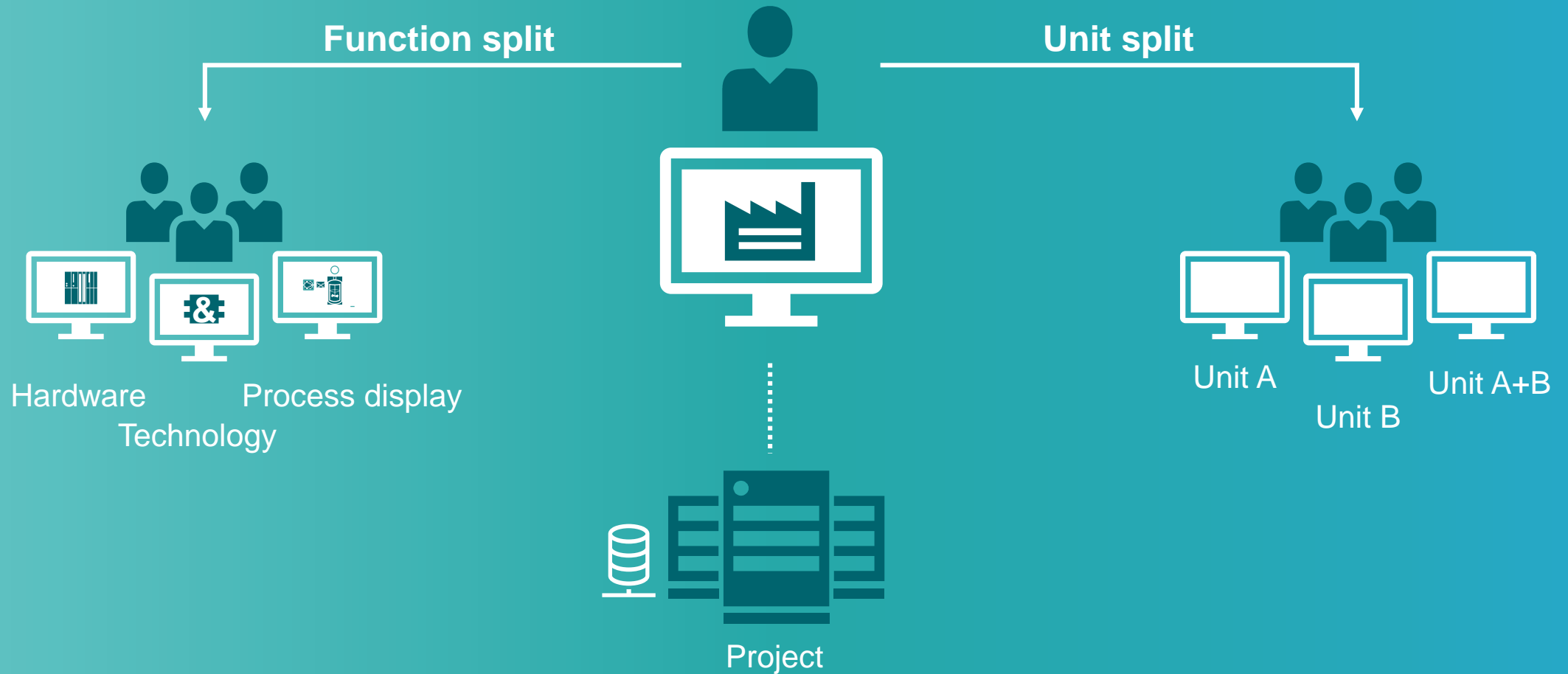


**reThink
Collaboration**



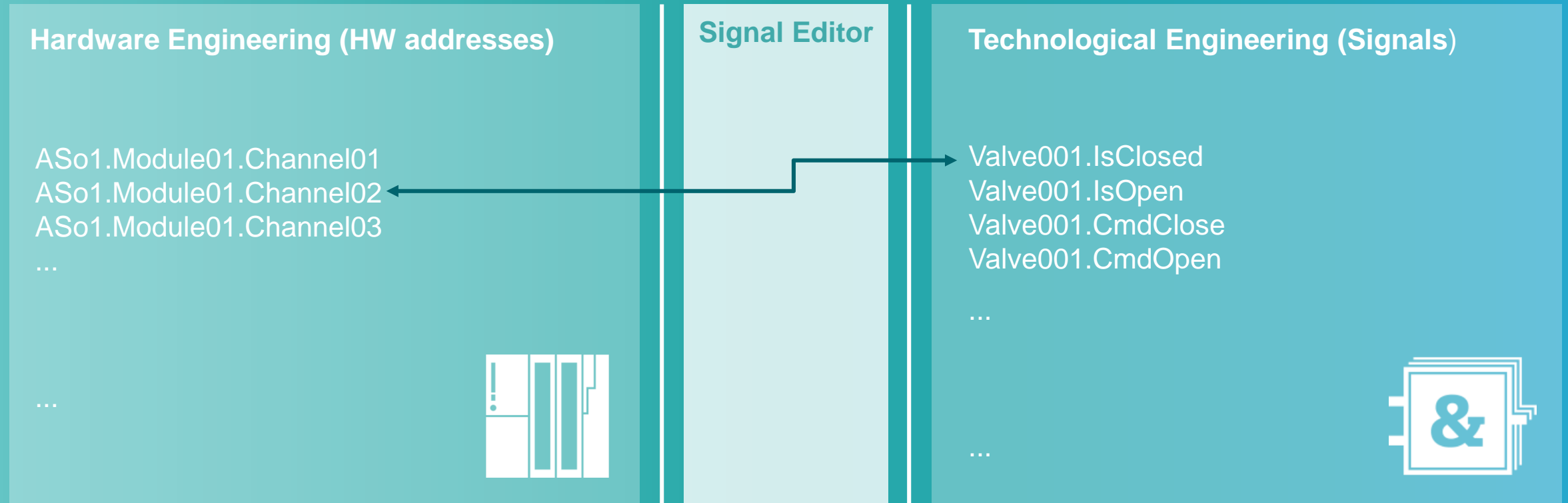
reThink Collaboration

Flexible project engineering on one central data basis



reThink Collaboration

Late hardware binding



Global expertise with on-demand availability –execute project tasks in parallel to reduce time to market

States of an object



Object is locked by me. Only I can edit this object. Object is locked for other until I publish my session.



Object is locked by another session. Object is locked for me. I cannot edit this object.



Object is edited by me.



Object is edited and published by another session. I can update the content from the root project to update my session.

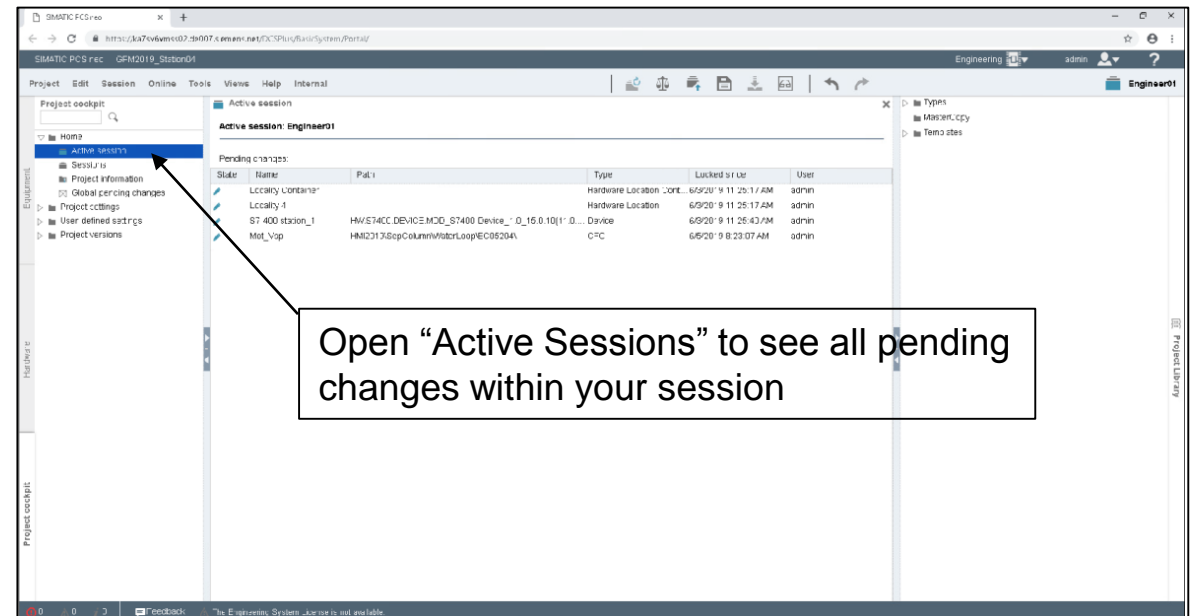
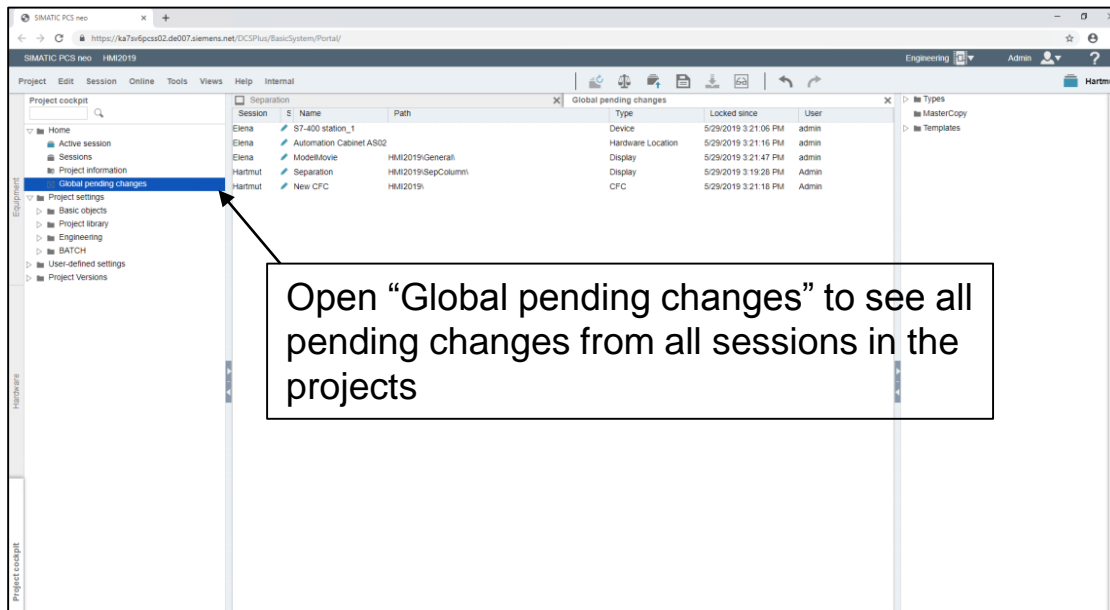


The state of an object under this folder has changed.

Live demo Collaboration Pending Changes



Multiuser Engineering coordination -Overview of pending changes

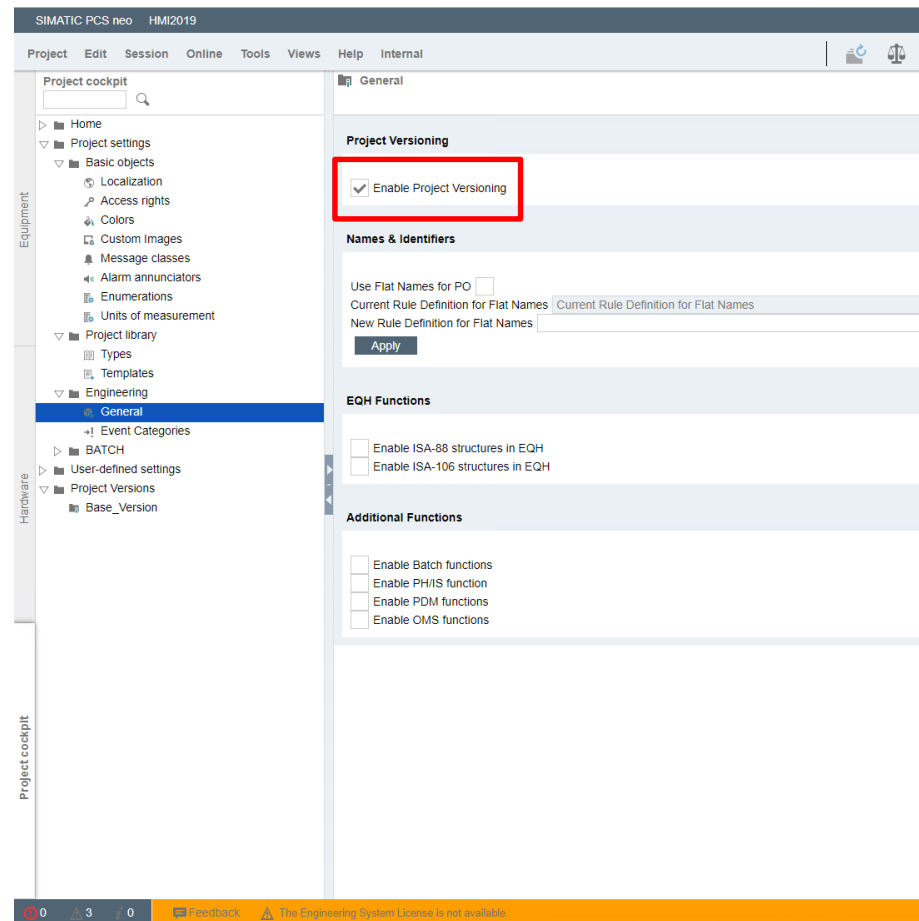


Live demo Collaboration

Project Versioning

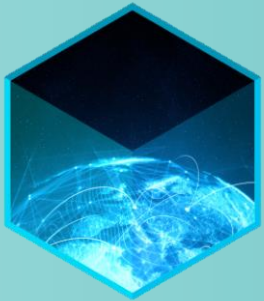


Automatic project versioning provides 'Rollback' functionality –return to any state of the project at any time.



Imagine situation ...

The project manager gets a lot of pressure from the management, the project is under a very high time pressure, but the commissioning date cannot be moved. In this situation we have to get additional resources that may work abroad.



What is the benefit

- Leverage global expertise with on-demand availability.
- Ensure project consistency with system supported change management.
- Faster time to market, as automation and project tasks can be executed in parallel.

Easy and Secure System Access and Multi Session Management for parallel editing of many (>30) engineers!



Project manager
in a huge DCS project

reThink

With SIMATIC PCS neo Engineering you can distribute engineering tasks globally and split

Project can be divided by tasks, process units etc. very flexibly!

Reduce engineering times, flexible allocate resources. Get most experienced and available resources optimally integrated in an engineering task

Agenda Innovation Day SIMATIC PCS neo



Process Industries



08:00

- Breakfast and registration

08:30

- Welcome

08:40

- Why a new DCS?

09:00

- Introduction to PCS neo: System Access

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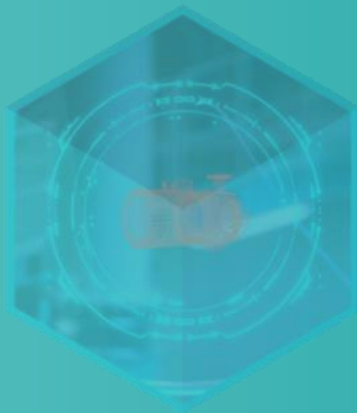
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Starting to “reThink” Process Automation to accelerate the digital transformation

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Ingenuity for life



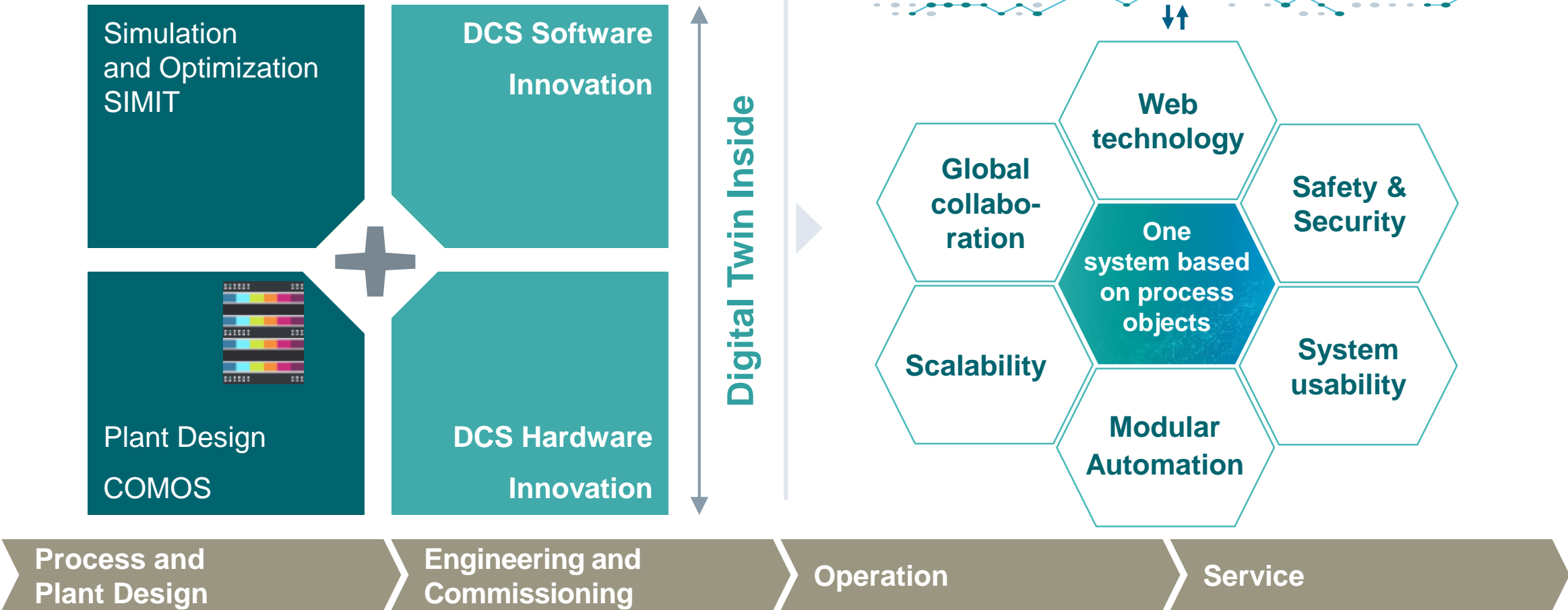
**reThink
Digitalization**



SIMATIC PCS neo neo Digitalization



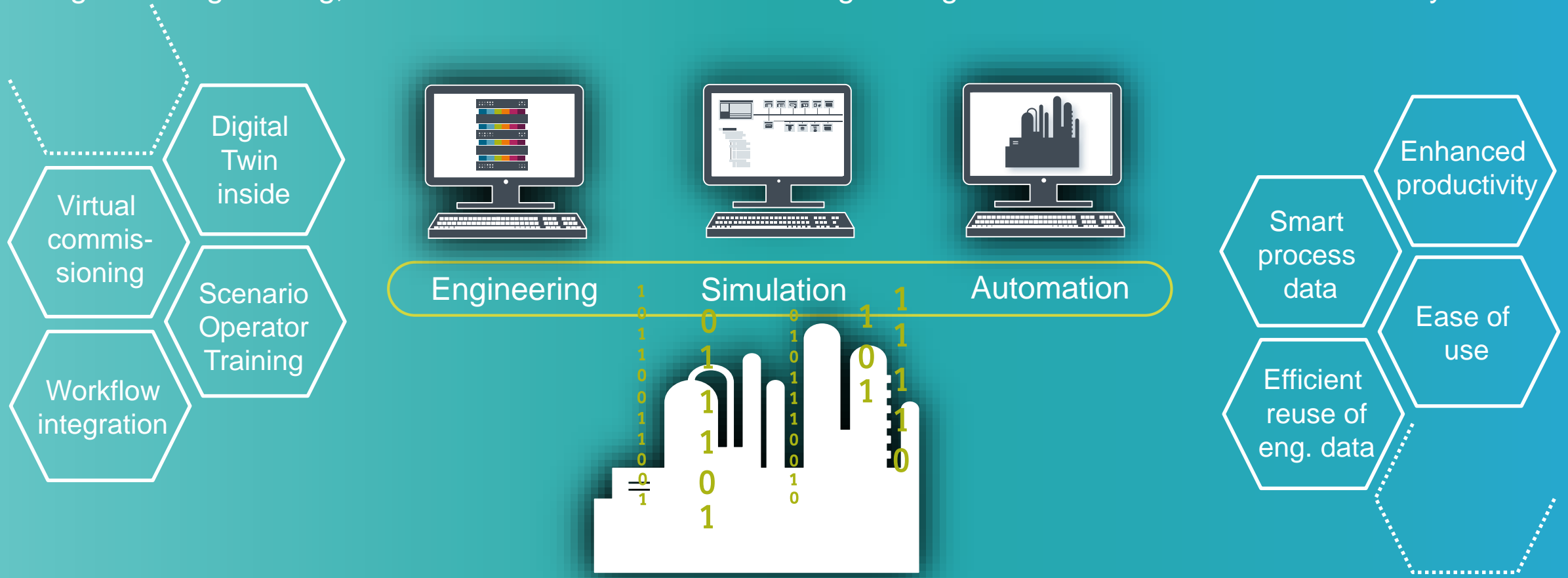
Beyond existing systems and architectures



SIMATIC PCS neo neo Digitalization



Integrated Engineering, Simulation and Automation enabling the digital twin inside over the entire lifecycle



Starting to “reThink” Process Automation to accelerate the digital transformation

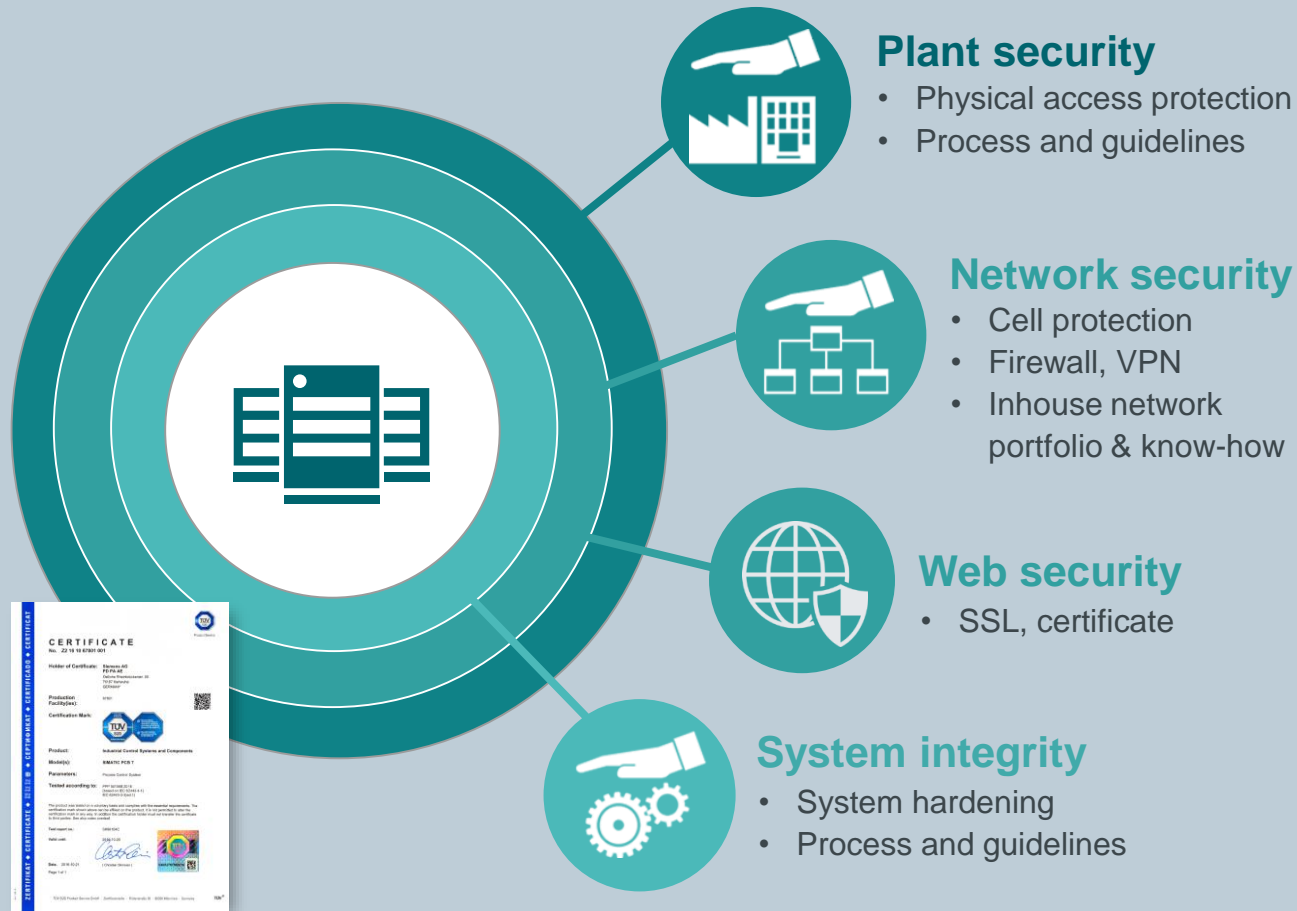
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**reThink
Cyber Security**



Security as a top priority today and tomorrow



Security always matters

- TÜV certification of product life cycle process based on IEC 62443-4-1
- TÜV certification based on IEC 62443-3-3
- Product development is compliant with current IACS Security Standards
- Process Control Innovation will be compliant with current IACS Security Standards



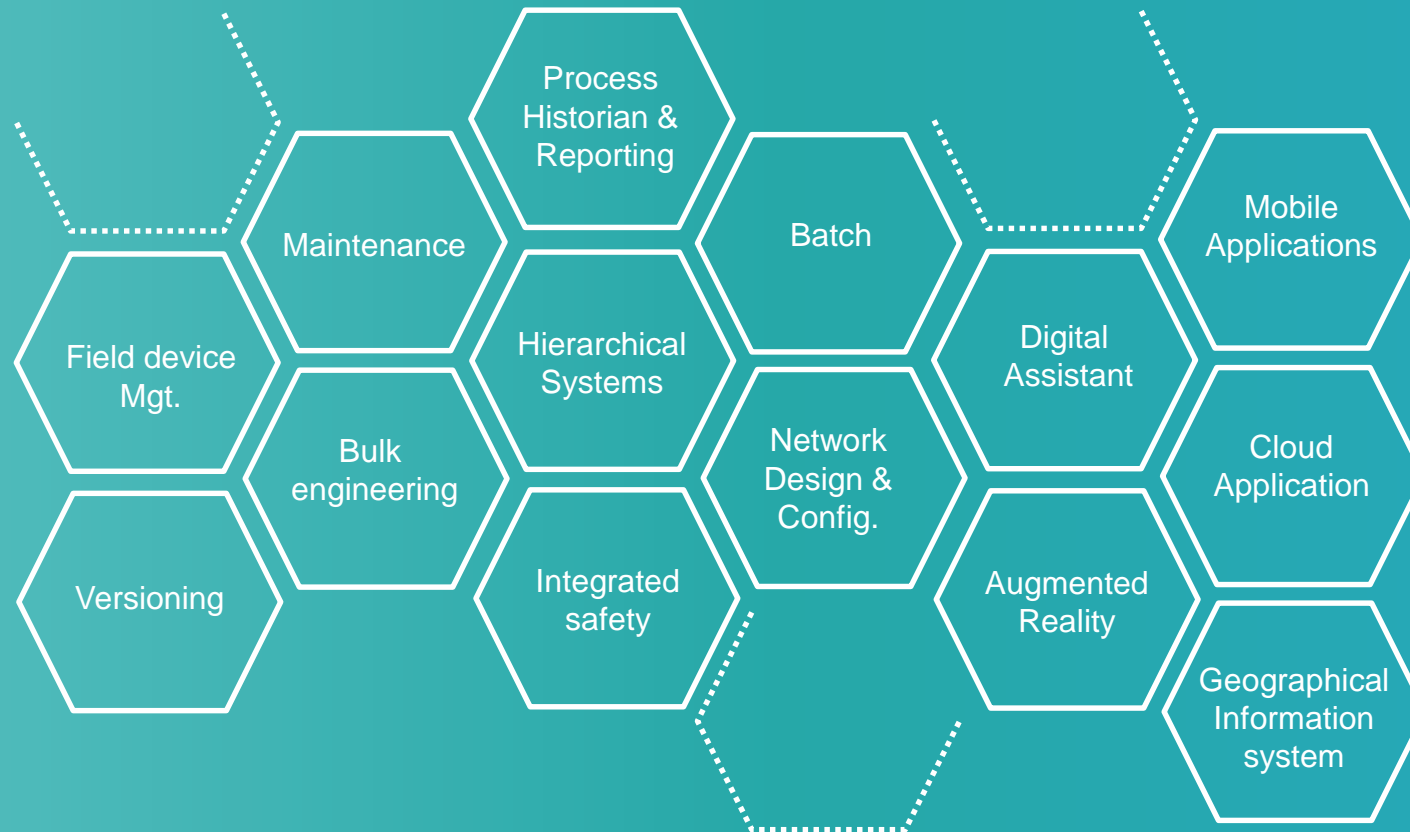
Security is a “built-in” element of PCS neo!

Optimized security in plant operation with lowest effort for our customers



- **Security by Default**
 - PCS neo will provide full Security - right from the Installation
 - Security-features can be de-selected, to adopt customer needs
- **Secure Access**
 - All functions require Authentication and Authorization (single sign-on)
 - 2-factor Authentication for critical functions
- **Central Administration**
 - Full transparency on the Security Level and Security Events
 - Ease of Administration to maintain Protection-Level over the plant lifecycle
- **Security by Design**
 - Encrypted system communication based on Certificates
 - IEC 62443-conform development process, "Secure Coding" Guidelines
- **Defense in Depth**
 - Continue PCS 7-proven „bolted-on“ Security portfolio with Firewalls and Network Components, Virus Scanners and Anomaly Detection

A comprehensive grows further ...

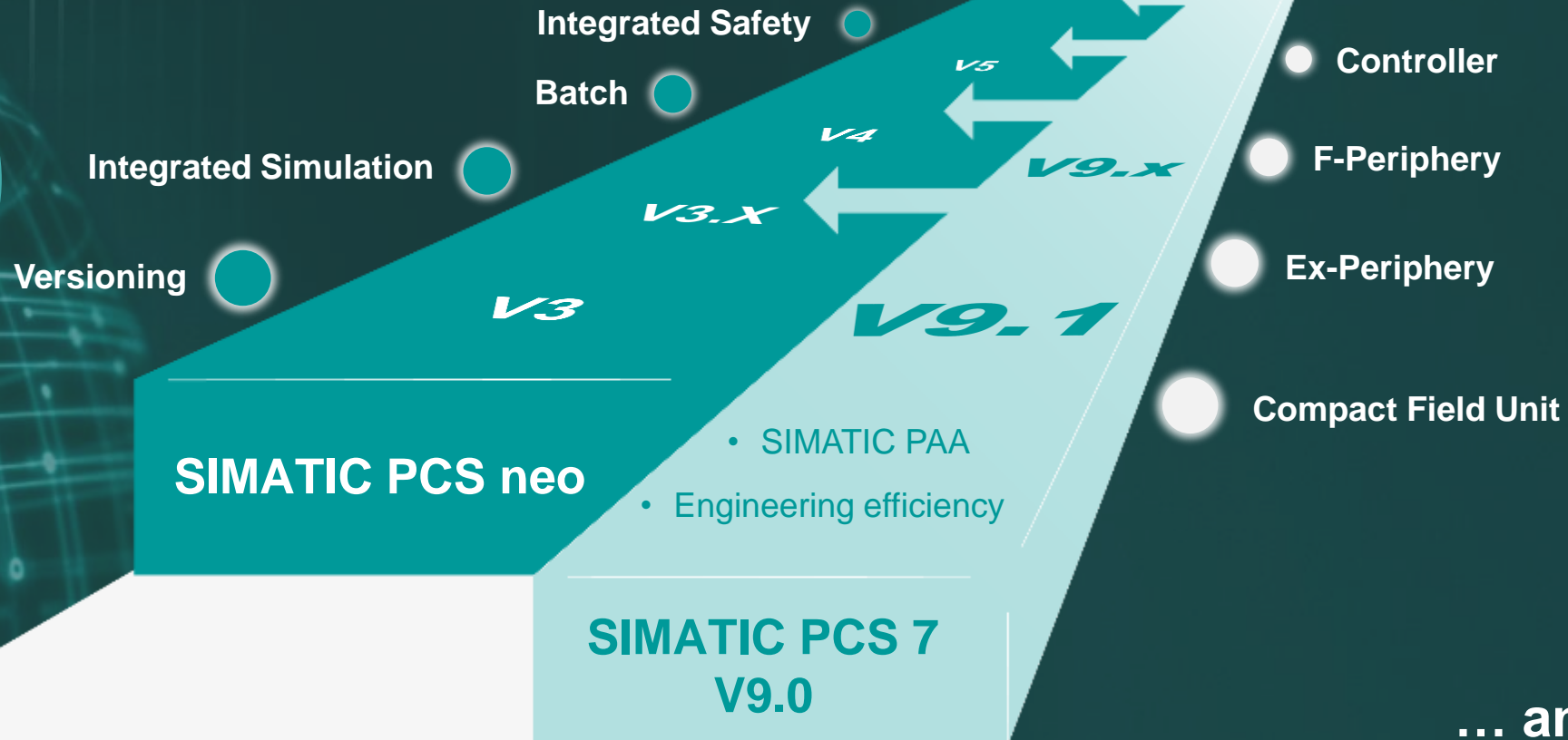


....and the innovation will continue!

The common hardware basis for future innovation...



Customers
can define
the time to
switch.



ONE HARDWARE PLATFORM

... and maximum
investment protection!

Q&A



Thank you –

Welcome to the Future of Process
Automation at SPS Fair 2019

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RC-SE DI R-SE PA

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